

HEWLETT  PACKARD

CALCULATOR

PROGRAM

CATALOG

HEWLETT- PACKARD COMPANY
Calculator Program Catalog

INTRODUCTION

This catalog includes programs from world-wide sources for HP Calculators and their peripherals. Some of these are contained in program libraries or packets, which may be purchased both as printed books and as sets of prerecorded magnetic cards. Individual programs which are contained in a packet are not available separately.

Programs which are not members of a packet or library are available separately. The individual program is sold only as a complete unit including documentation and prerecorded magnetic cards. Prices are shown in the main catalog section.

Use the alphabetical index to locate the category, such as surveying, of the program you are seeking. The available programs in each category are listed alphabetically in the Table of Contents section toward the front of the catalog, which refers to the location of the programs in the main catalog section.

Each category in the main section is arranged numerically by model number and program number. Model 9100A/B programs appear first within each category, followed by 9810A programs. The main section also shows prices of the available publications and single programs. These prices apply to the U. S. A. and Canada and are shown in U. S. A. dollars. In other countries, prices are available from the local Hewlett-Packard sales office.

Availability and delivery time of all programs are subject to demand. Where a price is not included, contact the local HP sales office for price and availability. Orders for all packets and programs should be placed with the local HP sales office.

Programs are of three types:

1. Published programs are those published either in a program packet or in KEYBOARD magazine. Prices for packet books are shown in the category heading. Part numbers and prices of prerecorded magnetic card sets are at the end of the category listing.
2. Unpublished programs are those which do not appear in a library or packet. They are purchasable individually, as indicated by a price in their listing.
3. Customer-submitted programs are identified as such. They are not tested or supported by HP.
 - a. Supported customer-submitted programs are those showing "contact" before the author's address. The author has agreed to answer questions directed to him by other HP calculator users.
 - b. Unsupported customer-submitted programs do not say "contact" and it is requested that questions on these be directed to the HP sales office.

If you have programs you believe are of interest to many other HP calculator users, please complete the Program Submittal Forms in the back of the catalog and send to the address shown. Your program will be evaluated for publication in either KEYBOARD magazine, a program library, or the catalog.

The program material listed herein is supplied without representation or warranty of any kind. Hewlett-Packard Company therefore assumes no responsibility and shall have no liability, consequential or otherwise, of any kind arising from the use of these programs or any part thereof.

October 1971

CALCULATORS AND PERIPHERAL EQUIPMENT

9100A Calculator

9100B Calculator

9100 Peripherals

- 9101A Extended Memory
- 9104A Tape Reader
- 9106A Typewriter Coupler
- 9107A Digitizer
- 9120A Printer
- 9125A/B Plotter
- 9160A Marked Card Reader

9810A Calculator

Plug-In Function Blocks

- 11210A Math
- 11211A Printer Alpha
- 11213A Definable Functions
- 11214A Statistics

Options

Opt 001	111 Data Registers	(11216A)
Opt 002	1012 Total Program Steps	(11217A)
Opt 003	2036 Total Program Steps	(11218A)
Opt 004	Printer	(11219A)

9800 Peripherals

- 9860A Marked Card Reader
- 9861A Typewriter
- 9862A Plotter

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Program Packet/Category	Packet Price	Magnetic Card Set Price	Table of Contents Page
ANALYSIS OF VARIANCE PAC	\$29.50	\$40.00	C11
Analytical Chemistry			C29
ANIMAL ECOLOGY PAC	7.50	15.00	C38
Astronomy			C28
Banking			C31
BAUTECHNISCHE I (German Structures Vol. 1)	7.50	*	C34
BAUTECHNISCHE II (German Structures Vol. 2)	12.50	*	C34
CALCOLI DI STRUTTURE CIVILI (Italian Structures)	18.00	*	C35
Business			C30
Business Forecasting			C31
CARDIOLOGY PAC	7.50	15.00	C38
Chemical			C29
Chemical Engineering			C30
CHEMICAL PROCESS PAC VOL. 1	15.00	45.00	C29
CHEMICAL PROCESS PAC VOL. 2	15.00	20.00	C30
CLINICAL PATHOLOGY PAC	7.50	15.00	C37
Communications Engineering			C15
Electric Utilities			C17
ELECTRIC UTILITIES PAC	7.50	35.00	C15
Electronics			C13
Fluid Mechanics/Hydraulics			C22
GEAR DESIGN PAC (British)	7.50	*	C17
GENERAL BIOLOGY PROGRAMS	7.50	*	C38
Geodetic Surveying			C27
Higher Education			C33
HYDRAULIC ENGINEERING PAC	9.50	*	C28
Mathematics			C3
MATH PAC (Model 10)	50.00	*	C1
Mechanics			C17
Medical			C37
Microwave			C14
MICROWAVE DESIGN PAC	25.00	50.00	C16
Miscellaneous			C40
Nuclear Medicine and Radiology			C38
Nuclear Physics			C29
Optics			C28
Physics			C27
QUALITY ASSURANCE PAC	19.50	30.00	C11
Secondary Education			C32
SHIPBUILDING PROGRAMMES I	35.00	*	C36
STADSMÄTNING (Swedish Surveying Pac)	*	*	C19
STAT PAC (Model 10)	50.00	*	C2
Statistics			C12
STATISTICS PAC VOL. 1 (9100)	19.50	215.00	C7
Stock Analysis			C31
Structures			C23

STRUCTURES PAC	19.50	165.00	C24
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VERMESSUNG 1 (German Surveying 1)	15.00	*	C20
9100A PROGRAM LIBRARY	30.00	130.00	C39
9100B PROGRAM LIBRARY	30.00	150.00	C39
9101A EXTENDED MEMORY LIBRARY	7.50	90.00	C39
9125A/B PLOTTER PROGRAM PACKET	5.00	25.00	C39

*Prices not established as of printing date. Contact local HP sales office.

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HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

SHIPBUILDING PROGRAMMES I

09100-79400

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CALCULATOR PROGRAM CATALOG

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HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

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HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

MISCELLANEOUS

09100-76XXX

CONTINUED

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09100-77038

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09100-76008

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HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

CATEGORY - MODEL 10 MATH PAC

09810-70000

REFER TO THE LAST ENTRY IN THIS PROGRAM CATEGORY FOR ORDERING INFORMATION ON SETS OF PRERECORDED MAGNETIC CARDS FOR THIS PACKET. IF CARDS ARE NOT AVAILABLE, AS INDICATED BY NO ORDERING ENTRY, CONSULT YOUR LOCAL HP CALCULATOR SALESMAN FOR FURTHER INFORMATION.

PROGRAM PRICE 50.00

PART NUMBER	PROGRAM TITLE
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09810-70000	ROOT-FINDER
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PGM 1-1	LAST REVISION 06/08/71	MODEL 10 MATH PAC
	PUBLISHED	

THIS PROGRAM USES A MODIFIED METHOD OF SUCCESSIVE APPROXIMATIONS TO LOCATE REAL ROOT OF AN ANALYTIC EXPRESSION.

THE FUNCTION F(X) IS PLACED IN THE PROGRAM AS A LABELED SUBROUTINE. THE ITERATION CONSTANT IS VARIABLE BY USER CHOICE.

EQUIPMENT REQUIRED - 9810A 11219A

09810-70000	MAXIMUM AND MINIMUM OF $Z = Z(X,Y)$
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PGM 1-2	LAST REVISION 06/08/71	MODEL 10 MATH PAC
	PUBLISHED	

THIS PROGRAM WILL CALCULATE THE APPROXIMATE MAXIMUM AND MINIMUM OF A FUNCTION OF 2 INDEPENDENT VARIABLES.

EQUIPMENT REQUIRED - 9810A 11219A 11211A

09810-70000	FOURIER SERIES
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PGM 1-3	LAST REVISION 06/08/71	MODEL 10 MATH PAC
	PUBLISHED	

THIS PROGRAM DETERMINES THE FOURIER SERIES ASSOCIATED WITH A GIVEN SET OF SAMPLED DATA. AO, THE DC TERM IS OUTPUT. OUTPUT OPTIONS INCLUDE SINE AND COSINE COEFFICIENTS, OR MAGNITUDE AND PHASE.

EQUIPMENT REQUIRED - 9810A 11219A 11211A 11210A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09810-70000 NUMERICAL INTEGRATION USING SIMPSONS ONE THIRD RULE
PGM 2-1 LAST REVISION 06/08/71 MODEL 10 MATH PAC
PUBLISHED

THIS PROGRAM EVALUATES THE AREA UNDER A CURVE REPRESENTED
BY DISCRETE POINTS. SIMPSONS ONE THIRD RULE IS USED.
EQUIPMENT REQUIRED - 9810A 11219A

09810-70000 DIFFERENTIAL EQUATIONS
PGM 2-2 LAST REVISION 06/08/71 MODEL 10 MATH PAC
PUBLISHED

THE PROGRAM SOLVES A SYSTEM OF N SIMULTANEOUS LINEAR OR NON-
LINEAR DIFFERENTIAL EQUATIONS. UP TO 10 DIFFERENTIAL
EQUATIONS MAY BE ACCOMODATED. METHOD USED RUNGA-KUTTA-
GILL METHOD.
EQUIPMENT REQUIRED - 9810A 11219A

09810-70000 POLYNOMIAL EVALUATION (N LESS THAN OR EQUAL TO 10)
PGM 3-1 LAST REVISION 06/08/71 MODEL 10 MATH PAC
PUBLISHED

THIS PROGRAM EVALUATES A N-TH ORDER POLYNOMIAL. THE COEFFI-
CIENTS CAN BE REAL OR COMPLEX. THE ARGUMENT Z, CAN BE REAL OR
COMPLEX.
EQUIPMENT REQUIRED - 9810A 11219A

09810-70000 POLYNOMIAL COEFFICIENTS FROM ROOTS
PGM 3-2 LAST REVISION 06/08/71 MODEL 10 MATH PAC
PUBLISHED

THIS PROGRAM GENERATES THE COEFFICIENTS OF A POLYNOMIAL WHEN
THE ROOTS ARE GIVEN. THE ROOTS AND COEFFICIENTS MAY BE REAL
OR COMPLEX. UP TO 10 COMPLEX ROOTS MAY BE ACCOMMODATED.
EQUIPMENT REQUIRED - 9810A 11219A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER PROGRAM TITLE

09810-70000 ROOTS OF POLYNOMIAL (ORDER LESS THAN 9)
PGM 3-3 LAST REVISION 06/08/71 MODEL 10 MATH PAC
 PUBLISHED

THIS PROGRAM DETERMINES THE ROOTS OF A POLYNOMIAL OF DEGREE
N LESS THAN OR EQUAL TO 8. THE COEFFICIENTS OF THE POLYNOM-
IAL MAY BE REAL OR COMPLEX. A METHOD OF STEEPEST DESCENT IS
USED.

EQUIPMENT REQUIRED - 9810A OPT 2 11219A

09810-70000 ROOTS OF POLYNOMIAL (ORDER LESS THAN 21)
PGM 3-4 LAST REVISION 06/08/71 MODEL 10 MATH PAC
 PUBLISHED

THIS PROGRAM DETERMINES THE ROOTS OF A POLYNOMIAL OF DEGREE
N LESS THAN OR EQUAL TO 20. THE POLYNOMIAL COEFFICIENTS MAY
BE REAL OR COMPLEX. A METHOD OF STEEPEST DESCENT IS USED.

EQUIPMENT REQUIRED - 9810A OPT 1 OPT 2

09810-70000 QUADRATIC EQUATION
PGM 3-5 LAST REVISION 06/08/71 MODEL 10 MATH PAC
 PUBLISHED

THIS PROGRAM DETERMINES THE ROOTS OF A QUADRATIC EQUATION.
IT IS DESIGNED TO HANDLE MOST PATHOLOGICAL CASES. IT CAN
ALSO BE USED AS A SUBROUTINE.

EQUIPMENT REQUIRED - 9810A 11219A 11211A

09810-70000 SYNTHETIC DIVISION ON N-TH ORDER POLYNOMIAL N LESS THAN 11
PGM 3-6 LAST REVISION 06/08/71 MODEL 10 MATH PAC
 PUBLISHED

THIS PROGRAM PERFORMS SYNTHETIC DIVISION UPON A POLYNOMIAL
OF ORDER N (N LESS THAN OR EQUAL TO 10). THE COEFFICIENTS
OF THE POLYNOMIAL AND THE FACTORS MAY BOTH BE COMPLEX.

EQUIPMENT REQUIRED - 9810A 11219A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09810-70000 INTERPOLATION (EQUI-SPACED DATA)

PGM 3-7 LAST REVISION 06/08/71 MODEL 10 MATH PAC
PUBLISHED

THIS PROGRAM APPLIES THE METHOD OF NEWTONS FORWARD
DIFFERENCES TO FIT AN N-TH ORDER POLYNOMIAL THRU N+1 EQUI-
SPACED POINTS.

EQUIPMENT REQUIRED - 9810A 11219A

09810-70000 INTERPOLATION (UNEQUI-SPACED DATA)

PGM 3-8 LAST REVISION 06/08/71 MODEL 10 MATH PAC
PUBLISHED

THIS PROGRAM PERFORMS LAGRANGIAN INTERPOLATION OVER A SET
OF N DATA POINTS (XI,YI). N MUST BE LESS THAN OR EQUAL TO
12. THE XI NEED NOT BE EQUALLY SPACED.

EQUIPMENT REQUIRED - 9810A 11219A

09810-70000 SOLUTION OF N SIMULTANEOUS LINEAR EQUATIONS (N LESS THAN 11)

PGM 4-1 LAST REVISION 06/08/71 MODEL 10 MATH PAC
PUBLISHED

THIS PROGRAM SOLVES A SYSTEM OF N LINEAR EQUATIONS. AN
ELIMINATION TECHNIQUE IS USED. N MUST BE LESS THAN OR EQUAL
TO 10.

EQUIPMENT REQUIRED - 9810A 11219A

09810-70000 GAUSS-JORDAN ELIMINATION FOR SOLUTION OF SIM. LIN. EQUATIONS

PGM 4-2 LAST REVISION 06/08/71 MODEL 10 MATH PAC
PUBLISHED

THIS PROGRAM APPLIES ROW PIVOTING TO SOLVE A SYSTEM OF
LINEAR EQUATIONS. N MUST BE LESS THAN OR EQUAL TO 9. THE
MATRIX INVERSE AND DETERMINANT ARE OUTPUT.

EQUIPMENT REQUIRED - 9810A OPT 1 11219A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09810-70000 MATRIX INVERSION FOR SOLUTION OF SIM. LIN. EQUATIONS
PGM 4-3 LAST REVISION 06/08/71 MODEL 10 MATH PAC
PUBLISHED

THIS PROGRAM APPLIES ROW PIVOTING TO SOLVE A SYSTEM OF
LINEAR EQUATIONS. N MUST BE LESS THAN OR EQUAL TO 6. THE
METHOD OF GAUSS-JORDAN ELIMINATION IS USED. THE INVERSE AND
MATRIX DETERMINANT ARE OUTPUT OPTIONS.

EQUIPMENT REQUIRED - 9810A 11219A

09810-70000 MATRIX INVERSION FOR SOLUTION OF SIM. LIN. EQUATIONS
PGM 4-4 LAST REVISION 06/08/71 MODEL 10 MATH PAC
PUBLISHED

THIS PROGRAM APPLIES ROW PIVOTING TO SOLVE A SYSTEM OF
LINEAR EQUATIONS. N MUST BE LESS THAN OR EQUAL TO 9. THE
METHOD OF GAUSS-JORDAN ELIMINATION IS USED. THE INVERSE AND
MATRIX DETERMINANT ARE OUTPUT OPTIONS.

EQUIPMENT REQUIRED - 9810A OPT 1 11219A

09810-70000 GAUSS-JORDAN ELIMINATION FOR SOLUTION OF SIM. LIN. EQUATIONS
PGM 4-5 LAST REVISION 06/08/71 MODEL 10 MATH PAC
PUBLISHED

THIS PROGRAM APPLIES ROW PIVOTING TO SOLVE A SYSTEM OF
LINEAR EQUATIONS. N MUST BE LESS THAN OR EQUAL TO 6. THE
MATRIX INVERSE AND DETERMINANT ARE OUTPUT.

EQUIPMENT REQUIRED - 9810A 11219A

09810-70000 GAUSS-JORDAN ELIMINATION FOR SOLUTION OF SIM. LIN. EQUATIONS
PGM 4-6 LAST REVISION 06/08/71 MODEL 10 MATH PAC
PUBLISHED

THIS PROGRAM APPLIES ROW PIVOTING TO SOLVE A SYSTEM OF
LINEAR EQUATIONS. N MUST BE LESS THAN OR EQUAL TO 9. THE
MATRIX INVERSE AND DETERMINANT ARE OUTPUT.

EQUIPMENT REQUIRED - 9810A OPT 1 11219A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09810-70000 MATRIX ARITHMETIC

PGM 4-7 LAST REVISION 06/08/71 MODEL 10 MATH PAC
PUBLISHED

WITH THIS PROGRAM, MATRICES OF ANY SIZE UP TO 9X11 MAY BE
ADDED, SUBTRACTED, OR MULTIPLIED. THE RESULTANT MATRIX REMAINS
IN THE CALCULATOR AND MAY BE OPERATED UPON BY A THIRD MATRIX
EQUIPMENT REQUIRED - 9810A OPT 1 11219A

09810-70000 CHARACTERISTIC EQUATION SOLUTION (N LESS THAN OR EQUAL TO 6)
PGM 4-8 LAST REVISION 06/08/71 MODEL 10 MATH PAC
PUBLISHED

THIS PROGRAM DETERMINES THE CHARACTERISTIC POLYNOMIAL OF A
MATRIX A. THE DANILEVSKY METHOD IS USED. THE RESULTING
POLYNOMIAL IS FACTORED WHEN POSSIBLE.
EQUIPMENT REQUIRED - 9810A 11219A

09810-70000 CHARACTERISTIC EQUATION SOLUTION (N LESS THAN OR EQUAL TO 9)
PGM 4-9 LAST REVISION 06/08/71 MODEL 10 MATH PAC
PUBLISHED

THIS PROGRAM DETERMINES THE CHARACTERISTIC POLYNOMIAL OF A
MATRIX A. THE DANILEVSKY METHOD IS USED. THE RESULTING
POLYNOMIAL IS FACTORED WHERE POSSIBLE.
EQUIPMENT REQUIRED - 9810A OPT 1 11219A

09810-70000 STATISTICS FOR SINGLE VARIABLE ANALYSIS
PGM 5-1 LAST REVISION 07/28/71 MODEL 10 MATH PAC
PUBLISHED

THIS PROGRAM COMPUTES THE MEAN, STD. DEV., AND STD. ERROR
FOR A SET OF DATA. THE PROGRAM OUTPUTS THE SUM OF THE XS,
THE SUM OF THE SQUARED XS, AND N THE NUMBER OF OBSERVATIONS.
EQUIPMENT REQUIRED - 9810A 11219A 11211A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09810-70000 LINEAR REGRESSION WITH ANOVA

PGM 5-2 LAST REVISION 07/28/71 MODEL 10 MATH PAC
PUBLISHED

THIS PROGRAM DETERMINES THE COEFFICIENTS A_0 AND A_1 FOR THE
SIMPLE LINEAR CURVE FIT. THE MEANS AND STD. DEV.S OF X AND Y
ARE OUTPUT. THE STANDARD ERROR OF ESTIMATE AND CONFIDENCE
INTERVAL FOR SLOPE (A_1) ARE OUTPUT. THE REGRESSION ANALYSIS
OF VARIANCE TABLE IS OUTPUT ALSO.

EQUIPMENT REQUIRED - 9810A 11219A 11211A

09810-70000 HISTOGRAM GENERATION

PGM 5-3 LAST REVISION 07/28/71 MODEL 10 MATH PAC
PUBLISHED

THIS PROGRAM GENERATES A 20 CELL HISTOGRAM FOR A SET OF DATA
FOR EACH CELL THE NUMBER OF OBSERVATIONS, AND THE PERCENT
RELATIVE FREQUENCY IS OUTPUT. IN ADDITION THE MEAN, STD. DEV.,
MAXIMUM, MINIMUM, AND RANGE OF THE DATA IS COMPUTED. A
PLOT OF THE HISTOGRAM IS OPTIONAL.

EQUIPMENT REQUIRED - 9810A 11211A 11214A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

CATEGORY - MODEL 10 STAT PAC

09810-70800

REFER TO THE LAST ENTRY IN THIS PROGRAM CATEGORY FOR ORDERING INFORMATION ON SETS OF PRERECORDED MAGNETIC CARDS FOR THIS PACKET. IF CARDS ARE NOT AVAILABLE, AS INDICATED BY NO ORDERING ENTRY, CONSULT YOUR LOCAL HP CALCULATOR SALESMAN FOR FURTHER INFORMATION.

PROGRAM PRICE 50.00

PART NUMBER

PROGRAM TITLE

09800-70800 MEAN, STANDARD DEVIATION, STANDARD ERROR
PGM 1-1 LAST REVISION 07/28/71 MODEL 10 STAT PAC
PUBLISHED

THIS PROGRAM COMPUTES THE MEAN, STD. DEV., AND STD. ERROR
FOR A SET OF DATA. THE PROGRAM OUTPUTS THE SUM OF THE XS,
THE SUM OF THE SQUARED XS, AND N, THE NUMBER OF OBSERVATIONS
EQUIPMENT REQUIRED - 9810A 11219A 11211A

09810-70800 MEAN, STANDARD DEVIATION, STANDARD ERROR FOR GROUPED DATA
PGM 1-2 LAST REVISION 07/28/71 MODEL 10 STAT PAC
PUBLISHED

THIS PROGRAM COMPUTES THE MEAN, STD. DEV., AND STD. ERROR
FOR GROUPED DATA. THE TOTAL NUMBER OF OBSERVATIONS IS ALSO
AN OUTPUT VALUE.
EQUIPMENT REQUIRED - 9810A 11219A 11211A

09810-70800 MEAN, STD. DEV., SKEWNESS, KURTOSIS-GROUPED OR UNGROUPED DATA
PGM 1-3 LAST REVISION 07/28/71 MODEL 10 STAT PAC
PUBLISHED

THIS PROGRAM COMPUTES MOMENTS M2, M3, M4, KURTOSIS, SKEWNESS,
AND THE MEAN, STANDARD DEVIATION FOR GROUPED OR UNGROUPED
DATA.
EQUIPMENT REQUIRED - 9810A 11219A 11211A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09810-70800 PERMUTATIONS

PGM 1-4 LAST REVISION 07/28/71 MODEL 10 STAT PAC
PUBLISHED

THIS PROGRAM EVALUATES THE FORMULA FOR THE PERMUTATIONS OF
N OBJECTS TAKEN R AT A TIME. A RELOCATABLE SUBROUTINE IS
USED.

EQUIPMENT REQUIRED - 9810A 11219A 11211A

09810-70800 COMBINATIONS

PGM 1-5 LAST REVISION 07/28/71 MODEL 10 STAT PAC
PUBLISHED

THIS PROGRAM EVALUATES THE FORMULA FOR THE COMBINATION OF
N OBJECTS TAKEN R AT A TIME.

EQUIPMENT REQUIRED - 9810A 11219A 11211A

09810-70800 ARITHMETIC, HARMONIC, GEOMETRIC MEANS

PGM 1-6 LAST REVISION 07/28/71 MODEL 10 STAT PAC
PUBLISHED

THIS PROGRAM DETERMINES THE ARITHMETIC, GEOMETRIC, AND
HARMONIC MEANS OF A SET OF DATA.

EQUIPMENT REQUIRED - 9810A 11219A 11211A 11214A

09810-70800 COVARIANCE AND COEFFICIENT OF CORRELATION

PGM 1-7 LAST REVISION 07/28/71 MODEL 10 STAT PAC
PUBLISHED

THIS PROGRAM ACCEPTS PAIRED X,Y DATA AND COMPUTES THE MEANS
OF X AND Y, THE STANDARD DEVIATIONS OF X AND Y, THE
COVARIANCE OF X AND Y, AND THE COEFFICIENT OF CORRELATION
BETWEEN X AND Y.

EQUIPMENT REQUIRED - 9810A 11219A 11211A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09810-70800 HISTOGRAM GENERATION

PGM 1-8 LAST REVISION 07/28/71 MODEL 10 STAT PAC
PUBLISHED

THIS PROGRAM GENERATES A 20 CELL HISTOGRAM FOR A SET OF DATA FOR EACH CELL THE NUMBER OF OBSERVATIONS, AND THE PERCENT RELATIVE FREQUENCY IS OUTPUT. IN ADDITION THE MEAN, STD. DEV., MAXIMUM, MINIMUM, AND RANGE OF THE DATA IS COMPUTED. A PLOT OF THE HISTOGRAM IS OPTIONAL.

EQUIPMENT REQUIRED - 9810A 11211A 11214A

09810-70800 UNIFORM RANDOM NUMBER GENERATION

PGM 1-9 LAST REVISION 07/28/71 MODEL 10 STAT PAC
PUBLISHED

THIS PROGRAM GENERATES (N) UNIFORMLY DISTRIBUTED RANDOM NUMBERS. THESE NUMBERS ARE UNIFORMLY DISTRIBUTED BETWEEN 0 AND UNITY.

EQUIPMENT REQUIRED - 9810A 11219A 11211A 11214A

09810-70800 NORMAL RANDOM NUMBER GENERATION

PGM 1-10 LAST REVISION 07/28/71 MODEL 10 STAT PAC
PUBLISHED

THIS PROGRAM GENERATES (N) NORMALLY DISTRIBUTED RANDOM NUMBERS. THE USER SPECIFIES THE MEAN AND VARIANCE OF THE DISTRIBUTION.

EQUIPMENT REQUIRED - 9810A 11219A 11211A 11210A

09810-70800 ONE-WAY ANALYSIS OF VARIANCE (BALANCED OR UNBALANCED DESIGN)

PGM 1-11 LAST REVISION 08/28/71 MODEL 10 STAT PAC
PUBLISHED

THIS PROGRAM PERFORMS A ONE WAY ANOV ON A BALANCED OR UNBALANCED DESIGN. THERE IS NO LIMIT TO THE NUMBER TREATMENT GROUPS, OR NUMBER OF OBSERVATIONS WITHIN A TREATMENT GROUP. TREATMENT SUM, MEAN, AND N ARE OUTPUT FOR EACH TREATMENT. TOTAL SUM, MEAN, AND N (OVERALL TREATMENTS) IS OUTPUT. THE COMPLETE ANOV TABLE (SS VALUES, MS VALUES, DEGREES OF FREEDOM, F RATIO) IS OUTPUT.

EQUIPMENT REQUIRED - 9810A 11219A 11211A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09810-70800 NORMAL PROBABILITY INTEGRAL

PGM 2-1 LAST REVISION 07/28/71 MODEL 10 STAT PAC
PUBLISHED

THIS PROGRAM COMPUTES THE INTEGRAL OF THE STANDARDIZED
NORMAL DISTRIBUTION. THE LIMITS OF X ARE + AND - 7.

EQUIPMENT REQUIRED - 9810A 11219A 11211A 11214A

09810-70800 CHI-SQUARED DISTRIBUTION

PGM 2-2 LAST REVISION 07/28/71 MODEL 10 STAT PAC
PUBLISHED

THIS PROGRAM EVALUATES THE CHI-SQUARED DISTRIBUTION INTEGRAL
FOR GIVEN VALUES OF CHI-SQUARED AND DEGREES OF FREEDOM. IT
MAY BE USED AS A SUBROUTINE IN OTHER STATISTICAL PROGRAMS.

EQUIPMENT REQUIRED - 9810A 11219A 11211A 11214A

09810-70800 BINOMIAL DISTRIBUTION

PGM 2-3 LAST REVISION 07/28/71 MODEL 10 STAT PAC
PUBLISHED

THIS PROGRAM EVALUATES THE BINOMIAL DISTRIBUTION FOR A
GIVEN.. P = PROBABILITY OF SUCCESS

R = NUMBER OF SUCCESSES

N = NUMBER OF TRIALS

EQUIPMENT REQUIRED - 9810A 11219A 11211A 11214A

09810-70800 POISSON DISTRIBUTION

PGM 2-4 LAST REVISION 07/28/71 MODEL 10 STAT PAC
PUBLISHED

THIS PROGRAM EVALUATES THE POISSON DISTRIBUTION.

A SUBROUTINE FOR COMPUTING X FACTORIAL IS INCLUDED.

EQUIPMENT REQUIRED - 9810A 11219A 11211A 11214A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09810-70800 TWO VARIABLE LINEAR REGRESSION

PGM 3-1 LAST REVISION 07/28/71 MODEL 10 STAT PAC
PUBLISHED

THIS PROGRAM DETERMINES THE COEFFICIENTS A_0 AND A_1 FOR THE SIMPLE LINEAR CURVE FIT. THE MEANS AND STD. DEV. S OF X AND Y ARE OUTPUT. THE STANDARD ERROR OF ESTIMATE AND CONFIDENCE INTERVAL FOR SLOPE (A_1) ARE OUTPUT. THE REGRESSION ANALYSIS OF VARIANCE TABLE IS OUTPUT ALSO.

EQUIPMENT REQUIRED - 9810A 11219A 11211A

09810-70800 TWO VARIABLE PARABOLIC REGRESSION

PGM 3-2 LAST REVISION 07/28/71 MODEL 10 STAT PAC
PUBLISHED

THIS PROGRAM DETERMINES THE COEFFICIENTS A_0 , A_1 , AND A_2 , FOR A PARABOLIC CURVE FIT BETWEEN X AND Y. BASIC STATISTICS, SUCH AS MEANS, VARIANCES, MAX.S, MIN.S, RANGES, AND COEF. OF DETERMINATION ARE OUTPUT. THE PROGRAM HAS OPTIONS FOR

1. CORRECTING OR DELETING DATA
2. OUTPUTING THE REGRESSION AOV TABLE.

EQUIPMENT REQUIRED - 9810A 11219A 11211A 11214A

09810-70800 TWO VARIABLE CUBIC REGRESSION

PGM 3-3 LAST REVISION 07/28/71 MODEL 10 STAT PAC
PUBLISHED

THIS PROGRAM COMPUTES THE COEF.S A_0 , A_1 , A_2 , AND A_3 FOR A CUBIC CURVE FIT BETWEEN X AND Y. BASIC STATISTICS, SUCH AS MEANS, VARIANCES, MIN.S, MAX.S, RANGES, AND COEF. OF DETERMINATION ARE OUTPUT. THE PROGRAM HAS OPTIONS FOR

1. CORRECTING OR DELETING DATA
2. OUTPUTING THE REGRESSION AOV TABLE.

EQUIPMENT REQUIRED - 9810A OPT 3 11219A 11211A 11214A

09810-70800 TWO VARIABLE QUARTIC REGRESSION

PGM 3-4 LAST REVISION 07/28/71 MODEL 10 STAT PAC
PUBLISHED

. OUTPUTING THE REGRESSION AOV TABLE
A QUARTIC CURVE FIT BETWEEN X AND Y. BASIC STATISTICS, SUCH AS MEANS, VARIANCES, MIN.S, MAX.S, RANGES, AND COEF. OF DETERMINATION ARE OUTPUT. THE PROGRAM HAS OPTIONS FOR

1. CORRECTING OR DELETING DATA

EQUIPMENT REQUIRED - 9810A OPT 3 11219A 11211A 11214A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09810-70800 LEAST SQUARES FIT - EXPONENTIAL

PGM 3-5 LAST REVISION 07/28/71 MODEL 10 STAT PAC
PUBLISHED

THIS PROGRAM COMPUTES THE COEF.S A0 AND A1 OF THE MODEL
 $Y = A0 * EXP(A1 * X)$

BASIC STATISTICS SUCH AS MEANS, VARIANCES, MAX.S, MIN.S,
RANGES, AND COEF. OF DETERMINATION, ARE OUTPUT. THE PROGRAM
HAS A CORRECT OPTION.

EQUIPMENT REQUIRED - 9810A 11219A 11211A 11214A

09810-70800 LEAST SQUARES FIT - POWER

PGM 3-6 LAST REVISION 07/28/71 MODEL 10 STAT PAC
PUBLISHED

THIS PROGRAM COMPUTES THE COEF.S A0 AND A1 OF THE MODEL
 $Y = A0 * X ** A1$

BASIC STATISTICS SUCH AS MEANS, VARIANCES, MAX.S, MIN.S,
RANGES, AND COEF. OF DETERMINATION, ARE OUTPUT. THE PROGRAM
HAS A CORRECT OPTION.

EQUIPMENT REQUIRED - 9810A 11219A 11211A 11214A

09810-70800 MULTIPLE LINEAR REGRESSION (3 VARIABLE)

PGM 4-1 LAST REVISION 07/28/71 MODEL 10 STAT PAC
PUBLISHED

THIS PROGRAM COMPUTES THE COEF.S A0, A1, AND A2 FOR THE
MLR MODEL $Z = A0 + A1 * X + A2 * Y$.

BASIC STATISTICS SUCH AS MEANS, VARIANCES, MAX.S, MIN.S,
SIMPLE CORRELATIONS, AND COEF. OF DETERMINATION, ARE OUT-
PUT. THE REGRESSION AOV TABLE IS OPTIONAL.

EQUIPMENT REQUIRED - 9810A 11219A 11211A 11214A

09810-70800 MULTIPLE LINEAR REGRESSION (4 VARIABLE)

PGM 4-2 LAST REVISION 07/28/71 MODEL 10 STAT PAC
PUBLISHED

THIS PROGRAM COMPUTES THE COEF.S A0, A1, A2, AND A3 FOR THE
MLR MODEL $Y = A0 + A1 * X1 + A2 * X2 + A3 * X3$.

BASIC STATISTICS SUCH AS MEANS, VARIANCES, SIMPLE CORRELA-
TIONS, AND COEF. OF DETERMINATION, ARE OUTPUT. THE COMPLETE
AOV TABLE, SS VALUES, MS VALUES, DF VALUES, AND F RATIO IS
OUTPUT.

EQUIPMENT REQUIRED - 9810A OPT 3 11219A 11211A 11214A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09810-70800 MULTIPLE LINEAR REGRESSION (5 VARIABLE)
PGM 4-3 LAST REVISION 07/28/71 MODEL 10 STAT PAC
PUBLISHED

THIS PROGRAM COMPUTES THE COEF.S A0, A1, A2, A3, AND A4 FOR
THE MLR MODEL $Y = A0 + A1 \cdot X1 + A2 \cdot X2 + A3 \cdot X3 + A4 \cdot X4$.
BASIC STATISTICS SUCH AS MEANS, VARIANCES, SIMPLE CORRELA-
TIONS, AND COEF. OF DETERMINATION, ARE OUTPUT. THE COMPLETE
ADV TABLE, SS VALUES, MS VALUES, DF VALUES, AND F RATIO IS
OUTPUT.

EQUIPMENT REQUIRED - 9810A OPT 3 11219A 11211A 11214A

09810-70800 BARTLETTS TEST FOR HOMOGENEITY OF VARIANCE
PGM 5-1 LAST REVISION 07/28/71 MODEL 10 STAT PAC
PUBLISHED

THIS PROGRAM COMPUTES THE STATISTICS NECESSARY FOR TESTING
FOR THE HOMOGENEITY OF VARIANCES. OUTPUT INCLUDES THE
F STATISTIC WITH DEGREES OF FREEDOM, POOLED VARIANCE, M,
AND THE CHI-SQUARED STATISTIC.

EQUIPMENT REQUIRED - 9810A 11219A 11211A 11214A

09810-70800 OUTLIER DETERMINATION
PGM 5-2 LAST REVISION 07/28/71 MODEL 10 STAT PAC
PUBLISHED

THE PROGRAM DETERMINES IF AN EXTREME VALUE WITHIN A DATA SET
IS A STATISTICAL OUTLIER AND CAN BE EXCLUDED FROM THE DATA
SET. THE METHOD IS BASED ON AN OUTLIER TEST BY DR. F.E.GRUBBS
AND DESCRIBED IN THE ANNALS OF MATH. STATISTICS, VOL. 21.
OUTPUT INCLUDES THE MEAN OF THE DATA SET, OVERALL SS, SS1
(SUSPECTED OUTLIER REMOVED), AND R (RATIO OF SS/SS1)
THE DATA NEED NOT BE RANKED FOR INPUT.

EQUIPMENT REQUIRED - 9810A 11219A 11211A

09810-70800 SPEARMANS RANK CORRELATION COEFFICIENT
PGM 5-3 LAST REVISION 07/28/71 MODEL 10 STAT PAC
PUBLISHED

THIS PROGRAM DETERMINES SPEARMANS R, THE Z STATISTIC, AND
THE VARIANCE OF R, FOR A DATA SET OF RANKED OBSERVATIONS.

EQUIPMENT REQUIRED - 9810A 11219A 11211A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09810-70800 INTRAClass CORRELATION

PGM 5-4 LAST REVISION 07/28/71 MODEL 10 STAT PAC
PUBLISHED

THIS PROGRAM COMPUTES THE INTRAClass CORRILATION BETWEEN TWO COLUMNS OF DATA. IN ADDITION TO THE INTRAClass CORRELATION COEFFICIENT, THE PROGRAM OUTPUTS THE MEANS AND THE VARIANCES OF BOTH COLUMNS.

EQUIPMENT REQUIRED - 9810A 11219A 11211A

09810-70800 PAIRED OBSERVATION T TEST

PGM 5-5 LAST REVISION 07/28/71 MODEL 10 STAT PAC
PUBLISHED

THIS PROGRAM DETERMINES THE STATISTICS ASSOCIATED WITH A PAIRED OBSERVATION ANALYSIS. OUTPUT INCLUDES THE MEANS, AND STD. DEVIATIONS OF X AND Y, THE MEAN, STD. DEVIATION, AND STD. ERROR OF THE DIFFERENCES, THE T STATISTIC WITH DEGREES OF FREEDOM.

EQUIPMENT REQUIRED - 9810A 11219A 11211A

09810-70800 T STATISTIC FOR MEANS OF TWO SAMPLES

PGM 5-6 LAST REVISION 07/28/71 MODEL 10 STAT PAC
PUBLISHED

THIS PROGRAM COMPUTES THE T STATISTIC USED TO TEST THE HYPOTHESIS THAT TWO SAMPLES BELONG TO THE SAME POPULATION. THE PROGRAM OUTPUTS SSX, SSY, SAMPLE SIZE X, SAMPLE SIZE Y, MEAN X, MEAN Y, STD. DEV. X, STD. DEV. Y, AND THE T VALUE WITH ASSOCIATED DEGREES OF FREEDOM.

EQUIPMENT REQUIRED - 9810A 11219A 11211A

09810-70800 CHI-SQUARED EVALUATION (EXPECTED VALUES EQUAL)

PGM 5-7 LAST REVISION 07/28/71 MODEL 10 STAT PAC
PUBLISHED

THIS PROGRAM COMPUTES THE CHI-SQUARED STATISTIC ASSOCIATED WITH A CONTINGENCY TABLE OF EQUAL EXPECTED VALUES.

EQUIPMENT REQUIRED - 9810A 11219A 11211A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09810-70800 CHI-SQUARED EVALUATION (EXPECTED VALUES UNEQUAL)
PGM 5-8 LAST REVISION 07/28/71 MODEL 10 STAT PAC

PUBLISHED

THIS PROGRAM COMPUTES THE CHI-SQUARED STATISTIC ASSOCIATED
WITH A CONTINGENCY TABLE OF UNEQUAL EXPECTED VALUES.

EQUIPMENT REQUIRED - 9810A 11219A 11211A

09810-70800 CHI-SQUARED (2*K) CONTINGENCY TABLE
PGM 5-9 LAST REVISION 07/28/71 MODEL 10 STAT PAC

PUBLISHED

THIS PROGRAM DETERMINES THE CHI-SQUARED STATISTIC ASSOCIATED
WITH A (2*K) CONTINGENCY TABLE. OUTPUT INCLUDES THE ROW
TOTALS.

EQUIPMENT REQUIRED - 9810A 11219A 11211A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

CATEGORY - MATHEMATICS

09100-70XXX

REFER TO THE LAST ENTRY IN THIS PROGRAM CATEGORY FOR ORDERING INFORMATION ON SETS OF PRERECORDED MAGNETIC CARDS FOR THIS PACKET. IF CARDS ARE NOT AVAILABLE, AS INDICATED BY NO ORDERING ENTRY, CONSULT YOUR LOCAL HP CALCULATOR SALESMAN FOR FURTHER INFORMATION.

PART NUMBER

PROGRAM TITLE

09100-70001 N FACTORIAL

LAST REVISION 09/01/69 9100A/B LIBRARY
PUBLISHED

CALCULATES N FACTORIAL FOR POSITIVE INTEGER N WHERE
N DOES NOT EXCEED 69.

EQUIPMENT REQUIRED - 9100A 9100B

09100-70002 POLYNOMIAL EVALUATION

LAST REVISION 09/01/69 9100A/B LIBRARY
PUBLISHED

EVALUATES POLYNOMIALS FOR COMPLEX COEFFICIENTS.

EQUIPMENT REQUIRED - 9100A 9100B

09100-70003 NUMERICAL INTEGRATION USING SIMPSON'S ONE-THIRD RULE

LAST REVISION 09/01/69 9100A/B LIBRARY
PUBLISHED

USES SIMPSON'S RULE TO OBTAIN THE AREA UNDER A CURVE. THE
EQUATION USED IS.. $A = H/3 (Y_0 + 4Y_1 + Y_2)$

EQUIPMENT REQUIRED - 9100A 9100B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-70004 VECTOR CROSS PRODUCT

LAST REVISION 12/01/68 9100A LIBRARY

PUBLISHED

CALCULATES THE VECTOR CROSS PRODUCT (A X B) OF TWO THREE-DIMENSIONAL VECTORS.

EQUIPMENT REQUIRED - 9100A 9100B

09100-70005 ANGLE BETWEEN TWO THREE-DIMENSIONAL VECTORS

LAST REVISION 12/01/68 9100A LIBRARY

PUBLISHED

CALCULATES THE ANGLE BETWEEN TWO THREE-DIMENSIONAL VECTORS.

EQUIPMENT REQUIRED - 9100A 9100B

09100-70006 1ST ORDER DIFFERENTIAL EQUATIONS

LAST REVISION 09/01/69 9100A/B LIBRARY

PUBLISHED

SOLVES DIFFERENTIAL EQUATIONS OF THE FORM $Y' = F(X,Y)$

EQUIPMENT REQUIRED - 9100A 9100B

09100-70007 RAISING A NUMBER TO A POWER

LAST REVISION 09/01/69 9100A/B LIBRARY

PUBLISHED

RAISES COMPLEX NUMBERS TO COMPLEX POWERS.

EQUIPMENT REQUIRED - 9100A 9100B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-70008 2ND ORDER DIFFERENTIAL EQUATIONS

LAST REVISION 09/01/69 9100A/B LIBRARY
PUBLISHED

SOLVES DIFFERENTIAL EQUATIONS OF THE FORM.. $Y'' = F(X, Y, Y')$
EQUIPMENT REQUIRED - 9100A 9100B

09100-70009 QUADRATIC EQUATION

LAST REVISION 06/01/69 9100A/B LIBRARY
PUBLISHED

SOLVES A QUADRATIC EQUATION
EQUIPMENT REQUIRED - 9100A 9100B

09100-70010 FINITE DIFFERENCE INTERPOLATION USING GAUSS BACKWARD FORMULA

LAST REVISION 06/01/70 9100A/B LIBRARY
PUBLISHED

USES GAUSS'S BACKWARD FORMULA FOR INTERPOLATION IN TABULAR
DATA WITH EQUAL ABSCISSA SPACING. THE PROGRAM FITS A CUBIC
EQUATION THROUGH THE TABULAR DATA.
EQUIPMENT REQUIRED - 9100A 9100B

09100-70011 CUBIC EQUATION

LAST REVISION 09/01/69 9100A/B LIBRARY
PUBLISHED

SOLVES CUBIC EQUATIONS FOR REAL AND COMPLEX ROOTS
EQUIPMENT REQUIRED - 9100A 9100B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER	PROGRAM TITLE
09100-70012	OCTAL - DECIMAL CONVERSION
	LAST REVISION 12/01/68 9100A/B LIBRARY
	PUBLISHED
	CONVERTS OCTAL NUMBERS TO DECIMAL OR DECIMAL NUMBERS TO OCTAL.
EQUIPMENT REQUIRED -	9100A 9100B

09100-70013	FACTORS OF N
	LAST REVISION 09/01/70 9100A/B LIBRARY
	PUBLISHED
	GIVES ALL FACTORS OF AN INTEGER N
EQUIPMENT REQUIRED -	9100A 9100B

09100-70014	REAL ROOTS OF F(X)
	LAST REVISION 09/01/69 9100A/B LIBRARY
	PUBLISHED
	CALCULATES REAL ROOTS FOR F(X) BY STARTING FROM X0 AND INCREMENTING UNTIL F(X) CHANGES SIGN, THEN CONVERGES ON THE ROOT. F(X) IS PROGRAMMED BY THE USER.
EQUIPMENT REQUIRED -	9100A 9100B

09100-70015	NUMERICAL INTEGRATION USING SIMPSON RULE WHEN F(X) IS UNKNOW
	LAST REVISION 12/01/68 9100A LIBRARY
	PUBLISHED
	THE SPECIFIC F(X) IS PROGRAMMED INTO THE CALCULATOR BY THE USER AND IS THEN USED BY THE GENERAL SOLUTION TO EVALUATE THE INTEGRAL.
EQUIPMENT REQUIRED -	9100A 9100B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-70016 SIMULTANEOUS SOLUTION OF TWO EQUATIONS IN TWO UNKNOWN
LAST REVISION 09/01/69 9100A/B LIBRARY
PUBLISHED

THE PROGRAM SOLVES TWO INDEPENDENT EQUATIONS OF THE FORM..
 $AX + BY = E$, $CX + DY = F$. X AND Y ARE THE UNKNOWN TO BE
FOUND.

EQUIPMENT REQUIRED - 9100A 9100B

09100-70017 N FACTORIAL (N IS LESS THAN 10 TO THE 12TH POWER)
LAST REVISION 09/01/69 9100A/B LIBRARY
PUBLISHED

CALCULATES N FACTORIAL FOR POSITIVE INTEGER N.

EQUIPMENT REQUIRED - 9100A 9100B

09100-70018 CONVOLUTION
LAST REVISION 12/01/68 9100A/B LIBRARY
PUBLISHED

THIS PROGRAM SOLVES A CONVOLUTION INTEGRAL.

EQUIPMENT REQUIRED - 9100A 9100B

09100-70019 4TH OR 5TH DEGREE POLYNOMIAL ROOTS
LAST REVISION 12/01/68 9100A/B LIBRARY
PUBLISHED

CALCULATES THE ROOTS, REAL AND/OR COMPLEX, OF 5TH OR 4TH
DEGREE POLYNOMIALS.

EQUIPMENT REQUIRED - 9100A 9100B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-70020 INTEGRAL OF $F(X)$ BETWEEN A AND X
LAST REVISION 12/01/68 9100A/B LIBRARY
PUBLISHED

THIS PROGRAM CALCULATES THE INTEGRAL OF A KNOWN FUNCTION $F(X)$
BETWEEN ANY LOWER LIMIT (A) AND A SUCCESSIVELY INCREMENTED
UPPER LIMIT X. SIMPSON'S RULE IS USED TO PERFORM THE
INTEGRATION.

EQUIPMENT REQUIRED - 9100A 9100B

09100-70021 POLYNOMIAL EVALUATION (N BETWEEN 1 AND 10)
LAST REVISION 09/01/69 9100A/B LIBRARY
PUBLISHED

THIS PROGRAM EVALUATES A POLYNOMIAL WITH REAL COEFFICIENTS
AND POWERS WHERE N IS BETWEEN 1 AND 10.

EQUIPMENT REQUIRED - 9100A 9100B

09100-70022 3X3 MATRIX INVERS./SIMULT. SOLUTION 3 EQ'NS. IN 3 UNKNOWN
LAST REVISION 09/01/69 9100A/B LIBRARY
PUBLISHED

SOLVES THREE LINEAR INDEPENDENT EQUATIONS IN THREE UNKNOWN
SIMULTANEOUSLY OR INVERTS A 3X3 MATRIX.

EQUIPMENT REQUIRED - 9100A 9100B

09100-70023 FOURIER SERIES
LAST REVISION 09/01/69 9100A/B LIBRARY
PUBLISHED

CALCULATES THE FOURIER SERIES COEFFICIENTS THAT REPRESENT A
PERIODIC TIME FUNCTION $F(T)$ WITH PERIOD T. THE SPECIFIC $F(T)$
IS PROGRAMMED INTO THE CALCULATOR BY THE USER.

EQUIPMENT REQUIRED - 9100A 9100B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-70024 GAMMA FUNCTION

LAST REVISION 09/01/69 9100A/B LIBRARY
PUBLISHED

EVALUATES THE GAMMA FUNCTION

EQUIPMENT REQUIRED - 9100A 9100B

09100-70025 BESSEL FUNCTION

LAST REVISION 09/01/69 9100A/B LIBRARY
PUBLISHED

CALCULATES THE VALUE OF THE BESSEL FUNCTION $J(x)$ OF THE FIRST
KIND OF INTEGER ORDER N .

EQUIPMENT REQUIRED - 9100A 9100B

09100-70026 MAXIMUM AND MINIMUM OF $Y=F(X)$

LAST REVISION 06/01/70 PLOTTER LIBRARY
PUBLISHED

THIS PROGRAM WILL COMPUTE THE APPROXIMATE MAXIMUM AND
MINIMUM OF THE FUNCTION $F(X)$ OVER SPECIFIED RANGE OF
INDEPENDENT VARIABLE X .

EQUIPMENT REQUIRED - 9100A 9100B

09100-70027 PLOT OF $Y=F(X)$

LAST REVISION 06/01/70 PLOTTER LIBRARY
PUBLISHED

THIS PROGRAM WILL PLOT THE FUNCTION $Y = F(X)$ IN
RECTANGULAR COORDINATES. THE NUMBER OF PLOT POINTS PER INCH,
 N , IS SPECIFIED BY THE USER, AS ALSO ARE THE PLOTTING
CONSTANTS.

EQUIPMENT REQUIRED - 9100A 9100B 9125A/B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-70028 FIRST ORDER DIFFERENTIAL EQUATION PLOT
LAST REVISION 06/01/70 PLOTTER LIBRARY
PUBLISHED

NUMERICALLY SOLVES 1ST ORDER DIFFERENTIAL EQUATIONS USING A
RUNGE-KUTTA METHOD AND PLOTS SOLUTION FOR INCREMENTED
VALUES OF THE INDEPENDENT VARIABLE

EQUIPMENT REQUIRED - 9100A 9100B 9125A/B

09100-70029 MAXIMUM AND MINIMUM OF $R=F(\theta)$
LAST REVISION 06/01/70 PLOTTER LIBRARY
PUBLISHED

WITH POLAR COORDINATE VALUES, THIS PROGRAM WILL COMPUTE THE
APPROXIMATE MAXIMUM AND MINIMUM OF THE FUNCTION IN
RECTANGULAR COORDINATES OVER A SPECIFIED RANGE OF THE
INDEPENDENT VARIABLE.

EQUIPMENT REQUIRED - 9100A 9100B

09100-70030 PLOT OF $R=F(\theta)$ IN POLAR COORDINATES
LAST REVISION 06/01/70 PLOTTER LIBRARY
PUBLISHED

THIS PROGRAM WILL PLOT THE FUNCTION $R=F(\theta)$ IN POLAR
COORDINATES. THE NUMBER OF PLOT POINTS, N, IS SPECIFIED BY
THE USER AS ALSO ARE THE PLOTTING CONSTANTS.

EQUIPMENT REQUIRED - 9100A 9100B 9125A/B

09100-70031 (M X N) MATRIX TIMES (NX1) VECTOR WHERE N IS BETWEEN 2 AND 6
LAST REVISION 12/01/68 I W LARSON
UNPUBLISHED PRICE 10.00

THIS PROGRAM MULTIPLIES AN (MXN) MATRIX A TIMES AN (NX1)
COLUMN VECTOR X WHERE N IS BETWEEN 2 AND 6

EQUIPMENT REQUIRED - 9100A 9100B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-70032 ERROR FUNCTION

LAST REVISION 12/01/68 I W LARSON

UNPUBLISHED

PRICE 10.00

THIS PROGRAM EVALUATES AN ERROR FUNCTION USING A SERIES
EXPANSION.

EQUIPMENT REQUIRED - 9100A 9100B

09100-70033 FOURIER SERIES (DISCRETE DATA POINTS)

LAST REVISION 12/01/68 I W LARSON

UNPUBLISHED

PRICE 10.00

THIS PROGRAM CALCULATES A FOURIER SERIES FOR ANY NUMBER OF
DATA POINTS N FROM WHICH THE FREQUENCY DISTRIBUTION OF A WAVE
FORM MAY BE DETERMINED.

EQUIPMENT REQUIRED - 9100A 9100B

09100-70035 NUMERICAL SOLUTION OF TWO FIRST-ORDER DIFFERENTIAL EQUATIONS

LAST REVISION 12/01/68 I W LARSON

UNPUBLISHED

PRICE 10.00

THIS PROGRAM MAY BE USED TO SOLVE A WIDE VARIETY OF PAIRS OF
FIRST ORDER DIFFERENTIAL EQUATIONS.

EQUIPMENT REQUIRED - 9100A 9100B

09100-70037 SIMULTANEOUS SOLUTION OF FOUR EQUATIONS IN FOUR UNKNOWNNS

LAST REVISION 01/01/71 KEYBOARD VOL. 1 NO. 1

PUBLISHED

PRICE 10.00

THIS PROGRAM SOLVES SIMULTANEOUS SOLUTIONS OF FOUR EQUATIONS
IN FOUR UNKNOWNNS.

DR. S. J. MEDWADOWSKY, CONSULTING ENGINEER, SAN FRANCISCO

EQUIPMENT REQUIRED - 9100A 9100B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-70038 CHARACTERISTIC EQUATION OF A 3X3 MATRIX

LAST REVISION 12/01/68 M J WINGERT

UNPUBLISHED

PRICE 10.00

THIS PROGRAM WILL CALCULATE THE COEFFICIENTS OF THE
CHARACTERISTIC POLYNOMIAL OF A MATRIX.

EQUIPMENT REQUIRED - 9100A 9100B

09100-70039 REST RATIONAL APPROXIMATION

LAST REVISION 12/01/68 I W LARSON

UNPUBLISHED

PRICE 10.00

THIS PROGRAM DETERMINES A GEAR RATIO BY GIVING VALUES OF
P AND Q WHICH WILL MAKE THEIR RATIO APPROXIMATELY EQUAL TO
NU.

EQUIPMENT REQUIRED - 9100A 9100B

09100-70040 4 X 4 DETERMINANT EVALUATION

LAST REVISION 12/01/68 M J WINGERT

UNPUBLISHED

PRICE 10.00

THIS PROGRAM EVALUATES THE DETERMINANT OF A MATRIX. THE
PROGRAM EMPLOYS THE STANDARD DEFINITION OF A DETERMINANT
IN THE EVALUATION.

EQUIPMENT REQUIRED - 9100A 9100B

09100-70041 3 X 3 DETERMINANT EVALUATION

LAST REVISION 12/01/68 I W LARSON

UNPUBLISHED

PRICE 10.00

THIS PROGRAM EVALUATES THE DETERMINANT OF A MATRIX

EQUIPMENT REQUIRED - 9100A 9100B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-70042 3 X 3 MATRIX MULTIPLICATION

LAST REVISION 12/01/68 I W LARSON

UNPUBLISHED

PRICE 10.00

THIS PROGRAM CALCULATES THE PRODUCT MATRIX C AND DETERMINANT
OF C OF TWO 3X3 MATRICES A AND B.

EQUIPMENT REQUIRED - 9100A 9100B

09100-70043 (3 X 3) MATRIX TIMES (3 X 1) VECTOR

LAST REVISION 12/01/68 I W LARSON

UNPUBLISHED

PRICE 10.00

THIS PROGRAM MULTIPLIES A (3X3) MATRIX A TIMES A (3X1)
COLUMN VECTOR X.

EQUIPMENT REQUIRED - 9100A 9100B

09100-70044 (M X N) MATRIX TIMES (N X 1) VECTOR N IS BETWEEN 2 AND 6

LAST REVISION 12/01/68 I W LARSON

UNPUBLISHED

PRICE 10.00

THIS PROGRAM MULTIPLIES AN (M X N) MATRIX A TIMES AN (N X 1)
COLUMN VECTOR X WHERE N IS BETWEEN 2 AND 6.

EQUIPMENT REQUIRED - 9100A 9100B

09100-70045 FOURIER TRANSFORMATION CALCULATION AND PLOT

LAST REVISION 06/01/70 I W LARSON

UNPUBLISHED

PRICE 10.00

CALCULATES AND PLOTS THE FOURIER TRANSFORM OF A REAL
TRANSIENT FUNCTION OF TIME

EQUIPMENT REQUIRED - 9100A 9100B 9125A/B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-70046 SECOND ORDER DIFFERENTIAL EQUATION SOLUTION AND PLOT
LAST REVISION 12/01/68 I W LARSON
UNPUBLISHED PRICE 10.00
THIS PROGRAM MAY BE USED TO SOLVE A WIDE VARIETY OF SECOND
ORDER DIFFERENTIAL EQUATIONS.
EQUIPMENT REQUIRED - 9100A 9100B 9125A/B

09100-70047 MAXIMUM AND MINIMUM OF THE DERIVATIVE OF A FUNCTION $F(X)$
LAST REVISION 12/01/68 M J WINGERT
UNPUBLISHED PRICE 10.00
THIS PROGRAM WILL CALCULATE THE APPROXIMATE MAXIMUM AND
MINIMUM OF $DF(X)$ WHERE $F(X)$ IS KNOWN.
EQUIPMENT REQUIRED - 9100A 9100B

09100-70048 PLOT OF THE DERIVATIVE OF A FUNCTION $F(X)$
LAST REVISION 12/01/68 M J WINGERT
UNPUBLISHED PRICE 10.00
THIS PROGRAM WILL PLOT THE CURVE OF THE DERIVATIVE OF AN
ANALYTIC FUNCTION $F(X)$.
EQUIPMENT REQUIRED - 9100A 9100B 9125A/B

09100-70049 SEMILOGARITHMIC PLOT OF $F(X)$ (LOGARITHMIC IND. VARIABLE)
LAST REVISION 12/01/68 M J WINGERT
UNPUBLISHED PRICE 10.00
THIS PROGRAM WILL EVALUATE AND PLOT ON SEMI-LOG PAPER (LOG
AXIS HORIZONTAL) ANY FUNCTION OF ONE INDEPENDENT VARIABLE.
EQUIPMENT REQUIRED - 9100A 9100B 9125A/B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-70050 SEMILOGARITHMIC PLOT OF $F(X)$ (LOGARITHMIC DEPENDENT VARIABLE)
LAST REVISION 12/01/68 M J WINGERT
UNPUBLISHED PRICE 10.00
THIS PROGRAM WILL EVALUATE AND PLOT ON SEMI-LOG PAPER (LOG
AXIS VERTICAL) ANY FUNCTION OF ONE INDEPENDENT VARIABLE.
EQUIPMENT REQUIRED - 9100A 9100B 9125A/B

09100-70051 LOG-LOG PLOT OF $F(X)$
LAST REVISION 12/01/68 M J WINGERT
UNPUBLISHED PRICE 10.00
THIS PROGRAM WILL EVALUATE AND PLOT ON LOG-LOG PAPER FUNCTION
 $F(X)$ OF ONE INDEPENDENT VARIABLE.
EQUIPMENT REQUIRED - 9100A 9100B 9125A/B

09100-70052 APPLICATION OF A (3 X 3) MATRIX ON A COLUMN MATRIX
LAST REVISION 07/01/69 KEYBOARD VOL 1 NO. 2
PUBLISHED PRICE 10.00
THIS PROGRAM DETERMINES A (3 X 3) COLUMN MATRIX, XYZ IF
ORTHOGONAL, THE SPHERICAL COORDINATES ARE COMPUTED.
MICHEL WALCH, LEVALLOIS, FRANCE
EQUIPMENT REQUIRED - 9100A 9100B

09100-70053 BINOMIAL DISTRIBUTION
LAST REVISION 12/01/68 D W COLE
UNPUBLISHED PRICE 10.00
THIS PROGRAM CALCULATES THE BINOMIAL DISTRIBUTION FOR ANY
NUMBER N LESS THAN 70.
EQUIPMENT REQUIRED - 9100A 9100B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-70054 SINE WAVE CURVE FIT

LAST REVISION 12/01/68 D W COLE

UNPUBLISHED

PRICE 10.00

THIS PROGRAM ACCEPTS DISCRETE SAMPLES OF A CURVE AND
DETERMINES C ZERO, C ONE, AND P1.

EQUIPMENT REQUIRED - 9100A 9100B

09100-70055 DOUBLE PRECISION MULTIPLICATION

LAST REVISION 12/01/68 D W COLE

UNPUBLISHED

PRICE 10.00

THIS PROGRAM MULTIPLIES ONE NUMBER OF UP TO 10 DIGITS, EITHER
INTEGERS OR DECIMALS BY A SECOND NUMBER, AND PROVIDES UP TO A
20 DIGIT ANSWER.

EQUIPMENT REQUIRED - 9100A 9100B

09100-70056 UNIVERSAL FOUR OPERATIONS PROGRAM

LAST REVISION 11/01/70 KEYBOARD VOL 2 NO. 2

PUBLISHED

PRICE 10.00

THIS PROGRAM WILL ADD, SUBTRACT, MULTIPLY OR DIVIDE EACH
NUMBER IN A LIST BY A GIVEN CONSTANT DESIGNATED BY THE
OPERATOR.

CLAUDE CAROOT

EQUIPMENT REQUIRED - 9100A 9100B

09100-70057 PLOT OF F(X) WITH AUTOMATIC SCALING AND SCALE PRINT-OUT

LAST REVISION 12/01/68 M J WINGERT

UNPUBLISHED

PRICE 20.00

THIS PROGRAM PROVIDES A GENERAL PURPOSE PLOTTING ROUTINE FOR
A FUNCTION SPECIFIED AS A SUBROUTINE BY THE USER.

EQUIPMENT REQUIRED - 9100A 9100B 9125A/B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-70059 LENGTH AND DIRECTION OF A THREE-DIMENSIONAL VECTOR
LAST REVISION 03/28/71 H. RUSSELL
UNPUBLISHED PRICE 10.00
GIVEN A THREE-DIMENSIONAL VECTOR WITH ITS RECTANGULAR
COORDINATES X_1, Y_1, Z_1 AND X_2, Y_2, Z_2 , THIS PROGRAM CALCULATES
THE LENGTH R AND THE DIRECTION OF THE VECTOR.
EQUIPMENT REQUIRED - 9100A 9100B

09100-70062 GENERAL OBLIQUE PROJECTION PLOT ROUTINE
LAST REVISION 07/12/71
CUSTOMER SUBMITTED PRICE 10.00
PROGRAM PRODUCES AN OBLIQUE PROJECTION OF ANY FUNCTION SPECI-
FIED BY USER OF THE FORM $Z = F(X, Y)$. THE PLOTTING PROGRAM
INCORPORATES AUTOMATIC HIDDEN LINE SUPPRESSION AND ENVELOPE
ENHANCEMENT.
CONTACT M.L. BOYD, APPLIED RES. LABS., P.O. BOX 8029, AUSTIN, TEXAS
EQUIPMENT REQUIRED - 9100B 9125A/B 9101A

09100-70063 A GENERALIZED SIMPSON FORMULA FOR INTEGRAL EVALUATION
LAST REVISION 05/17/71
CUSTOMER SUBMITTED PRICE 10.00
THIS PROGRAM EVALUATES THE AREA UNDER A CURVE REPRESENTED BY
DISCRETE POINTS WITH UNEQUAL ABSCISSA INCREMENTS BY USING A
MODIFICATION OF THE SIMPSON FORMULA.
CONTACT H.E.L. MADSEN, ROYAL VET. & AGRIC. COLL., DK-1871, COPENHAGEN, DEN.
EQUIPMENT REQUIRED - 9100A 9100B

09100-70064 TOLERANCED MEASUREMENT CONVERSION
LAST REVISION 04/05/71
CUSTOMER SUBMITTED PRICE 10.00
THIS PROGRAM CONVERTS TOLERANCED MEASUREMENTS OF ONE SYSTEM,
SUCH AS IMPERIAL TO EQUIVALENT VALUES OF ANOTHER SYSTEM,
SUCH AS METRIC. INPUTS ARE MADE EITHER BY CARD READER OR
BY KEYBOARD.
C.G. BRICKELL, AUCKLAND, NEW ZEALAND
EQUIPMENT REQUIRED - 9100B 9120A 9160A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-70065 EXPERIENCE CURVE

LAST REVISION 05/05/71

CUSTOMER SUBMITTED

PRICE 10.00

THIS PROGRAM CALCULATES THE ALGEBRAIC MIDPOINT OF A LOT,
WHERE THE INDEPENDENT VARIABLE FOLLOWS A POWER LAW $Y = AX$ TO
THE B POWER. IT ALSO CALCULATES VALUE FOR Y AT MIDPOINT, AND
THE INTEGRAL OF THE INDEPENDENT VARIABLE UNDER THE FUNCTION
 $Y(X)$ FOR X VALUES BETWEEN X_1 AND X_2 .

CONTACT J.WEINSTEIN, DEPT. OF ARMY, BLDG. 2525, RM. 2103A, FT. MONMOUTH, N.J.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-70066 EULER'S TOTIENT FUNCTION

LAST REVISION 04/14/71

CUSTOMER SUBMITTED

PRICE 10.00

THIS PROGRAM CALCULATES THE VALUE OF THE EULER TOTIENT
FUNCTION $\Phi(X)$. THIS IS THE NUMBER OF INTEGERS NOT EXCEEDING
AND RELATIVELY PRIME TO X, WHERE X IS A POSITIVE INTEGER.

CONTACT RICHARD N. JEKEL, CUBIC CORP., SAN DIEGO, CALIFORNIA 92123

EQUIPMENT REQUIRED - 9100A 9100B

09100-70067 SOLUTION OF TWO COMPLEX SIMULTANEOUS EQUATIONS

LAST REVISION 03/05/71

CUSTOMER SUBMITTED

PRICE 10.00

THIS PROGRAM SOLVES TWO INDEPENDENT EQUATIONS OF THE FORM
 $AX + BY = E$ AND $CX + DY = F$, WHERE A,B,C,D,E AND F ARE COM-
PLEX NUMBERS, AND X AND Y ARE FOUND IN COMPLEX FORM. GAUSS'
METHOD IS USED.

CONTACT DR.F.B.OTTO, DEPT. OF ELECT. ENGRG, UNIV. OF MAINE, ORONO, MAINE

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-70401 HYPERGEOMETRIC SERIES EXPANSION

LAST REVISION 09/01/69 9100B LIBRARY

PUBLISHED

GIVEN A,B, AND C, THIS PROGRAM DETERMINES THE COEFFICIENTS OF
THE HYPERGEOMETRIC SERIES $F(A,B,C, X)$. THIS PROGRAM IS
USEFUL IN SOLVING GAUSS'S DIFFERENTIAL EQUATION.

EQUIPMENT REQUIRED - 9100B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER	PROGRAM TITLE
09100-70402	(3X3) MATRIX MULTIPLICATION
	LAST REVISION 09/01/69 9100B LIBRARY
	PUBLISHED
	GIVEN TWO (3X3) MATRICES A AND B, THIS PROGRAM DETERMINES THE PRODUCT MATRIX $C = A.B.$
	EQUIPMENT REQUIRED - 9100B

09100-70403	ROOTS OF A 4TH DEGREE POLYNOMIAL
	LAST REVISION 09/01/69 9100B LIBRARY
	UNPUBLISHED
	THIS PROGRAM DETERMINES THE ROOTS (REAL AND COMPLEX) OF A 4TH DEGREE POLYNOMIAL.
	EQUIPMENT REQUIRED - 9100B

09100-70404	NUMERICAL SOLUTION OF TWO FIRST ORDER DIFFERENTIAL EQUATIONS
	LAST REVISION 09/01/69 9100B LIBRARY
	PUBLISHED
	THIS PROGRAM MAY BE USED TO SOLVE A WIDE VARIETY OF PAIRS OF FIRST ORDER DIFFERENTIAL EQUATIONS.
	EQUIPMENT REQUIRED - 9100B

09100-70405	ROOTS OF A 6TH DEGREE POLYNOMIAL
	LAST REVISION 09/01/69 9100B LIBRARY
	UNPUBLISHED
	THE PROGRAM DETERMINES THE ROOTS (REAL AND COMPLEX) OF A 6TH DEGREE POLYNOMIAL.
	EQUIPMENT REQUIRED - 9100B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-70406 CHARACTERISTIC EQ.OF A (3X3)MATRIX & EIGENVALUE DETERMINATION

LAST REVISION 09/01/69 9100B LIBRARY

PUBLISHED

GIVEN A (3X3) MATRIX A, THIS PROGRAM COMPUTES A
CHARACTERISTIC EQUATION AND DETERMINES THE EIGENVALUES BY
USING PROGRAM 09100-70011 AS A SUB-PROGRAM.

EQUIPMENT REQUIRED - 9100B

09100-70407 SIMULTANEOUS SOLUTION OF FOUR LINEAR EQ. IN FOUR UNKNOWNNS

LAST REVISION 09/01/69 9100B LIBRARY

PUBLISHED

GIVEN A SYSTEM OF FOUR LINEAR EQUATIONS IN FOUR UNKNOWNNS,
THIS PROGRAM USES CHOLEWSKI'S METHOD TO DETERMINE THE XI'S.

EQUIPMENT REQUIRED - 9100B

09100-70408 CONVOLUTION INTEGRAL WITH PLOT

LAST REVISION 09/01/69 9100B LIBRARY

PUBLISHED

THIS PROGRAM EVALUATES AND PLOTS Y(T), THE CONVOLUTION OF
E(T) AND H(T).

EQUIPMENT REQUIRED - 9100B 9125A/B

09100-70409 NUMERICAL INTEGRATION USING SIMPSON RULE WHEN F(X) IS KNOWN.

LAST REVISION 09/01/69 9100B LIBRARY

PUBLISHED

THE SPECIFIC F(X) IS PROGRAMMED INTO THE CALCULATOR BY THE
USER AND IS THEN USED BY THE GENERAL SOLUTION TO EVALUATE THE
INTEGRAL.

EQUIPMENT REQUIRED - 9100B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-70410 INTEGRAL OF A FUNCTION BETWEEN LOWER LIMIT A & UPPER LIMIT X
LAST REVISION 09/01/69 9100B LIBRARY

PUBLISHED

THIS PROGRAM CALCULATES THE INTEGRAL OF A KNOWN FUNCTION $F(X)$
BETWEEN ANY LOWER LIMIT A AND A SUCCESSIVELY INCREMENTED
UPPER LIMIT X.

EQUIPMENT REQUIRED - 9100B 9125A/B

09100-70411 MAX - MIN OF $Z = Z(X,Y)$

LAST REVISION 09/01/69 9100B LIBRARY

PUBLISHED

THIS PROGRAM DETERMINES THE APPROXIMATE RANGE OF A FUNCTION Z
OF TWO INDEPENDENT VARIABLES X AND Y GIVEN A RANGE FOR
X AND Y.

EQUIPMENT REQUIRED - 9100B

09100-70412 PLOT OF $Z = Z(X,Y)$

LAST REVISION 09/01/69 9100B LIBRARY

PUBLISHED

GIVEN A FUNCTION Z OF TWO INDEPENDENT VARIABLES X AND Y, THIS
PROGRAM CREATES A THREE-DIMENSIONAL PLOT OVER A PRESCRIBED
RANGE OF X AND Y.

EQUIPMENT REQUIRED - 9100B 9125A/B

09100-70413 5 EQUATIONS - 5 UNKNOWNNS REDUCED TO 4 EQUATIONS - 4 UNKNOWNNS

LAST REVISION 12/01/68 D W COLE

UNPUBLISHED

PRICE 10.00

THE PROGRAM ACCEPTS SYSTEM OF 5 LINEAR EQUATIONS IN 5
UNKNOWNNS AND REDUCES IT BY GAUSS'S ELIMINATION TO A SYSTEM OF
4 LINEAR EQUATIONS IN 4 UNKNOWNNS.

EQUIPMENT REQUIRED - 9100B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-70414 SIMULTANEOUS SOL. OF 4 EQUATIONS IN 4 UNKNOWN WITH PRINTER
LAST REVISION 12/01/68 D W COLE
UNPUBLISHED PRICE 10.00
GIVEN A SYSTEM OF LINEAR ALGEBRAIC EQUATIONS OR A MATRIX
NOTATION, THIS PROGRAM GIVES A SIMULTANEOUS SOLUTION OF 4
EQUATIONS IN 4 UNKNOWN WITH PRINTER.
EQUIPMENT REQUIRED - 9100B 9120A

09100-70415 PLOT OF $Y=F(X)$
LAST REVISION 06/01/70 JE DUNN
UNPUBLISHED PRICE 20.00
PLOTS THE CURVE SPECIFIED BY A GIVEN ANALYTIC FUNCTION. USER
SPECIFIES HIS PARTICULAR FUNCTION. AXES PRINTOUT IS
INCLUDED.
EQUIPMENT REQUIRED - 9100A 9100B 9120A 9125A/B

09100-70416 SECOND ORDER DIFFERENTIAL EQUATION SOLUTION AND PLOT
LAST REVISION 09/15/70 W A CUMMINGS
UNPUBLISHED
THIS PROGRAM SOLVES A VARIETY OF SECOND ORDER DIFFERENTIAL
EQUATIONS OF THE FORM $X''=F(T,X,X')$.
EQUIPMENT REQUIRED - 9100B 9120A

09100-70417 SIMULT. SOLUTION TWO NONLINEAR EQUATIONS IN TWO UNKNOWN
LAST REVISION 03/28/71 H. RUSSELL
UNPUBLISHED PRICE 10.00
THIS PROGRAM SOLVES TWO INDEPENDENT NONLINEAR EQUATIONS OF
THE FORM $F(U,V)=0$ AND $G(U,V)=0$. U AND V ARE THE UNKNOWN
TO BE FOUND.
EQUIPMENT REQUIRED - 9100B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-70418 EIGEN-VALUES & EIGEN-VECTORS OF A 3X3 SYMMETRIC MATRIX
LAST REVISION 04/30/71

CUSTOMER SUBMITTED

PRICE 10.00

THIS PROGRAM CALCULATES THE EIGEN-VALUES AND EIGEN-VECTORS OF
A 3X3 SYMMETRIC MATRIX WHOSE ELEMENTS ARE REAL NUMBERS. IT
WILL GIVE CORRECT EIGEN-VALUES FOR THE GENERAL CASE. EIGEN-
VECTORS CAN BE WRONG IN CASES WHERE TWO EIGEN-VALUES ARE
EQUAL OR WHERE ORIGINAL MATRIX CONTAINS A DIAGONAL SUBMATRIX.
CONTACT J.C.DUTERTRE, ECOLE POLYTECHNIQUE, MONTREAL 26, QUEBEC
EQUIPMENT REQUIRED - 9100B

09100-73951 ORTHOGONAL VECTOR TRANSFORMATION IN EUCLIDIAN SPACE
LAST REVISION 04/06/71

CUSTOMER SUBMITTED

PRICE 20.00

THE FIRST PART OF THIS PROGRAM DETERMINES THE RESULTING
ORTHOGONAL MATRIX AS A PRODUCT OF A VARIETY OF ROTATION
AND/OR REFLECTION MATRICES. THE SECOND PART ENABLES THE USER
TO TRANSFORM SEQUENTIALLY AN ARBITRARY NUMBER OF VECTORS
USING THE ORTHOGONAL MATRIX STORED BY THE FIRST PART OF THE
PROGRAM.

IVO BAUERSIMA, BERN, SWITZERLAND
EQUIPMENT REQUIRED - 9100B

09100-75802 PRIME NUMBER GENERATOR

LAST REVISION 01/10/70 9100A LIBRARY
PUBLISHED

DISPLAYS THE PRIME NUMBERS BETWEEN AN UPPER LIMIT AND A LOWER
LIMIT.

EQUIPMENT REQUIRED - 9100A 9120A

09100-75803 SIN (X) MACLAURIN SERIES PLOT

LAST REVISION 01/10/70 T. L. GILDEA
UNPUBLISHED

PRICE 10.00

PLOTS THE TERM BY TERM EXPANSION FOR THE MACLAURIN SERIES OF
THE SIN (X).

EQUIPMENT REQUIRED - 9100A 9100B 9125A/B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-75807 PLOT OF ADDITION OF DIRECTED NUMBERS

LAST REVISION 01/10/70 H. J. WEISSMAN

UNPUBLISHED

PRICE 10.00

PLOTS REAL NUMBERS AS VECTORS AND SHOWS SUM ON DISPLAY.

EQUIPMENT REQUIRED - 9100A 9100B 9125A/B

09100-75818 DERIVATIVE PLOT

LAST REVISION 10/02/70 T. L. GILDEA

UNPUBLISHED

PRICE 10.00

PLOTS INPUTTED FUNCTION AND ITS DERIVATIVE AT POINTS ON THE
CURVE AT A SPECIFIED INCREMENT.

EQUIPMENT REQUIRED - 9100B 9120A 9125A/B

09100-75819 MULTIPLICATION OF DIRECTED NUMBERS (PLOT)

LAST REVISION 10/02/70 H. J. WEISSMAN

UNPUBLISHED

PRICE 10.00

PLOTS THE MULTIPLICATION OF REAL NUMBERS USING VECTORS AND
DISPLAYS THE PRODUCT.

EQUIPMENT REQUIRED - 9100A 9100B

09100-75821 RATIONAL APPROXIMATION FOR SQUARE ROOT

LAST REVISION 10/03/70 H. J. WEISSMAN

UNPUBLISHED

PRICE 10.00

APPROXIMATES THE SQUARE ROOT OF A FUNCTION BY THE DIVIDE AND
AVERAGE METHOD.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-75822 LIM X TO NTH POWER AS N APPROACHES ZERO
LAST REVISION 10/03/70 H. J. WEISSMAN
UNPUBLISHED PRICE 10.00
CALCULATES X TO NTH POWER AS N APPROACHES 0. PROGRAM FLASHES
EACH TERM IN SERIES.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-75824 NEWTON'S METHOD
LAST REVISION 10/03/70 H. J. WEISSMAN
UNPUBLISHED PRICE 10.00
CALCULATES REAL ROOTS OF A FUNCTION USING NEWTON'S METHOD.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-75853 GREATEST COMMON FACTOR - TEST METHOD
PGM 0001 LAST REVISION 01/10/70 H. J. WEISSMAN
UNPUBLISHED PRICE 10.00
FINDS THE GREATEST COMMON FACTOR BY TESTING ALL POSSIBLE
VALUES.
EQUIPMENT REQUIRED - 9100A

09100-75853 GREATEST COMMON FACTOR - EUCLIDEAN ALGORITHM
PGM 0002 LAST REVISION 01/10/70 H. J. WEISSMAN
UNPUBLISHED PRICE 10.00
FINDS THE GREATEST COMMON FACTOR BY USING THE EUCLIDEAN
ALGORITHM.
EQUIPMENT REQUIRED - 9100A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-75901 CONIC SECTION DETERMINATION WITH PLOT
LAST REVISION 09/01/69 9100B LIBRARY
PUBLISHED

GIVEN THE GENERATING ANGLE OF A CONE, B, AND THE INTERSECTION
ANGLE WITH A PLANE, A, THIS PROGRAM DETERMINES AND PLOTS THE
CONIC SECTION.

EQUIPMENT REQUIRED - 9100B 9120A

09101-90002 MATRIX INVERSION
PGM 1-2 LAST REVISION 12/15/70 EXTENDED MEMORY LIBRARY
PUBLISHED

THIS PROGRAM WILL DETERMINE THE INVERSE OF A SQUARE MATRIX
WHERE THE MAXIMUM VALUE OF N IS 14 USING A MODIFIED GAUSS-
JORDAN ELIMINATION TECHNIQUE.

EQUIPMENT REQUIRED - 9100A 9100B 9120A 9125A/B 9101A

09101-90002 N LINEAR EQUATIONS IN N UNKNOWNNS
PGM 1-6 LAST REVISION 07/01/70 EXTENDED MEMORY LIBRARY
PUBLISHED

THIS PROGRAM WILL FIND THE SOLUTION OF A SYSTEM OF UP TO 14
LINEAR EQUATIONS IN 14 UNKNOWNNS WITH REAL COEFFICIENTS.

EQUIPMENT REQUIRED - 9100A 9100B 9120A 9101A

09101-90002 ROOTS OF NTH ORDER POLY. W/COMPLEX (REAL) COEFFICIENTS
PGM 1-9 LAST REVISION 07/01/70 EXTENDED MEMORY LIBRARY
PUBLISHED

THIS PROGRAM USES THE NEWTON-RAPHSON METHOD TO FIND ALL THE
ROOTS OF A POLYNOMIAL, UP TO 24TH ORDER FOR COMPLEX (OR REAL)
COEFFICIENTS.

EQUIPMENT REQUIRED - 9100A 9100B 9120A 9101A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

CATEGORY - STATISTICS PAC VOL. 1

09100-70800

REFER TO THE LAST ENTRY IN THIS PROGRAM CATEGORY FOR ORDERING INFORMATION ON SETS OF PRERECORDED MAGNETIC CARDS FOR THIS PACKET. IF CARDS ARE NOT AVAILABLE, AS INDICATED BY NO ORDERING ENTRY, CONSULT YOUR LOCAL HP CALCULATOR SALESMAN FOR FURTHER INFORMATION.

PROGRAM PRICE 19.50 MAGNETIC CARD PRICE 215.00

PART NUMBER

PROGRAM TITLE

09100-70800 MEAN, STANDARD DEVIATION AND PROBABLE ERROR
PGM 1-1 LAST REVISION 05/01/70 STAT-PAC
PUBLISHED

THIS PROGRAM CALCULATES THE MEAN, STANDARD DEVIATION,
PROBABLE ERROR, STANDARD DEVIATION FROM THE MEAN, AND
PROBABLE ERROR OF THE MEAN.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-70800 MEAN AND STANDARD DEVIATION OF GROUPED DATA
PGM 1-2 LAST REVISION 05/01/70 STAT-PAC
PUBLISHED

THIS PROGRAM CALCULATES THE MEAN AND STANDARD DEVIATION OF
DATA POINTS OF CERTAIN FREQUENCIES.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-70800 CUMULATIVE MEAN AND THE CUMULATIVE STANDARD DEVIATION
PGM 1-3 LAST REVISION 05/01/70 STAT-PAC
PUBLISHED

THIS PROGRAM CALCULATES THE CUMULATIVE MEAN AND THE
CUMULATIVE STANDARD DEVIATION FROM SUMMARY INFORMATION.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-70800 TWO VARIABLE SUMS OF SQUARES (WITH CORRECTION OPTION)
PGM 1-4 LAST REVISION 05/01/70 STAT-PAC
PUBLISHED

THIS PROGRAM COMPUTES THE SUMS OF SQUARES FOR A TABLE OF
POINTS. OPTION INCLUDED FOR CORRECTING ERRONEOUSLY ENTERED
DATA.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-70800 MEAN, VARIANCE, MOMENT COEFFICIENT OF SKEWNESS AND KURTOSIS
PGM 1-5 LAST REVISION 05/01/70 STAT-PAC
PUBLISHED

THIS PROGRAM COMPUTES THE MEAN VARIANCE, COEFFICIENTS OF
SKEWNESS AND KURTOSIS, AND STANDARD DEVIATION OF A TABLE OF
DATA.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-70800 COVARIANCE AND COEFFICIENT OF CORRELATION
PGM 1-6 LAST REVISION 05/01/70 STAT-PAC
PUBLISHED

THIS PROGRAM DETERMINES THE COVARIANCE AND COEFFICIENT OF
CORRELATION DERIVED FROM A TABLE OF DATA CONTAINING X AND Y
OBSERVATIONS.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-70800 PERMUTATIONS
PGM 1-7 LAST REVISION 05/01/70 STAT-PAC
PUBLISHED

THIS PROGRAM EVALUATES THE FORMULA FOR THE PERMUTATIONS OF N
OBJECTS TAKEN R AT A TIME.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-70800 COMBINATIONS

PGM 1-8 LAST REVISION 05/01/70 STAT-PAC
PUBLISHED

THIS PROGRAM EVALUATES THE FORMULA FOR THE COMBINATION OF N
OBJECTS TAKEN R AT A TIME.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-70800 HISTOGRAM GENERATION (WITHOUT PLOT)

PGM 1-9 LAST REVISION 05/01/70 STAT-PAC
PUBLISHED

THIS PROGRAM GENERATES A HISTOGRAM TABLE OF TEN WINDOWS GIVEN
A DATA SET OF POSITIVE NUMBERS. IN ADDITION, DETERMINES THE
MEAN, AND VARIANCE OF RAW DATA AND NORMALIZED HISTOGRAM DATA.

EQUIPMENT REQUIRED - 9100B 9120A

09100-70800 ARITHMETIC, GEOMETRIC, HARMONIC MEANS

PGM 1-10 LAST REVISION 05/01/70 STAT-PAC
PUBLISHED

THIS PROGRAM CALCULATES THE ARITHMETIC, GEOMETRIC, AND
HARMONIC MEANS OF A SET OF DATA VALUES.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-70800 RANDOM NUMBER GENERATOR (UNIFORM)

PGM 1-11 LAST REVISION 05/01/70 STAT-PAC
PUBLISHED

THIS PROGRAM CALCULATES UNIFORMLY DISTRIBUTED RANDOM NUMBERS.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-70800 RANDOM NUMBER GENERATION (NORMAL)
PGM 1-12 LAST REVISION 05/01/70 STAT-PAC
PUBLISHED

THIS PROGRAM GENERATES A SEQUENCE OF NORMALLY DISTRIBUTED
RANDOM NUMBERS WITH MEAN AND VARIANCE.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-70800 NORMAL PROBABILITY PAPER PLOT POINTS
PGM 1-13 LAST REVISION 05/01/70 STAT-PAC
PUBLISHED

THIS PROGRAM DETERMINES RELATIVE CUMULATIVE FREQUENCIES. IN
PER CENT, FROM A SET OF GROUPED DATA.

EQUIPMENT REQUIRED - 9100A 9100B 9120A 9125A/B

09100-70800 BUFFON NEEDLE EXPERIMENT
PGM 1-14 LAST REVISION 05/01/70 STAT-PAC
PUBLISHED

THIS PROGRAM SIMULATES THE WELL KNOWN BUFFON NEEDLE
EXPERIMENT PROBLEM TO DETERMINE THE PROBABILITY THAT A
NEEDLE OF LENGTH (A) WILL INTERSECT LINE ON GRID OF LINES
SEPARATED BY A DISTANCE (D).

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-70800 MEDIAN FINDER
PGM 1-15 LAST REVISION 05/01/70 STAT-PAC
PUBLISHED

THIS PROGRAM DETERMINES THE MEDIAN OF A SET OF N NUMBERS.

EQUIPMENT REQUIRED - 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER PROGRAM TITLE

09100-70800 UNIVERSAL FOUR OPERATIONS PROGRAM
PGM 1-16 LAST REVISION 05/01/70 STAT-PAC
PUBLISHED

THIS PROGRAM WILL PERFORM A GIVEN ARITHMETIC OPERATION ON A
LIST OF NUMBERS. IT WILL ADD, SUB., MULT. OR DIV. EACH
NUMBER IN THE LIST BY A GIVEN CONSTANT DESIGNATED BY THE
OPERATOR. (SEE ALSO P/N 09100-70056).

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-70800 NORMAL PROBABILITY INTEGRAL
PGM 2-1 LAST REVISION 05/01/70 STAT-PAC
PUBLISHED

THIS PROGRAM COMPUTES THE INTEGRAL OF THE STANDARDIZED
NORMAL DISTRIBUTION.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-70800 INVERSE NORMAL INTEGRAL
PGM 2-2 LAST REVISION 05/01/70 STAT-PAC
PUBLISHED

THIS PROGRAM PERFORMS THE INVERSE OF THE NORMAL PROBABILITY
INTEGRAL.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-70800 BINOMIAL DISTRIBUTION
PGM 2-3 LAST REVISION 05/01/70 STAT-PAC
PUBLISHED

THIS PROGRAM EVALUATES A BINOMIAL (BERNOULLI) DISTRIBUTION.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-70800 POISSON DISTRIBUTION

PGM 2-4 LAST REVISION 05/01/70 STAT-PAC
PUBLISHED

CALCULATES THE POISSON DENSITY FUNCTION, A DISCRETE DENSITY
WHICH IS USED TO EVALUATE SUCH THINGS AS COMPONENT FAILURE
PROBABILITIES.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-70800 CHI SQUARE DISTRIBUTION

PGM 2-5 LAST REVISION 05/01/70 STAT-PAC
PUBLISHED

THIS PROGRAM EVALUATES THE CHI SQUARE DISTRIBUTION INTEGRAL
FOR A GIVEN VALUE.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-70800 HYPERGEOMETRIC DISTRIBUTION

PGM 2-6 LAST REVISION 05/01/70 STAT-PAC
PUBLISHED

THIS PROGRAM COMPUTES VARIOUS FUNCTIONS ASSOCIATED WITH THE
HYPERGEOMETRIC DISTRIBUTION.

EQUIPMENT REQUIRED - 9100B 9120A

09100-70800 T-DISTRIBUTION

PGM 2-7 LAST REVISION 05/01/70 STAT-PAC
PUBLISHED

THIS PROGRAM EVALUATES THE T-DISTRIBUTION INTEGRAL FOR A
GIVEN VALUE.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER	PROGRAM TITLE
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09100-70800 BETA DISTRIBUTION

PGM 2-8 LAST REVISION 05/01/70 STAT-PAC
PUBLISHED

THIS PROGRAM DETERMINES THE BETA DISTRIBUTION. THE PROGRAM
ALSO CALCULATES THE MEAN AND VARIANCE OF THE DISTRIBUTION.
EQUIPMENT REQUIRED - 9100B 9120A

09100-70800 F-DISTRIBUTION

PGM 2-9 LAST REVISION 05/01/70 STAT-PAC
PUBLISHED

THIS PROGRAM EVALUATES THE INTEGRAL OF THE F DISTRIBUTION
DENSITY FUNCTION.
EQUIPMENT REQUIRED - 9100B 9120A

09100-70800 NEGATIVE BINOMIAL DISTRIBUTION

PGM 2-10 LAST REVISION 05/01/70 STAT-PAC
PUBLISHED

THIS PROGRAM COMPUTES VARIOUS FUNCTIONS ASSOCIATED WITH THE
NEGATIVE BINOMIAL DISTRIBUTION.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-70800 GAMMA DISTRIBUTION

PGM 2-11 LAST REVISION 05/01/70 STAT-PAC
PUBLISHED

THIS PROGRAM DETERMINES THE GAMMA DISTRIBUTION. ALSO
EVALUATES THE MEAN AND VARIANCE OF THE DISTRIBUTION.
EQUIPMENT REQUIRED - 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-70800 LOG NORMAL DISTRIBUTION

PGM 2-12 LAST REVISION 05/01/70 STAT-PAC
PUBLISHED

THIS PROGRAM COMPUTES THE VALUE OF THE LOG-NORMAL
DISTRIBUTION FOR A GIVEN SET OF PARAMETERS, OVER A SPECIFIED
RANGE OF X.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-70800 ERROR FUNCTION

PGM 2-13 LAST REVISION 05/01/70 STAT-PAC
PUBLISHED

THIS PROGRAM COMPUTES $\text{ERF}(X)$.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-70800 JOINT NORMAL PROBABILITY DENSITY FUNCTION

PGM 2-14 LAST REVISION 05/01/70 STAT-PAC
PUBLISHED

THIS PROGRAM EVALUATES A FUNCTION $F(X, Y)$ WHERE THE FUNCTION
IS SUCH THAT THE TWO VARIABLES X AND Y HAVE A BIVARIATE
NORMAL DISTRIBUTION.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-70800 CUMULATIVE BINOMIAL DISTRIBUTION

PGM 2-15 LAST REVISION 05/01/70 STAT-PAC
PUBLISHED

THIS PROGRAM DETERMINES THE CUMULATIVE BINOMIAL DISTRIBUTION.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-70800 T STATISTIC FOR MEANS OF TWO SAMPLES
PGM 3-1 LAST REVISION 05/01/70 STAT-PAC
PUBLISHED

THIS PROGRAM CALCULATES THE VALUE OF THE T STATISTIC GIVEN
TWO SAMPLES (X1,X2). IT ALSO CALCULATES THE SAMPLE MEANS
AND VARIANCE.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-70800 PAIRED OBSERVATION TEST
PGM 3-2 LAST REVISION 05/01/70 STAT-PAC
PUBLISHED

GIVEN A TABLE OF PAIRED OBSERVATIONS, THIS PROGRAM DETERMINES
THE STATISTICS ASSOCIATED WITH THE DIFFERENCE, D.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-70800 T STATISTIC - TEST A MEAN X EQUAL TO MU0
PGM 3-3 LAST REVISION 05/01/70 STAT-PAC
PUBLISHED

THIS PROGRAM CALCULATES THE TEST STATISTIC T USED IN TESTING
A SAMPLE MEAN X EQUAL TO A VALUE MU0

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-70800 CHI-SQUARED ST. TESTING A POP. VARIANCE = TO A SIGMA0 SQ.
PGM 3-4 LAST REVISION 05/01/70 STAT-PAC
PUBLISHED

THIS PROGRAM DETERMINES THE TEST STATISTIC NECESSARY TO TEST
A VARIANCE AGAINST A GIVEN VALUE.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-70800 CHI SQUARE EVALUATION EXPECTED VALUES EQUAL ($E1 = F$)
PGM 3-5 LAST REVISION 05/01/70 STAT-PAC
PUBLISHED
THIS PROGRAM CALCULATES THE VALUE OF CHI SQUARE.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-70800 CHI SQUARE 2X2 CONTINGENCY TABLE
PGM 3-6 LAST REVISION 05/01/70 STAT-PAC
PUBLISHED
THIS PROGRAM CALCULATES CHI SQUARE FOR A 2X2 CONTINGENCY
TABLE CONTAINING OBSERVED FREQUENCIES.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-70800 CHI SQUARE EVALUATION (EXPECTED VALUES UNEQUAL)
PGM 3-7 LAST REVISION 05/01/70 STAT-PAC
PUBLISHED
THIS PROGRAM CALCULATES THE VALUE OF CHI SQUARE.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-70800 CHI SQUARE - 2XK CONTINGENCY TABLE
PGM 3-8 LAST REVISION 05/01/70 STAT-PAC
PUBLISHED
THIS PROGRAM CALCULATES CHI SQUARE FOR A 2XK CONTINGENCY
TABLE CONTAINING OBSERVED FREQUENCIES.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-70800 T STATISTIC FOR TESTING CORRELATION COEFFICIENT

PGM 3-9 LAST REVISION 05/01/70 STAT-PAC

PUBLISHED

THIS PROGRAM CALCULATES THE TEST STATISTIC NECESSARY IN
TESTING THE HYPOTHESIS THAT CORRELATION COEFFICIENT ρ IS
EQUAL TO ZERO.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-70800 BARTLETT'S CHI SQUARE STATISTIC FOR VARIANCE HOMOGENEITY

PGM 3-10 LAST REVISION 05/01/70 STAT-PAC

PUBLISHED

THIS PROGRAM COMPUTES A CHI SQUARE STATISTIC. THIS STATISTIC
MAY BE USED TO TEST HYPOTHESIS THAT K SAMPLE VARIANCES ARE
ALL ESTIMATES OF THE SAME POPULATION VARIANCE.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-70800 CALC. YC, RESIDUAL & ACCUMULATED RESID. OF LINEAR REGRESSION

PGM 3-11 LAST REVISION 05/01/70 STAT-PAC

PUBLISHED

THIS PROGRAM CALCULATES THE QUANTITIES FOR THE LINEAR
REGRESSION MODEL $Y=MX+B$. THIS PROGRAM IS USED WITH PROGRAMS
STAT-PAC 3-12 AND 3-13.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-70800 STATISTIC FOR DURBIN-WATSON TEST

PGM 3-12 LAST REVISION 05/01/70 STAT-PAC

PUBLISHED

THIS PROGRAM COMPUTES THE DURBIN-WATSON STATISTIC D, WHERE
THE DATA VALUES ARE THE RESIDUALS CALCULATED BY PROGRAM
STAT-PAC 3-11.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-70800 STAT. FOR SERIAL CORRELATION COEFFICIENT (ORDER 1)
PGM 3-13 LAST REVISION 05/01/70 STAT-PAC
PUBLISHED

THIS PROGRAM DETERMINES THE SERIAL CORRELATION COEFFICIENT OF
ORDER 1, WHERE THE DATA SET IS ANY TIME ORDERED SET OF DATA.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-70800 SPEARMAN'S RANK CORRELATION COEFFICIENT
PGM 3-14 LAST REVISION 05/01/70 STAT-PAC
PUBLISHED

SPEARMAN'S RANK CORRELATION COEFFICIENT WAS DEVELOPED TO
MEASURE THE ASSOCIATION BETWEEN X AND Y AND DEPENDS ONLY UPON
THE RANKS (OR ORDER) OF THE X AND Y OBSERVATIONS.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-70800 F-TEST FOR THE RATIO OF TWO SAMPLE VARIANCES (SNEDECOR)
PGM 3-15 LAST REVISION 05/01/70 STAT-PAC
PUBLISHED

THIS PROGRAM DETERMINES THE PROBABILITY THAT AN EXPERIMENTAL
VALUE OF $F(V1, V2)$ IS GREATER THAN OR EQUAL TO $FT(V1, V2)$,
FT MEANING F THEORETICAL.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-70800 DISTRIBUTION
PGM 3-16 LAST REVISION 05/01/70 STAT-PAC
PUBLISHED

GIVEN N PAIRS OF VALUES (X1, Y1). PROGRAM STAT-PAC 4-1 ALLOWS
US TO DETERMINE THE LINE OF BEST FIT $Y=MX+B$ AS WELL AS THE
CORRELATION COEFFICIENT $REXP$ ($REXP=R$ EXPERIMENTAL).
EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-70800 LINEAR REGRESSION AND CORRELATION COEFFICIENT

PGM 4-1 LAST REVISION 05/01/70 STAT-PAC

PUBLISHED

THIS PROGRAM CALCULATES THE EQUATION OF THE STRAIGHT LINE OF
BEST FIT OF A SET OF DATA POINTS.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-70800 LINEAR REG. WITH MEANS, RMS VALUES, VARIANCES, & CORR. COEFF.

PGM 4-2 LAST REVISION 05/01/70 STAT-PAC

PUBLISHED

THIS PROGRAM FITS A CURVE OF THE FORM $Y=MX+B$, SOLVING FOR THE
SLOPE AND INTERCEPT, GIVEN THE INPUT DATA FOR ANY NUMBER OF
SETS.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-70800 MULTIPLE LINEAR REGRESSION THREE VARIABLE

PGM 4-3 LAST REVISION 05/01/70 STAT-PAC

PUBLISHED

THIS PROGRAM FITS ANY NUMBER OF DATA POINTS (X_1, Y_1, Z_1) TO A
LINEAR, TWO VARIABLE EQUATION.

EQUIPMENT REQUIRED - 9100B 9120A

09100-70800 MULTIPLE LINEAR REGRESSION FOUR VARIABLE

PGM 4-4 LAST REVISION 05/01/70 STAT-PAC

PUBLISHED

THIS PROGRAM DETERMINES THE COEFFICIENTS OF THE NORMAL
EQUATIONS REQUIRED TO DETERMINE A LEAST SQUARES REGRESSION
EQUATION. AN OPTION IS AVAILABLE FOR CORRECTING ERRONEOUSLY
INPUTTED DATA.

EQUIPMENT REQUIRED - 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-70800 NORMAL EQUATION COEFFICIENT UPDATER (CORRECTOR)
PGM 4-5 LAST REVISION 05/01/70 STAT-PAC

PUBLISHED

THIS PROGRAM IS TO CORRECT SUMMATIONS COMPUTED BY PROGRAM
STAT-PAC 4-4. TO CORRECT FOR ERROR DATA ENTERED INTO THE
PROGRAM, REPEAT THE SAME ERRONEOUS ENTRIES INTO THIS
UPDATER PROGRAM.

EQUIPMENT REQUIRED - 9100B 9120A

09100-70800 LEAST SQUARES FIT - POWER CURVE
PGM 4-6 LAST REVISION 05/01/70 STAT-PAC

PUBLISHED

THIS PROGRAM COMPUTES THE LEAST SQUARE FIT AND CORRELATION
COEFFICIENT OF N PAIRS OF DATA POINTS FOR POWER CURVE.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-70800 LEAST SQUARE FIT - EXPONENTIAL
PGM 4-7 LAST REVISION 05/01/70 STAT-PAC

PUBLISHED

THIS PROGRAM COMPUTES THE LEAST SQUARE FIT AND A CORRELATION
COEFFICIENT OF N PAIRS OF DATA POINTS FOR AN EXPONENTIAL
FUNCTION.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-70800 THE LEAST SQUARE PARABOLA
PGM 4-8 LAST REVISION 05/01/70 STAT-PAC

PUBLISHED

THIS PROGRAM CALCULATES THE LEAST-SQUARE PARABOLA
APPROXIMATING THE SET OF POINTS (X1,Y1)....(XN,YN).

EQUIPMENT REQUIRED - 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER PROGRAM TITLE

09100-70800 CUBIC REGRESSION (LEAST SQUARES)
PGM 4-9 LAST REVISION 05/06/70 STAT-PAC
 PUBLISHED

THIS PROGRAM DETERMINES THE SUMMATIONS WHICH ARE THEN INPUT
TO PROGRAM STAT-PAC 4-13, SIMULTANEOUS SOLUTION OF FOUR
LINEAR EQUATIONS IN FOUR UNKNOWN, (WITH PRINTER).
EQUIPMENT REQUIRED - 9100B 9120A

09100-70800 LINEAR LEAST SQUARES.. $Y=A+BX$ (WITH ERROR STATISTICS)
PGM 4-10 LAST REVISION 05/01/70 STAT-PAC
 PUBLISHED

THIS PROGRAM COMPUTES THE LINEAR REGRESSION COEFFICIENTS A
AND B, THE ROOT MEAN SQUARE ERROR (ERMS), THE ERROR IN EACH
COEFFICIENT, & THE T STATISTIC FOR EACH COEFFICIENT.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-70800 MULTIPLE LINEAR REGRESSION (3 VARIABLE) STATISTICS FAMILY
PGM 4-11 LAST REVISION 05/02/70 STAT-PAC
 PUBLISHED

THIS PROGRAM CONSISTS OF 3 PARTS COMPUTING STATISTICS
ASSOCIATED WITH A REGRESSION MODEL.. $Z = A_0 + A_1X + A_2Y$
($X_1 = A_0 + A_1X_2 + A_2X_3$).
EQUIPMENT REQUIRED - 9100B 9120A

09100-70800 GOMPERTZ CURVE FIT
PGM 4-12 LAST REVISION 05/01/70 STAT-PAC
 PUBLISHED

THIS PROGRAM FITS A GOMPERTZ CURVE TO OBSERVED DATA.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-70800 SIMULTANEOUS SOLUTION - 4 EQ. IN 4 UNKNOWNNS (WITH PRINTER)
PGM 4-13 LAST REVISION 05/01/70 STAT-PAC

PUBLISHED

GIVEN A SYSTEM OF LINEAR ALGEBRAIC EQUATIONS OR A MATRIX
NOTATION THIS PROGRAM SOLVES 4 EQUATIONS IN FOUR UNKNOWNNS.
EQUIPMENT REQUIRED - 9100B 9120A

09100-70800 LEAST SQUARES REGRESSION
PGM 4-14 LAST REVISION 05/01/70 STAT-PAC

PUBLISHED

THIS PROGRAM CALCULATES THE COEFFICIENTS OF LEAST SQUARES FIT
OF A SET OF DATA POINTS.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-70800 SINE WAVE CURVE FIT
PGM 5-1 LAST REVISION 05/01/70 STAT-PAC

PUBLISHED

THIS PROGRAM ACCEPTS DISCRETE SAMPLES OF A CURVE, AND
DETERMINES THE SINE CURVE FIT.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-70800 FOURIER ANALYSIS (12-ORDINATE SCHEME)
PGM 5-2 LAST REVISION 05/01/70 STAT-PAC

PUBLISHED

THIS PROGRAM COMPUTES THE FIRST FOUR SINE AND COSINE TERMS OF
THE FOURIER SERIES OBTAINED FROM 12 OBSERVED ORDINATES.
EQUIPMENT REQUIRED - 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-70800 FOURIER SERIES (SAMPLED $X(T)$)

PGM 5-3 LAST REVISION 05/01/70 STAT-PAC

PUBLISHED

THIS PROGRAM CALCULATES THE FIRST 15 FOURIER SINE OR COSINE
COEFFICIENTS ASSOCIATED WITH A DISCRETE (SAMPLED) TIME
FUNCTION $X(T)$.

EQUIPMENT REQUIRED - 9100B 9120A

09100-70800 SAMPLE SIZE N FOR CONTINUOUS DATA

PGM 6-1 LAST REVISION 05/01/70 STAT-PAC

PUBLISHED

THIS PROGRAM CALCULATES THE NECESSARY SAMPLE SIZE (N)
REQUIRED TO ACHIEVE A DESIRED PRECISION (D), ASSUMING A
SMALL RISK THAT THE PRECISION MAY NOT BE REACHED.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-70800 SAMPLE SIZE (N) IN SAMPLING FOR PROPORTIONS

PGM 6-2 LAST REVISION 05/01/70 STAT-PAC

PUBLISHED

THIS PROGRAM CALCULATES THE NECESSARY SAMPLE SIZE (N) TO
ACHIEVE A DESIRED PRECISION D , ASSUMING A SMALL RISK THAT THE
DESIRED PRECISION MAY NOT BE REACHED.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-70800 NEYMAN ALLOCATION IN STRATIFIED RANDOM SAMPLING

PGM 6-3 LAST REVISION 05/01/70 STAT-PAC

PUBLISHED

THIS PROGRAM CALCULATES THE OPTIMUM ALLOCATION OF A FIXED
NUMBER OF SAMPLES BETWEEN THE N STRATA.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-70800 ONE WAY ANALYSIS OF VARIANCE M X N
PGM 7-1 LAST REVISION 05/01/70 STAT-PAC
PUBLISHED

THIS PROGRAM SEPARATES THE TOTAL VARIANCE IN A TABLE OF DATA
INTO A PORTION DUE TO CHANCE & A PORTION DUE TO DIFFERENCE
BETWEEN & POPULATION UNDERLYING EACH COLUMN OF SAMPLE DATA.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-70800 TWO WAY ANALYSIS OF VARIANCE WITH REPLICATES (3 WAY)
PGM 7-3 LAST REVISION 05/01/70 STAT-PAC
PUBLISHED

THIS PROGRAM ANALYZES THE TOTAL STATISTICAL VARIANCE IN A
TABLE OF DATA BY SEPARATING THE TOTAL VARIANCE INTO 3 PARTS,
AMONG ROWS, BETWEEN COLUMNS, AND VARIANCE DUE TO
INTERACTIONS.

EQUIPMENT REQUIRED - 9100B 9120A

09100-70800 ANALYSIS OF VARIANCE F TEST FOR MEANS
PGM 7-4 LAST REVISION 05/01/70 STAT-PAC
PUBLISHED

THIS PROGRAM OPERATES ON 2 OR MORE COLUMNS OF DATA
CONTAINING EQUAL NUMBERS OF ITEMS, CLASSIFIED ACCORDING TO A
SINGLE CRITERION.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-70800 TWO WAY ANALYSIS OF VARIANCE (M X 4)
PGM 7-12 LAST REVISION 05/01/70 STAT-PAC
PUBLISHED

THIS PROGRAM ANALYZES THE TOTAL STATISTICAL VARIANCE IN A
TABLE OF DATA BY SEPARATING THE TOTAL VARIANCE INTO TWO
PARTS, ROWS OF DATA AND COLUMNS OF DATA.

EQUIPMENT REQUIRED - 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-70800 QUEUEING MODEL

PGM 8-1 LAST REVISION 05/01/70 STAT-PAC
PUBLISHED

THIS PROGRAM DETERMINES THE PROBABILITY OF A WAITING LINE
AND THE MEAN VALUE OF A WAITING LINE FOR A SINGLE-STATION
QUEUEING PROBLEM.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-70800 QUEUEING WITH FINITE CUSTOMERS

PGM 8-2 LAST REVISION 05/01/70 STAT-PAC
PUBLISHED

THIS PROGRAM COMPUTES THE AVERAGE NUMBERS IN SYSTEM AND THE
QUEUE LENGTH WHEN THE PARAMETERS ARE KNOWN.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-70800 QUEUEING WITH INFINITE CUSTOMERS

PGM 8-3 LAST REVISION 05/01/70 STAT-PAC
PUBLISHED

THIS PROGRAM COMPUTES THE QUEUE LENGTH OF A SYSTEM WHEN THE
SYSTEM PARAMETERS ARE KNOWN.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-70800 WEIBULL DISTRIBUTION PARAMETER CALCULATION FOR FAILURE DATA

PGM 9-1 LAST REVISION 05/01/70 STAT-PAC
PUBLISHED

THIS PROGRAM USES WEIBULL ANALYSIS FOR FAILURE DATA WHERE ALL
SAMPLES ARE TESTED TO FAILURE. THE USER LISTS THE ITEMS IN
ORDER OF INCREASING TIME TO FAILURE.

EQUIPMENT REQUIRED - 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-70800 WEIBULL ANALYSIS VIA FAILED AND SUSPENDED SETS
PGM 9-2 LAST REVISION 05/01/70 STAT-PAC

PUBLISHED

THIS PROGRAM DETERMINES THE WEIBULL PARAMETERS B, AND THETA,
FROM A GROUPING OF FAILURE DATA INTO SETS OF FAILED ITEMS
AND SUSPENDED ITEMS.

EQUIPMENT REQUIRED - 9100B 9120A

09100-70800 GENERAL STATISTICS FOR QUALITY CONTROL
PGM 9-3 LAST REVISION 05/01/70 STAT-PAC

PUBLISHED

THIS PROGRAM DETERMINES VARIOUS STATISTICS USEFUL IN QUALITY
CONTROL.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-70800 REPEATABILITY
PGM 9-4 LAST REVISION 05/01/70 STAT-PAC

PUBLISHED

THIS PROGRAM COMPUTES PARAMETERS ASSOCIATED WITH THE
REPEATABILITY OF MEASURING (OR EXPERIMENTAL) PROCESS.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-70800 HISTOGRAM GENERATION (WITH PLCT)
PGM 10-1 LAST REVISION 05/01/70 STAT-PAC

PUBLISHED

THIS PROGRAM GENERATES AND PLOTS A HISTOGRAM OF TEN WINDOWS
GIVEN A DATA SET OF POSITIVE NUMBERS.

EQUIPMENT REQUIRED - 9100B 9120A 9125A/B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER PROGRAM TITLE

09100-70800 EXPONENTIAL REGRESSION AND PLOT

PGM 10-10 LAST REVISION 05/01/70 STAT-PAC
PUBLISHED

THIS PROGRAM COMPUTES THE LEAST SQUARES FIT AND A CORRELATION
COEFFICIENT OF N PAIRS OF DATA POINTS FOR AN EXPONENTIAL
FUNCTION.

EQUIPMENT REQUIRED - 9100A 9100B 9120A 9125A/B

09100-70800 CUBIC (THIRD DEGREE) REGRESSION PLOT

PGM 10-11 LAST REVISION 05/01/70 STAT-PAC
PUBLISHED

THIS PROGRAM PLOTS THE DATA POINTS AND THE CUBIC CURVE
ASSOCIATED WITH A THIRD DEGREE REGRESSION CURVE FIT. RAW DATA
POINTS MAY BE PLOTTED BEFORE OR AFTER STAT-PAC 4-9.

EQUIPMENT REQUIRED - 9100B 9120A 9125A/B

09100-70800 LEAST SQ. REGRESSION (LINEAR, PARABOLIC, POWER, EXPONENTIAL)

PGM 10-12 LAST REVISION 05/01/70 STAT-PAC
PUBLISHED

THIS PROGRAM ALLOWS THE USER TO CALCULATE AND PLOT THE
FUNCTION OF FOUR DIFFERENT REGRESSION CURVES WITH A SINGLE
ENTRY OF HIS DISCRETE DATA.

EQUIPMENT REQUIRED - 9100B 9120A 9125A/B

09100-70800 LOG NORMAL DISTRIBUTION WITH PLOT

PGM 10-13 LAST REVISION 05/01/70 STAT-PAC
PUBLISHED

THIS PROGRAM COMPUTES THE VALUE OF THE LOG-NORMAL
DISTRIBUTION FOR A GIVEN SET OF PARAMETERS OVER A SPECIFIED
RANGE OF X.

EQUIPMENT REQUIRED - 9100A 9100B 9120A 9125A/B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-70800 GOMPERTZ CURVE PLOT

PGM 10-14 LAST REVISION 05/01/70 STAT-PAC
PUBLISHED

THIS PROGRAM PLOTS THE DATA VALUES IN CALCULATING A GOMPERTZ CURVE (STAT-PAC 4-12) AND PLOTS THE GOMPERTZ CURVE BEST FITTING THESE DATA POINTS.

EQUIPMENT REQUIRED - 9100A 9100B 9120A 9125A/B

09100-70800 BUFFON NEEDLE EXPERIMENT WITH PLOT

PGM 10-15 LAST REVISION 05/01/70 STAT-PAC
PUBLISHED

THIS PROGRAM DETERMINES THE PROBABILITY THAT A NEEDLE OF LENGTH A WILL INTERSECT A LINE ON A GRID OF LINES SEPARATED BY DISTANCE D.

EQUIPMENT REQUIRED - 9100B 9120A 9125A/B

09100-70800 CONTROL ELLIPSE

PGM 10-16 LAST REVISION 05/01/70 STAT-PAC
PUBLISHED

THIS PROGRAM ACCEPTS SAMPLE VARIANCES & COVARIANCE, SAMPLE SIZE, AND F ALPHA OBTAINED FROM F TABLES & OUTPUTS APPROXIMATION TO CHI SQUARED, THE ANALYTICAL CALC. FOR THE ELLIPSE AND THE PLOT.

EQUIPMENT REQUIRED - 9100B 9120A 9125A/B

09100-70800 GENERAL PARAMETRIC PLOT (SELF-SCALING)

PGM 10-17 LAST REVISION 05/01/70 STAT-PAC
PUBLISHED

THIS PROGRAM PERMITS THE PLOTTING OF A FAMILY OF CURVES $F(X,A,B)$ WHERE A AND B ARE PARAMETRICALLY VARIED.

EQUIPMENT REQUIRED - 9100B 9120A 9125A/B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-70800 GENERAL POINT PLOT

PGM 10-18 LAST REVISION 05/01/70 STAT-PAC
PUBLISHED

THIS PROGRAM PLOTS A SERIES OF POINTS (X1,Y1).
EQUIPMENT REQUIRED - 9100A 9100B 9120A 9125A/B

09100-70800 AXES PLOT

PGM 10-19 LAST REVISION 05/01/70 STAT-PAC
PUBLISHED

THIS PROGRAM PLOTS THE ABSCISSA & ORDINATE AXES. IT WAS
WRITTEN TO BE USED IN CONJUNCTION WITH THE OTHER PLOTTER
PROGRAMS TO FACILITATE INTERPETATION & INTERPOLATION OF
PLOTTED DATA.
EQUIPMENT REQUIRED - 9100A 9100B 9125A/B

09100-70800 NORMAL CURVE OVERLAY

PGM 10-2 LAST REVISION 05/01/70 STAT-PAC
PUBLISHED

THIS PROGRAM GENERATES A NORMAL CURVE GIVEN MEAN AND
VARIANCE. THE PROGRAM WAS INTENDED TO BE USED IN CONJUNCTION
WITH PROGRAM STAT-PAC 10-1, HISTOGRAM GENERATION (WITH PLOT)
EQUIPMENT REQUIRED - 9100A 9100B 9120A 9125A/B

09100-70800 X CONTROL CHART PLOT

PGM 10-20 LAST REVISION 05/01/70 STAT-PAC
PUBLISHED

THIS PROGRAM CONSTRUCTS A CONTROL CHART AND PLOTS
OBSERVED SAMPLES ON THE CHART. THIS PROGRAM HAS AN OPTION
OF UPDATING THE CONTROL CHART AS OBSERVATIONS ARE AVAILABLE.
EQUIPMENT REQUIRED - 9100A 9100B 9120A 9125A/B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-70800 NORMAL CURVE PLOT (GENERAL)

PGM 10-3 LAST REVISION 05/01/70 STAT-PAC

PUBLISHED

THIS PROGRAM GENERATES A NORMAL CURVE GIVEN THE MEAN AND
VARIANCE OF THE NORMAL DISTRIBUTION.

EQUIPMENT REQUIRED - 9100A 9100B 9120A 9125A/B

09100-70800 CUMULATIVE PROBABILITY FUNCTION INTEGRAL WITH PLOT

PGM 10-4 LAST REVISION 05/01/70 STAT-PAC

PUBLISHED

THIS PROGRAM EVALUATES THE INTEGRAL OF A FUNCTION $F(U)$
BETWEEN ANY LOWER LIMIT A AND SUCCESSIVELY INCREMENTED
UPPER LIMIT.

EQUIPMENT REQUIRED - 9100B 9120A 9125A/B

09100-70800 CHI SQUARE DISTRIBUTION

PGM 10-5 LAST REVISION 05/01/70 STAT-PAC

PUBLISHED

THIS PROGRAM WILL PLOT THE DISTRIBUTION FOR SPECIFIED EVEN
VALUES OF NU , THE NUMBER OF DEGREES OF FREEDOM DESIRED.

EQUIPMENT REQUIRED - 9100A 9100B 9120A 9125A/B

09100-70800 LINEAR REGRESSION AND PLOT

PGM 10-6 LAST REVISION 05/01/70 STAT-PAC

PUBLISHED

BEST FIT OF A SET OF DATA POINTS. IT ALSO PLOTS EACH DATA
POINT AND STRAIGHT LINE DETERMINED BY THE CALCULATED
EQUATION.

EQUIPMENT REQUIRED - 9100A 9100B 9120A 9125A/B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER PROGRAM TITLE

09100-70800 LINEAR REGRESSION (PRINT PLOT)

PGM 10-7 LAST REVISION 05/01/70 STAT-PAC
PUBLISHED

THIS PROGRAM CALCULATES THE EQUATION OF THE STRAIGHT LINE OF
BEST FIT OF A SET OF DATA POINTS.

EQUIPMENT REQUIRED - 9100A 9100B 9120A 9125A/B

09100-70800 POWER CURVE REGRESSION AND PLOT

PGM 10-8 LAST REVISION 05/01/70 STAT-PAC
PUBLISHED

THIS PROGRAM COMPUTES THE LEAST SQUARES FIT AND CORRELATION
COEFFICIENT OF N PAIRS OF DATA POINTS FOR A POWER CURVE.

EQUIPMENT REQUIRED - 9100A 9100B 9120A 9125A/B

09100-70800 GENERAL POWER CURVE REGRESSION AND PLOT

PGM 10-9 LAST REVISION 05/01/70 STAT-PAC
PUBLISHED

THIS PROGRAM COMPUTES THE LEAST SQUARES FIT AND CORRELATION
COEFFICIENT OF N PAIRS OF DATA POINTS FOR A POWER CURVE.

EQUIPMENT REQUIRED - 9100B 9120A 9125A/B

09119-70800 SET OF PRERECORDED CARDS FOR STAT-PAC

LAST REVISION 05/01/70 STATISTICS PAC VOL. 1

PUBLISHED

PRICE 215.00

SEND ALL ORDERS FOR PUBLICATIONS AND MAGNETIC CARDS TO THE
LOCAL HP SALES OFFICE.

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

CATEGORY - ANALYSIS OF VARIANCE PAC

09100-70900

REFER TO THE LAST ENTRY IN THIS PROGRAM CATEGORY FOR ORDERING INFORMATION ON SETS OF PRERECORDED MAGNETIC CARDS FOR THIS PACKET. IF CARDS ARE NOT AVAILABLE, AS INDICATED BY NO ORDERING ENTRY, CONSULT YOUR LOCAL HP CALCULATOR SALESMAN FOR FURTHER INFORMATION.

PROGRAM PRICE 29.50 MAGNETIC CARD PRICE 40.00

PART NUMBER

PROGRAM TITLE

09100-70900 ONE WAY ANALYSIS OF VARIANCE

PGM 1-1 LAST REVISION 03/02/71 ANALYSIS OF VARIANCE PAC
PUBLISHED

TESTS DIFFERENCE BETWEEN MEANS OF TREATMENT GROUPS. NO LIMIT ON NR. OF TREATMENT GROUPS OR OBSERVATIONS WITHIN GROUPS. TREATMENT MAY HAVE EQUAL OR UNEQUAL NR. OF OBS. COMPUTES TREATMENT SUM, MEAN, AND N. COMPUTES TOTAL SUM, MEAN AND N. A O V TABLE INCLUDES SS, MS, DF FOR TOTAL, BETWEEN, AND WITHIN, AND F RATIO.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-70900 2-WAY AOV, NO REPLICATES, WITH TUKEY TEST

PGM 1-2 LAST REVISION 03/02/71 ANALYSIS OF VARIANCE PAC
PUBLISHED

PERFORMS 2-WAY AOV ON A DESIGN WHERE THERE IS NO REPLICATION. TUKEY TEST FOR INTERACTION INCLUDED AS AN OPTION. THIS SEPARATES A SUM OF SQUARES WITH ONE DF FROM THE ERROR TERM. OUTPUT INCLUDES COL, ROW, OVERALL. ALSO TOTALS, MEANS, AND COMPLETE AOV TABLE.

EQUIPMENT REQUIRED - 9100B 9120A

09100-70900 TWO-WAY ANALYSIS OF VARIANCE WITH REPLICATES

PGM 1-3 LAST REVISION 03/02/71 ANALYSIS OF VARIANCE PAC
PUBLISHED

PERFORMS COMPLETE TWO-WAY AOV WITH REPLICATES TWO MODES OF OPERATION. (1) INPUT INCLUDES RAW DATA AND COL, ROW, ALL SUMS. NO LIMITATION AS TO MODEL SIZE IS REQUIRED. (2) INPUT INCLUDES ONLY RAW DATA. FOR THIS MODE, NR. OF ROWS IS LESS THAN 11. OUTPUT INCLUDES ALL, ROW, COL. TOTALS AND MEANS, ALSO COMPLETE AOV TABLE.

EQUIPMENT REQUIRED - 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-70900 NESTED CLASSIFICATIONS - 3 STAGE

PGM 1-4 LAST REVISION 03/02/71 ANALYSIS OF VARIANCE PAC

PUBLISHED

COMPUTES ADV FOR THREE STAGES OF A NESTED DESIGN. FIRST STAGE A MAY HAVE ANY NUMBER OF LEVELS. NUMBER OF LEVELS OF B WITHIN A, B(A), NEED NOT BE BALANCED. NUMBER OF LEVELS OF C WITH B, C(B(A)), NEED NOT BE BALANCED. OUTPUTS ARE OVERALL MEAN OF EXPERIMENT X, MEANS OF EACH LEVEL OF FACTOR A-X1, ANOVA TABLE AND F RATIOS.

EQUIPMENT REQUIRED - 9100B 9120A

09100-70900 ANALYSIS OF COVARIANCE

PGM 2-1 LAST REVISION 03/02/71 ANALYSIS OF VARIANCE PAC

PUBLISHED

PERFORMS A ONE-WAY DESIGN, EQUAL NUMBERS OF OBSERVATIONS PER TREATMENT. NO LIMITATION ON N, NUMBER OF OBSERVATIONS PER TREATMENT, BUT NUMBER MUST NOT VARY FROM TREATMENT TO TREATMENT. OUTPUTS INCLUDE TREATMENT OF SUMS AND MEANS, SUMS OF X SQUARES, XY ACCUMULATED TREATMENT BY TREATMENT, ADJUSTED SS AND SUMS OF PRODUCTS FOR X, Y OVER ENTIRE DATA, ADV TABLE, F RATIOS, AND BEST LINEAR UNBIASED ESTIMATE OF BETA.

EQUIPMENT REQUIRED - 9100B 9120A

09100-70900 ANALYSIS OF COVARIANCE

PGM 2-2 LAST REVISION 03/02/71 ANALYSIS OF VARIANCE PAC

PUBLISHED

PERFORMS A ONE-WAY DESIGN, UNEQUAL NUMBERS OF OBSERVATIONS PER TREATMENT. OUTPUTS INCLUDE TOTALS AND MEANS FOR X'S AND Y'S FOR EACH TREATMENT, ACCUMULATED SUM OF SQUARES FOR X'S AND FOR XY PRODUCTS, CORRECTED SUMS OF SQUARES AND SUM OF PRODUCTS, ADV TABLE, POINT ESTIMATE OF REGRESSION COEFFICIENT BETA, AND CORRECTED TREATMENT MEAN.

EQUIPMENT REQUIRED - 9100B 9120A

09100-70900 LINEAR REGRESSION WITH ANALYSIS OF VARIANCE

PGM 3-1 LAST REVISION 03/02/71 ANALYSIS OF VARIANCE PAC

PUBLISHED

FITS ANY NUMBER OF DATA POINTS TO A LINEAR EQUATION. OUTPUTS INCLUDE SLOPE AND INTERCEPT VALUES FOR THE EQUATION, MEANS AND STANDARD DEVIATION FOR THE X AND Y DATA, REGRESSION ANALYSIS OF VARIANCE TABLE, STANDARD ERROR OF ESTIMATE, AND CONFIDENCE INTERVAL ABOUT PARAMETER (SLOPE).

EQUIPMENT REQUIRED - 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-70900 MULTIPLE LINEAR REGRESSION (MLR) - 3 VARIABLE
PGM 3-2 LAST REVISION 03/02/71 ANALYSIS OF VARIANCE PAC
PUBLISHED

FITS A LEAST-SQUARES PLANE THROUGH A SET OF POINTS IN 3-
SPACE. IT USES A REGRESSION EQUATION OF Z ON X AND Y . N MUST
BE 3 OR GREATER. OUTPUT INCLUDES MEANS AND VARIANCES, SIMPLE
CORRELATION COEFFICIENTS, LEAST SQUARES (BLU) ESTIMATES A , B ,
 C , AOV TABLE, AND MULTIPLE CORRELATION COEFFICIENT.
EQUIPMENT REQUIRED - 9100B 9120A

09119-70900 SET OF PRERECORDED MAGNETIC CARDS FOR AOV PAC
LAST REVISION 03/02/71 ANALYSIS OF VARIANCE PAC
PUBLISHED PRICE 40.00
SEND ALL ORDERS FOR PUBLICATIONS AND MAGNETIC CARDS TO THE
LOCAL HP SALES OFFICE.

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

CATEGORY - QUALITY ASSURANCE PAC

09100-70950

REFER TO THE LAST ENTRY IN THIS PROGRAM CATEGORY FOR ORDERING INFORMATION ON SETS OF PRERECORDED MAGNETIC CARDS FOR THIS PACKET. IF CARDS ARE NOT AVAILABLE, AS INDICATED BY NO ORDERING ENTRY, CONSULT YOUR LOCAL HP CALCULATOR SALESMAN FOR FURTHER INFORMATION.

PROGRAM PRICE 19.50 MAGNETIC CARD PRICE 30.00

PART NUMBER PROGRAM TITLE

09100-70950 GENERAL STATISTICS FOR QUALITY CONTROL

PGM 1-1 LAST REVISION 05/17/71 QUALITY ASSURANCE PAC
PUBLISHED

GIVEN A SAMPLE OF N OBSERVATIONS, PROGRAM COMPUTES SAMPLE MEAN, SAMPLE VARIANCE, SAMPLE STD. DEVIATION, UPPER AND LOWER 3-SIGMA LIMITS, RANGE AND OTHER STATISTICS FOR QUALITY CONTROL.

JOSEPH S. MADACHY, MONSANTO RESEARCH CORP.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-70950 ESTIMATION OF PRODUCT YIELD (PERCENT DEFECTIVE)

PGM 1-2 LAST REVISION 05/17/71 QUALITY ASSURANCE PAC
PUBLISHED

FOR A SAMPLE FROM AN APPROXIMATELY NORMALLY DISTRIBUTED POPULATION, PROGRAM COMPUTES PERCENT OF PRODUCT LYING ABOVE AND BELOW THE SPECIFICATION LIMITS, PLUS THE TOTAL PERCENTAGE OUTSIDE OF SPECIFICATIONS.

L. E. SNODGRASS, SANDIA LABORATORIES

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-70950 BARTLETT'S TEST FOR HOMOGENEITY OF VARIANCE

PGM 1-3 LAST REVISION 05/17/71 QUALITY ASSURANCE PAC
PUBLISHED

TESTS HYPOTHESIS OF HOMOGENEITY OF VARIANCE, PROVIDING BOTH THE F AND CHI-SQUARED STATISTICS AND THE POOLED VARIANCE ESTIMATE.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-70950 OUTLIER DETERMINATION

PGM 1-4 LAST REVISION 05/17/71 QUALITY ASSURANCE PAC
PUBLISHED

PROGRAM DETERMINES WHETHER AN EXTREME VALUE FOUND IN A SAMPLE
IS TAKEN FROM THE SAME POPULATION AS THE REST OF THE SAMPLE
BUT IS JUST AN EXTREME MANIFESTATION OF IT OR IS ACTUALLY
TAKEN FROM ANOTHER POPULATION.

JAMES O'BRYON, ABERDEEN PROVING GROUND, MD.

EQUIPMENT REQUIRED - 9100A 9100B

09100-70950 HISTOGRAM GENERATION (WITH PLOT AND OFFSET PROVISION)

PGM 1-5 LAST REVISION 05/17/71 QUALITY ASSURANCE PAC
PUBLISHED

PROGRAM GENERATES AND PLOTS A HISTOGRAM OF TEN WINDOWS GIVEN
A DATA SET OF POSITIVE NUMBERS. ALSO DETERMINES MEAN AND
VARIANCE OF RAW DATA AND OF THE NORMALIZED HISTOGRAM DATA.
STORES DATA WHICH CAN BE USED BY PROGRAM 1-6 TO PLOT A NORMAL
CURVE OVER THE HISTOGRAM.

EQUIPMENT REQUIRED - 9100B 9120A 9125A/B

09100-70950 NORMAL CURVE OVERLAY

PGM 1-6 LAST REVISION 05/17/71 QUALITY ASSURANCE PAC
PUBLISHED

THIS PROGRAM GENERATES A NORMAL CURVE, GIVEN THE MEAN AND
VARIANCE. IT REQUIRES THAT MEAN AND VARIANCE BE STORED IN THE
F AND E REGISTERS PRIOR TO EXECUTION, AND IS INTENDED TO BE
USED IN CONJUNCTION WITH Q.A. PAC PROGRAM 1-5.

EQUIPMENT REQUIRED - 9100A 9100B 9120A 9125A/B

09100-70950 RANDOM SAMPLE GENERATOR

PGM 1-7 LAST REVISION 05/17/71 QUALITY ASSURANCE PAC
PUBLISHED

THIS PROGRAM CAN BE USED TO GENERATE (A) RANDOM NUMBERS UP TO
6 DIGITS, AND (B) A RANDOM SAMPLE FROM A DISTRIBUTION WITH
MAX Y SET BY THE USER. NOTE Y MIN = 1.

HENRY G. ROEBKE, LAKE JACKSON, TEXAS

EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-70950 X - Y PLOT WITH FRAMING

PGM 1-8 LAST REVISION 05/17/71 QUALITY ASSURANCE PAC
PUBLISHED

THIS IS A GENERAL PLOTTING ROUTINE WHICH DRAWS AND CALIBRATES
A FRAME ACCORDING TO THE USER'S SPECIFICATIONS. POINTS ARE
THEN EITHER PLOTTED AS PLUS SIGNS, CONNECTED BY A STRAIGHT
LINE, OR MIXED AS NEEDED BY THE USER. DATA INPUT MAY BE FROM
THE KEYBOARD OR FROM MARKED CARDS, OR A MIXTURE OF THE TWO.

EQUIPMENT REQUIRED - 9100B 9120A 9125A/B

09100-70950 X-BAR AND R QUALITY CONTROL LIMITS

PGM 2-1 LAST REVISION 05/17/71 QUALITY ASSURANCE PAC
PUBLISHED

THIS PROGRAM COMPUTES STATISTICS FOR X-BAR AND R CHARTS FOR
ANY SELECTED SUB-GROUP SIZE.

G. L. HOUSTON, MONSANTO RESEARCH CORP.

EQUIPMENT REQUIRED - 9100B 9120A

09100-70950 CONTROL CHART SIMULATION ON THE PRINTER

PGM 2-2 LAST REVISION 05/17/71 QUALITY ASSURANCE PAC
PUBLISHED

THIS PROGRAM SIMULATES THE CONTROL CHART PLOTTING BY SCREEN-
ING ENTRIES RELATIVE TO PLUS OR MINUS 3 SIGMA, 2 SIGMA, AND
1 SIGMA LIMITS AND PRINTING THEIR POSITION APPROXIMATELY AS
THEY WOULD APPEAR ON AN ACTUAL CONTROL CHART.

L. E. SNODGRASS, SANDIA LABS.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-70950 X-BAR CONTROL CHART PLOT (SIGMA GIVEN)

PGM 2-3 LAST REVISION 05/17/71 QUALITY ASSURANCE PAC
PUBLISHED

THIS PROGRAM CONSTRUCTS AN X-BAR CONTROL CHART AND PLOTS
OBSERVED SAMPLES ON THE CHART.

EQUIPMENT REQUIRED - 9100A 9100B 9120A 9125A/B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-70950 P-CONTROL CHART PLOT FOR FRACTION DEFECTIVE
PGM 2-4 LAST REVISION 05/17/71 QUALITY ASSURANCE PAC
PUBLISHED

THIS PROGRAM CONSTRUCTS A FRACTION DEFECTIVE CONTROL CHART
AND PLOTS OBSERVED SAMPLES ON THE CHART. THE CONTROL CHART
CONSISTS OF LINES AT P AND P PLUS OR MINUS 3 SIGMA.

EQUIPMENT REQUIRED - 9100A 9100B 9120A 9125A/B

09100-70950 C-CONTROL CHART PLOT FOR DEFECTS
PGM 2-5 LAST REVISION 05/17/71 QUALITY ASSURANCE PAC
PUBLISHED

THIS PROGRAM CONSTRUCTS A CONTROL CHART FOR DEFECTS AND PLOTS
OBSERVED SAMPLES ON THE CHART. IT HAS AN OPTION OF UPDATING
THE CONTROL CHART AS OBSERVATIONS BECOME AVAILABLE.

EQUIPMENT REQUIRED - 9100A 9100B 9120A 9125A/B

09100-70950 X-BAR AND R CONTROL CHART - SAMPLE STATISTICS INPUTTED
PGM 2-6 LAST REVISION 05/17/71 QUALITY ASSURANCE PAC
PUBLISHED

THE FIRST PART OF THIS PROGRAM DRAWS THE COORDINATES FOR THE
X-BAR AND R-BAR CONTROL CHARTS. THE SECOND PART PLOTS THE
GIVEN POINTS ONTO THE GRAPHS.

EQUIPMENT REQUIRED - 9100A 9100B 9120A 9125A/B

09100-70950 X-BAR AND R CONTROL CHART - RAW DATA INPUTTED
PGM 2-7 LAST REVISION 05/17/71 QUALITY ASSURANCE PAC
PUBLISHED

THIS PROGRAM CALCULATES AND PLOTS AN UPPER CONTROL LIMIT AND
LOWER CONTROL LIMIT FOR X-BAR AND R. THE USER INPUTS RAW
SAMPLE DATA.

EQUIPMENT REQUIRED - 9100B 9120A 9125A/B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09119-70950 SET OF PRERECORDED MAGNETIC CARDS FOR QUALITY ASSURANCE PAC
LAST REVISION 05/17/71 QUALITY ASSURANCE PAC
PUBLISHED PRICE 30.00
SEND ALL ORDERS FOR PUBLICATIONS AND MAGNETIC CARDS TO THE
LOCAL HP SALES OFFICE.

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

CATEGORY - STATISTICS

09100-70XXX

REFER TO THE LAST ENTRY IN THIS PROGRAM CATEGORY FOR ORDERING INFORMATION ON SETS OF PRERECORDED MAGNETIC CARDS FOR THIS PACKET. IF CARDS ARE NOT AVAILABLE, AS INDICATED BY NO ORDERING ENTRY, CONSULT YOUR LOCAL HP CALCULATOR SALESMAN FOR FURTHER INFORMATION.

PART NUMBER PROGRAM TITLE

09100-70818 LINEAR REGRESSION AND PLOT
LAST REVISION 06/01/70 PLOTTER PROGRAM PAC
PUBLISHED

THIS PROGRAM CALCULATES THE EQUATION OF THE STRAIGHT LINE OF BEST FIT FOR A SET OF DATA POINTS. IT PLOTS EACH DATA POINT AND THE STRAIGHT LINE DETERMINED BY THE CALCULATED EQUATION. (SEE STAT-PAC PROGRAM 10-12 FOR COMBINED LEAST SQUARES LINEAR, PARABOLIC, POWER AND EXPONENTIAL REGRESSION).

EQUIPMENT REQUIRED - 9100A 9100B 9125A/B

09100-70819 PARABOLIC REGRESSION AND PLOT
LAST REVISION 06/01/70 PLOTTER PROGRAM PAC
PUBLISHED

THIS PROGRAM FINDS THE COEFFICIENTS OF A SECOND DEGREE EQUATION. IT PLOTS THE DATA POINTS AND THE BEST FIT LEAST SQUARES PARABOLA DETERMINED BY THE CALCULATED EQUATION. (SEE STAT-PAC PROGRAM 10-12 FOR COMBINED LEAST SQUARES LINEAR, PARABOLIC, POWER AND EXPONENTIAL REGRESSION).

EQUIPMENT REQUIRED - 9100A 9100B 9125A/B

09100-70820 EXPONENTIAL REGRESSION AND PLOT
LAST REVISION 06/01/70 PLOTTER PROGRAM PAC
PUBLISHED

THIS PROGRAM COMPUTES THE LEAST SQUARES FIT AND A CORRELATION COEFFICIENT OF N PAIRS OF DATA POINTS FOR AN EXPONENTIAL FUNCTION. IT PLOTS EACH POINT AND THE LEAST SQUARES CURVE AFTER COMPUTING THE UNKNOWN. (SEE STAT-PAC PROGRAM 10-12 FOR COMBINED LEAST SQUARES LINEAR, PARABOLIC, POWER AND EXPONENTIAL REGRESSION).

EQUIPMENT REQUIRED - 9100A 9100B 9125A/B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-70825 TWO WAY ANALYSIS OF VARIANCE M X N
LAST REVISION 04/01/69 KEYBOARD VOL. 1 NO. 1
PUBLISHED PRICE 10.00
PROGRAM ANALYZES TOTAL STATISTICAL VARIANCE IN A TABLE OF
DATA BY SEPARATING TOTAL VARIANCE INTO THREE PARTS, VARIANCE
BETWEEN ROWS OF DATA, VARIANCE BETWEEN COLUMNS OF DATA, AND
COMPARING EACH TO VARIANCE DUE TO RANDOM INFLUENCE. IN A
TABLE OF N COLUMNS AND M ROWS IT CALCULATES THE VARIANCE
RATIO BETWEEN COLUMNS.
EQUIPMENT REQUIRED - 9100A 9100B

09100-70831 GENERAL STATISTICS FOR QUALITY CONTROL
LAST REVISION 11/01/69 KEYBOARD VOL. 1 NO. 3
PUBLISHED
(SEE STAT-PAC PROGRAM 9-3).
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-70835 X-BAR AND R CHARTS FOR ANY SELECTED SUB-GROUP SIZE
LAST REVISION 03/15/71 G. L. HOUSTON
CUSTOMER SUBMITTED PRICE 10.00
COMPUTES AND PRINTS INDIVIDUAL X-BAR AND RANGES FOR EACH SUB-
GROUP. GENERATES SUMS OF X'S AND R'S AND COUNTS SUB GROUPS.
COMPUTES GRANT'S STATISTICAL QUALITY CONTROL AND PRINTS X-
DOUBLE BAR AND R-BAR IN UPPER AND LOWER CONTROL UNITS ON X-
BAR AND RANGE.
G. L. HOUSTON, MONSANTO RESEARCH, MIAMISBURG, OHIO
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-70836 RANDOM MACHINE INTERFERENCE
LAST REVISION 03/15/71 MARCEL GAUTHIER
CUSTOMER SUBMITTED PRICE 10.00
THIS PROGRAM CALCULATES AND DISPLAYS FOR ONE OR MORE MACHINES
THE MACHINE UTILIZATION FACTOR, OPERATOR IDLE TIME, AND
INTERFERENCE (MACHINE OUT OF ORDER BUT WAITING FOR THE
OPERATOR).
MARCEL GAUTHIER, ECOLE POLYTECHNIQUE, MONTREAL, QUEBEC.
EQUIPMENT REQUIRED - 9100A 9100B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-70838 ONE WAY ANALYSIS OF VARIANCE
LAST REVISION 03/15/71 DAVE COLE
UNPUBLISHED PRICE 10.00
TESTS DIFFERENCES BETWEEN MEANS OF TREATMENT GROUPS. NO LIMIT
ON NUMBER OF TREATMENT GROUPS. CALCULATES TOTAL SUM, MEAN,
AND N. ADV TABLE INCLUDES SS, MS, DF FOR TOTAL, BETWEEN, AND
WITHIN, AND F RATIO.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-70839 BARTLETT'S TEST
LAST REVISION 03/15/71 DAVE COLE
UNPUBLISHED PRICE 10.00
TESTS HYPOTHESIS OF HOMOGENEITY OF VARIANCE, PROVIDING BOTH
THE F AND X-SQUARED STATISTICS AND THE POOLED VARIANCE
ESTIMATE. OUTPUT INCLUDES F VALUE WITH DEGREES OF FREEDOM,
SP-SQUARED (POOLED VARIANCE), M, AND X-SQUARED VALUES WITH
DEGREES OF FREEDOM.
EQUIPMENT REQUIRED - 9100A 9100B

09100-70840 FISHER'S TEST AND CONFID. INTERVAL
LAST REVISION 03/15/71 DAVE COLE
UNPUBLISHED PRICE 10.00
THIS PROGRAM TESTS THE HYPOTHESIS THAT A SAMPLE CORRELATION
COEFFICIENT IS EQUAL TO A KNOWN CORRELATION COEFFICIENT BY
USING FISHER'S NORMAL APPROXIMATION TO THE DISTRIBUTION OF
THE SAMPLE CORRELATION COEFFICIENT AND RATIONAL APPROX. FOR
NORMAL CUMULATIVE DISTRIBUTION. OUTPUTS ARE VALUE OF THE TEST
STATISTIC, LEVEL OF SIGNIFICANCE FOR TESTING, AND UCL AND
LCL.
EQUIPMENT REQUIRED - 9100A 9100B

09100-70841 FISHER'S TEST FOR EQUALITY OF CORRELATION COEFFICIENTS
LAST REVISION 03/15/71 D. COLE
UNPUBLISHED PRICE 10.00
THIS PROGRAM USES FISHER'S NORMAL APPROXIMATION TO TEST
EQUALITY OF TWO CORRELATION COEFFICIENTS. OUTPUTS INCLUDE
VALUE W OF THE TEST STATISTIC, LEVEL OF SIGNIFICANCE (ALPHA),
AND BEST ESTIMATE OF THE COMMON VALUE OF THE CORRELATION
COEFFICIENT.
EQUIPMENT REQUIRED - 9100A 9100B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-70842 SIGNIFICANCE OF A CORRELATION COEFFICIENT

LAST REVISION 03/15/71

CUSTOMER SUBMITTED

PRICE 10.00

THIS PROGRAM DETERMINES PROBABILITY THAT THE ABSOLUTE VALUE
OF A CORRELATION COEFFICIENT R OBTAINED FROM N PAIRS OF
RANDOM NUMBERS IS LESS THAN OR EQUAL TO THE CORRELATION
COEFFICIENT OBTAINED FROM N SETS OF DATA POINTS.

DR. GERMARD ROSE, MAX-PLANCK INSTITUTE, LINDAU, GERMANY

EQUIPMENT REQUIRED - 9100A 9100B 9125A/B

09100-70845 CONTROL CHART (AVERAGES AND RANGES) PLOT

LAST REVISION 03/15/71 EDWIN P. GOTWALS

CUSTOMER SUBMITTED

PRICE 30.00

THIS PROGRAM TAKES AN ORDERED SERIES OF DATA AND PARTITIONS
IT INTO ORDERED SUBGROUPS OF SIZE K. IT THEN PLOTS X-BARS AND
R'S, ALSO CONTROL LIMITS FOR THESE SUBGROUPS.

EDWIN P. GOTWALS, AMBLER, PENNSYLVANIA 19002

EQUIPMENT REQUIRED - 9100A 9100B 9120A 9125A/B

09100-70847 MULTIPLE LINEAR AND POLYNOMIAL REGR(15 INDEPENDENT VAR.LIMIT)

LAST REVISION 03/15/71 J. SIMPSON

UNPUBLISHED

PRICE 55.00

THIS PROGRAM CAN PERFORM A MULTIPLE LINEAR REGRESSION FOR
UP TO 15 VARIABLES. IT WILL ALSO DETERMINE UP TO A 15TH ORDER
POLYNOMIAL REGRESSION AND PLOT BOTH THE INPUT DATA AND THE
FINAL EQUATION.

JIM SIMPSON, HP, KING OF PRUSSIA, PA.

EQUIPMENT REQUIRED - 9100A 9100B 9125A/B 9101A 9102A

09100-70849 CHI-SQUARE FOR RXC CONTINGENCY TABLE

LAST REVISION 01/14/71

CUSTOMER SUBMITTED

PRICE 10.00

CALCULATES X-SQUARE STATISTIC SUITABLE FOR TESTING THE
HYPOTHESIS OF INDEPENDENCE FOR ANY RXC CONTINGENCY TABLE.

THE PROGRAM USES KULLBACK'S INFORMATION STATISTIC.

CONTACT R.S. GANESAN, LEDERLE LABORATORIES, PEARL RIVER, N.Y. 10965

EQUIPMENT REQUIRED - 9100A 9100B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-70850 HISTOGRAM PLOT

LAST REVISION 03/15/71 MRS. L. V. WHEELER
CUSTOMER SUBMITTED

PRICE 20.00

THIS PROGRAM IS IN THREE PARTS. THE FIRST ACCUMULATES THE SET
OF DATA READINGS. THE SECOND PART CALCULATES THE MEAN AND
STANDARD DEVIATION AND PLOTS THE HISTOGRAM UP TO 20 CELLS.
THE THIRD PART PLOTS X AND Y AXES ON THE HISTOGRAM.

PROGRAM COURTESY OF ROAN CONSOLIDATED MINES, INC., ZAMBIA
EQUIPMENT REQUIRED - 9100A 9100B 9125A/B

09100-70851 SLIDING MEANS

LAST REVISION 03/28/71 D. COLE
UNPUBLISHED

PRICE 10.00

THIS PROGRAM CALCULATES A MOVING AVERAGE (X BAR) OF 14
SUCCESSIVE DATA ENTRIES.

EQUIPMENT REQUIRED - 9100B

09100-70852 ASYMPTOTIC (EXPONENTIAL) REGRESSION

LAST REVISION 03/30/71 D. COLE
UNPUBLISHED

PRICE 20.00

GIVEN A SET OF FIVE DATA PAIRS, THIS PROGRAM CALCULATES
COMPONENTS OF AN EXPONENTIAL FUNCTION WHICH FITS THE DATA
WITHIN REQUIRED ACCURACY.

EQUIPMENT REQUIRED - 9100B 9120A

09100-70856 HISTOGRAM PLOT AND PRINT

LAST REVISION 05/18/71
CUSTOMER SUBMITTED

PRICE 10.00

THIS PROGRAM DISTRIBUTES RAW DATA INTO CELLS, PRINTS THE
HISTOGRAM DATA, AND PLOTS THE HISTOGRAM. UP TO 12 CELLS MAY
BE PLOTTED WITH ONE PROGRAM RUN-THROUGH. MORE CELLS CAN BE
PLOTTED WITH MORE THAN ONE RUN-THROUGH.

CONTACT JOSEPH S. MADACHY, MONSANTO RESEARCH CORP., MIAMISBURG, OHIO
EQUIPMENT REQUIRED - 9100A 9100B 9120A 9125A/B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-70857 TESTS FOR NORMALITY OF THE UNDERLYING DISTRIBUTION

LAST REVISION 08/10/71

CUSTOMER SUBMITTED

PRICE 10.00

THIS PROGRAM CALCULATES THE MEAN, THE SKEWNESS, AND THE
KURTOSIS OF DISTRIBUTION OF A SET OF DATA POINTS $X_1, X_2 \dots X_K$,
WITH FREQUENCIES $N_1, N_2 \dots N_K$, RESPECTIVELY.

CONTACT N.ZELINGHER, DIV. OF ENGR. SCI., P.O.B. 1025, BEER-SHEVA, ISRAEL
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-70858 ONE-WAY ANALYSIS OF VARIANCE $M \times N$, WITH VARIANCES & F-TEST

LAST REVISION 04/15/71

CUSTOMER SUBMITTED

PRICE 10.00

THIS PROGRAM CALCULATES SUMS OF SQUARES OF DEVIATIONS (A)
BETWEEN SAMPLES (COLUMNS), (B) WITHIN SAMPLES AND (C) TOTAL.
IT CALCULATES DEGREES OF FREEDOM (A) (B) AND (C), CALCULATES
VARIANCES (A) AND (B), AND CALCULATES F-RATIO.

CONTACT F.K.KEYTE, BEDFORD INSTITUTE, DARTMOUTH, NOVA SCOTIA
EQUIPMENT REQUIRED - 9100A 9100B

09100-70917 HISTOGRAM WITH PLOT AND OFFSET PROVISION

LAST REVISION 03/15/71 D. COLE

UNPUBLISHED

PRICE 10.00

THIS PROGRAM GENERATES AND PLOTS A HISTOGRAM OF 10 WINDOWS
GIVEN A DATA SET OF POSITIVE NUMBERS. IT ALSO DETERMINES THE
MEAN AND VARIANCE OF THE RAW DATA AND THE MEAN AND VARIANCE
OF THE NORMALIZED HISTOGRAM DATA. IT ALSO STORES DATA FOR
PLOTING A NORMAL CURVE OVER THE HISTOGRAM. THE OFFSET PRO-
VISION ALLOWS THE ORIGIN TO TAKE A NON-ZERO VALUE.

EQUIPMENT REQUIRED - 9100B 9120A 9125A/B

09100-70919 LEAST SQUARES REGRESSION

LAST REVISION 03/15/71 D. COLE

UNPUBLISHED

PRICE 55.00

THIS PROGRAM COMPUTES AND PLOTS THE EQUATIONS OF ANY OF FOUR
REGRESSION CURVES (LINEAR, PARABOLIC, POWER, OR EXPONENTIAL)
WITH A SINGLE ENTRY OF DISCRETE DATA. IT INCLUDES A CORRECTOR
OPTION FOR ERRONEOUSLY-ENTERED DATA, OTHERWISE SIMILAR TO
STAT-PAC PROGRAM 10-12.

EQUIPMENT REQUIRED - 9100B 9120A 9125A/B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-70920 ONE WAY ANOV WITH STATISTICS FOR ANOVA TABLE AND DATA TABLE
LAST REVISION 03/15/71 D. COLE
UNPUBLISHED PRICE 20.00
THIS PROGRAM PROVIDES PRINTOUT OF ALL INPUT DATA INCLUDING
SUMMARY STATISTICS FOR EACH COLUMN, SUCH THAT A COMPLETE DATA
TABLE FOR AN EXPERIMENT MAY BE PREPARED. A DISPLAY IS
PROVIDED FOR COMPLETION OF AN ANOVA TABLE.
THIS WORK WAS SUPPORTED BY THE ATOMIC ENERGY COMMISSION.
EQUIPMENT REQUIRED - 9100A 9125A/B

09100-70921 POWER CURVE REGRESSION AND PLCT
LAST REVISION 06/01/70 PLOTTER PROGRAM PAC
PUBLISHED
THIS PROGRAM COMPUTES THE LEAST SQUARES FIT AND CORRELATION
COEFFICIENT OF N PAIRS OF DATA POINTS FOR A POWER CURVE. IT
PLOTS EACH DATA POINT AND THE CURVE AFTER COMPUTING THE
UNKNOWN. (SEE STAT-PAC PROGRAM 10-12 FOR COMBINED LEAST
SQUARES LINEAR, PARABOLIC, POWER AND EXPONENTIAL REGRESSION).
EQUIPMENT REQUIRED - 9100A 9100B 9125A/B

09101-90002 HISTOGRAM
PGM 1-5 LAST REVISION 07/01/70 EXTENDED MEMORY LIBRARY
PUBLISHED
THIS PROGRAM PROVIDES SELECTION OF UP TO 65 VARIABLE/132
FIXED WIDTH WINDOWS, REL. FREQ. PRINTOUT & PLOT, NORM. PROB.
PAPER PLOT.
EQUIPMENT REQUIRED - 9100A 9100B 9120A 9125A/B 9101A

09101-90002 NTH ORDER POLYNOMIAL REGR. WITH PLOT (N IS LESS THAN 12)
PGM 1-7 LAST REVISION 07/01/70 EXTENDED MEMORY LIBRARY
PUBLISHED
THIS PROGRAM DETERMINES THE COEFFICIENTS FOR A POLYNOMIAL
EQUATION GIVING THE BEST NTH ORDER LEAST-SQUARES FIT TO A SET
OF DATA POINTS SPECIFIED BY THE USER.
EQUIPMENT REQUIRED - 9100A 9100B 9120A 9125A/B 9101A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

CATEGORY - ELECTRONICS

09100-71XXX

REFER TO THE LAST ENTRY IN THIS PROGRAM CATEGORY FOR ORDERING INFORMATION ON SETS OF PRERECORDED MAGNETIC CARDS FOR THIS PACKET. IF CARDS ARE NOT AVAILABLE, AS INDICATED BY NO ORDERING ENTRY, CONSULT YOUR LOCAL HP CALCULATOR SALESMAN FOR FURTHER INFORMATION.

PART NUMBER

PROGRAM TITLE

09100-70067 SOLUTION OF TWO COMPLEX SIMULTANEOUS EQUATIONS

LAST REVISION 03/05/71

CUSTOMER SUBMITTED

PRICE 10.00

THIS PROGRAM SOLVES TWO INDEPENDENT EQUATIONS OF THE FORM
 $AX + BY = E$ AND $CX + DY = F$, WHERE A,B,C,D,E AND F ARE COM-
PLEX NUMBERS, AND X AND Y ARE FOUND IN COMPLEX FORM. GAUSS'
METHOD IS USED.

CONTACT DR.F.B.OTTO,DEPT. OF ELECT. ENGRG,UNIV. OF MAINE,ORONO,MAINE
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-71000 TCHEBYSHEFF FILTER DESIGN

LAST REVISION 09/01/69 9100A/B LIBRARY

PUBLISHED

CALCULATES COMPONENT VALUES FOR TCHEBYSHEFF LOW PASS FILTERS
WITH EQUAL TERMINATIONS.

EQUIPMENT REQUIRED - 9100A 9100B

09100-71002 TCHEBYSHEFF FILTER DESIGN - FINITE TERMINATIONS

LAST REVISION 12/01/68 9100A/B LIBRARY

PUBLISHED

CALCULATES COMPONENT VALUES FOR TCHEBYSHEFF LOW PASS FILTERS
WITH FINITE TERMINATIONS (EQUAL OR UNEQUAL).

EQUIPMENT REQUIRED - 9100A 9100B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-71003 BUTTERWORTH FILTER DESIGN

LAST REVISION 09/01/69 9100A/B LIBRARY
PUBLISHED

CALCULATES COMPONENT VALUES FOR BUTTERWORTH LOW PASS FILTERS
BETWEEN EQUAL TERMINATIONS.

EQUIPMENT REQUIRED - 9100A 9100B

09100-71004 MINIMUM LOSS PADS

LAST REVISION 09/01/69 9100A/B LIBRARY
PUBLISHED

CALCULATES RESISTIVE MINIMUM LOSS PAD AND GIVES RESISTOR
VALUES AND LOSS IN DB.

EQUIPMENT REQUIRED - 9100A 9100B

09100-71005 TCHEBYSHEFF EVALUATION

LAST REVISION 09/01/69 9100A/B LIBRARY
PUBLISHED

USED TO DETERMINE FILTER ORDER OR THE FREQUENCY RESPONSE OF
A PARTICULAR TCHEBYSHEFF FILTER.

EQUIPMENT REQUIRED - 9100A 9100B

09100-71006 ATTENUATOR PADS T OR PI

LAST REVISION 09/01/69 9100A/B LIBRARY
PUBLISHED

CALCULATES RESISTOR VALUES FOR EITHER T OR PI PADS.
ATTENUATOR PADS T OR TT

CALCULATES RESISTOR VALUES FOR EITHER T OR TT PADS.

EQUIPMENT REQUIRED - 9100A 9100B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-71007 BAND PASS FILTER DESIGN

LAST REVISION 09/01/69 9100A/B LIBRARY

PUBLISHED

CALCULATES IDEAL COMPONENT VALUES AND EVALUATES THE
FREQUENCY RESPONSE BY THE IMAGE PARAMETER METHOD FOR
A BAND PASS FILTER.

EQUIPMENT REQUIRED - 9100A 9100B

09100-71008 STUB MATCHED TRANSMISSION LINE

LAST REVISION 07/15/71 9100A/B LIBRARY

PUBLISHED

CALCULATES THE DISTANCE FROM A LOW TO A POINT WHERE A
SHORTING STUB IS TO BE PLACED AND THE LENGTH OF THE STUB
TO MATCH A TRANSMISSION LINE.

EQUIPMENT REQUIRED - 9100A 9100B

09100-71009 TRANSMISSION LINE IMPEDANCE AT A POINT

LAST REVISION 09/01/69 9100A/B LIBRARY

PUBLISHED

CALCULATES THE IMPEDANCE AT ANY POINT ON A TRANSMISSION LINE
EITHER TOWARD THE GENERATOR OR TOWARD LOAD, THE VOLTAGE
REFLECTION (MAGNITUDE AND PHASE) AND THE VSWR ON THE LINE.

EQUIPMENT REQUIRED - 9100A 9100B

09100-71010 WYE TO DELTA AND/OR DELTA TO WYE CONVERSION

LAST REVISION 09/01/69 9100A/B LIBRARY

PUBLISHED

TRANSFORMS IMPEDANCES WIRED IN DELTA CONFIGURATION TO THE
EQUIVALENT WYE CONFIGURATION AND VICE-VERSA. LOOP AND NODAL
ANALYSES ARE USED TO PERFORM THE TRANSFORMATIONS.

EQUIPMENT REQUIRED - 9100A 9100B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-71011 S PARAMETER TO Y PARAMETER CONVERSION
LAST REVISION 12/01/68 9100A LIBRARY
PUBLISHED
CONVERTS S PARAMETERS FOR LINEAR (ACTIVE OR PASSIVE) CIRCUITS
TO Y PARAMETERS.
EQUIPMENT REQUIRED - 9100A 9100B

09100-71012 IMPEDANCE OF TAPERED TRANSMISSION LINE
LAST REVISION 12/01/68 M J WINGERT
UNPUBLISHED
THIS PROGRAM PLOTS AND PRINTS THE LINE IMPEDANCE
VERSUS LENGTH OF A TAPERED TRANSMISSION LINE.
EQUIPMENT REQUIRED - 9100A 9100B 9125A/B
PRICE 10.00

09100-71013 RESISTANCE THERMOMETER
LAST REVISION 12/01/68 M J WINGERT
UNPUBLISHED
THIS PROGRAM WILL CALCULATE THE TEMPERATURE OF BODY FROM F
READING TAKEN BY A RESISTANCE THERMOMETER.
EQUIPMENT REQUIRED - 9100A 9100B
PRICE 10.00

09100-71015 TCHEBYSHEFF FILTER PLOT
LAST REVISION 06/01/70 M J WINGERT
UNPUBLISHED
EVALUATES AND PLOTS RESPONSE OF A TCHEBYSHEFF FILTER.
PROGRAMED INPUT-OUTPUT ROUTINE FACILITATES USE OF THE
PROGRAM IN DETERMINING OPTIMUM FILTER FOR A GIVEN
APPLICATION.
EQUIPMENT REQUIRED - 9100A 9100B 9125A/B
PRICE 10.00

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-71016 TAPERED TRANSMISSION LINE WITH PLOT
LAST REVISION 06/01/70 M J WINGERT
UNPUBLISHED PRICE 10.00
PLOTS AND PRINTS OUT THE LINE IMPEDANCE VS LENGTH OF A
TAPERED TRANSMISSION LINE
EQUIPMENT REQUIRED - 9100A 9100B 9120A 9125A/B

09100-71020 TRANSMISSION LINE CONSTANTS
LAST REVISION 03/28/71 G.B. ASMUS
UNPUBLISHED PRICE 10.00
GIVEN THE LENGTH, FREQUENCY, AND INPUT OPEN-AND SHORT-
CIRCUIT MEASUREMENTS, THIS PROGRAM CALCULATES THE TRANS-
MISSION LINE R,L,G AND C,Z, ATTENUATION CONSTANT, PHASE
CONSTANT AND VELOCITY OF PHASE PROPAGATION.
EQUIPMENT REQUIRED - 9100A 9100B

09100-71021 STAR-CONNECTED CIRCUITRY
LAST REVISION 03/28/71 G.B. ASMUS
UNPUBLISHED PRICE 10.00
THIS PROGRAM COMPUTES IN A STAR (Y) CONNECTED CIRCUIT THE
VECTOR VOLTAGE BETWEEN THE COMMON AND THE STAR POINT.
EQUIPMENT REQUIRED - 9100A 9100B

09100-71022 OPERATIONAL AMPLIFIER OUTPUT
LAST REVISION 03/28/71 G.B. ASMUS
UNPUBLISHED PRICE 10.00
THIS PROGRAM CALCULATES THE OUTPUT VOLTAGE OF AN OPERATIONAL
AMPLIFIER FOR DIFFERENT REAL IMPEDANCE VALUES, FINITE GAIN
(A) AND INPUT VOLTAGE.
EQUIPMENT REQUIRED - 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-71501 TCHEBYSHEFF FILTER DESIGN - FINITE TERMINATIONS

LAST REVISION 09/01/70 9100B LIBRARY

PUBLISHED

CALCULATES COMPONENT VALUES FOR TCHEBYSHEFF LOW PASS FILTERS
WITH FINITE TERMINATIONS (EQUAL OR UNEQUAL).

EQUIPMENT REQUIRED - 9100B

09100-71502 S PARAMETER TO Y PARAMETER CONVERSION

LAST REVISION 09/01/69 9100B LIBRARY

PUBLISHED

CONVERTS S PARAMETERS FOR LINEAR (ACTIVE OR PASSIVE) CIRCUITS
TO Y PARAMETERS.

EQUIPMENT REQUIRED - 9100B

09100-71503 FREQUENCY RESPONSE FROM POLES AND ZEROES WITH PLOT

LAST REVISION 09/01/69 9100B LIBRARY

PUBLISHED

GIVEN THE ZEROES AND POLES OF A COMPLEX FUNCTION $F(S)$, THE
PROGRAM COMPUTES MAGNITUDE AND PHASE RESPONSE OVER A
SPECIFIED FREQUENCY.

EQUIPMENT REQUIRED - 9100B 9125A/B

09100-71504 CNAP CALCULATOR NETWORK ANALYSIS

LAST REVISION 03/15/71 H. RUSSELL

UNPUBLISHED

PRICE 40.00

THIS PROGRAM ANALYZES LINEAR NETWORKS WITH UP TO 8 NODES AND
22 COMPONENTS. RESULTS ARE PRINTED OUT AND PLOTTED. COMPONENTS
CAN BE RESISTORS, CAPACITORS, INDUCTORS, AND VOLTAGE-CON-
TROLLED CURRENT SOURCES. OTHER TYPES OF DEPENDENT SOURCES CAN
BE REALIZED BY APPROPRIATE CHANGES. EITHER LOG OR LINEAR
FREQUENCY SWEEP MAY BE SPECIFIED, AS WELL AS NUMBER OF POINTS
TO BE COMPUTED. BOTH OUTPUT VOLTAGE AND PHASE ARE SHOWN.

EQUIPMENT REQUIRED - 9100B 9120A 9125A/B 9101A 9102A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER PROGRAM TITLE

09100-71505 PASSIVE RLC NETWORK ANALYSIS

LAST REVISION 06/17/71 KEYBOARD VOL. 3 NO. 3
PUBLISHED

THIS PROGRAM ANALYZES A LADDER-LIKE NETWORK OF UP TO 15
SERIES AND SHUNT BRANCHES. EACH BRANCH CAN HAVE UP TO 3 ELE-
MENTS. THE AMPLITUDE AND PHASE OF THE TRANSFER FUNCTION,
REFLECTION COEFFICIENT OR VSWR VS. FREQUENCY CAN BE PLOTTED.
AMPLITUDE AND PHASE PLOTS CAN BE MADE WITH EITHER A LINEAR OR
LOG FREQUENCY SCALE.

C.E. WELLER & W.H. GLASS, AVCO ELECTRONICS, CINCINNATI, OHIO
EQUIPMENT REQUIRED - 9100A 9100B 9125A/B 9101A

09810-71001 TCHEBYCHEFF FILTER DESIGN- ELECTRONICS DEMO NO. 1

LAST REVISION 06/17/71 GB ASMUS
UNPUBLISHED

CALCULATES COMPONENT VALUES FOR TCHEBYCHEFF LOW PASS FILTER
BETWEEN EQUAL TERMINATIONS

EQUIPMENT REQUIRED - 9810A 11219A 11211A 11210A

09810-71011 PARAMETER CONVERSION- ELECTRONICS DEMO NO. 2

LAST REVISION 06/17/71 GB ASMUS
UNPUBLISHED

CONVERTS S PARAMETERS TO H,Y, OR Z PARAMETERS OR CONVERTS
H,Y, OR Z PARAMETERS TO S PARAMETERS.

EQUIPMENT REQUIRED - 9810A OPT 2 OPT 3 9862A 11211A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

CATEGORY - MICROWAVE

09100-712XX

REFER TO THE LAST ENTRY IN THIS PROGRAM CATEGORY FOR ORDERING INFORMATION ON SETS OF PRERECORDED MAGNETIC CARDS FOR THIS PACKET. IF CARDS ARE NOT AVAILABLE, AS INDICATED BY NO ORDERING ENTRY, CONSULT YOUR LOCAL HP CALCULATOR SALESMAN FOR FURTHER INFORMATION.

PART NUMBER

PROGRAM TITLE

09100-71017 5400/01 MCA PEAK ANALYSIS

LAST REVISION 12/01/69 G B ASMUS

UNPUBLISHED

PRICE 10.00

THIS PROGRAM READS DATA FROM AN HP5400 OR 5401 MULTICHANNEL ANALYZER. THIS DATA IS IN THE FORM OF CONTENTS OF SUCCESSIVE CHANNELS IN A SUBGROUP, SELECTED BY THE SUBGROUP THUMB WHEELS.

EQUIPMENT REQUIRED - 9100A 9100B

09100-71018 ENERGY, TIME CALIBRATION

LAST REVISION 12/01/69 G B ASMUS

UNPUBLISHED

PRICE 10.00

CONVERTS MULTICHANNEL ANALYZER PEAK LOCATION AND PEAK AREA TO PEAK ENERGY AND COUNTS PER UNIT TIME.

EQUIPMENT REQUIRED - 9100A 9100B

09100-73901 FRESNEL INTEGRALS

LAST REVISION 04/16/71

CUSTOMER SUBMITTED

PRICE 10.00

THIS PROGRAM CALCULATES DISCRETE FUNCTION OF THE FRESNEL INTEGRALS $S(t)$ AND $C(t)$. FUNCTIONS USED YIELD SOLUTIONS ACCURATE TO 10 SIGNIFICANT FIGURES FOR VALUES OF t BETWEEN -2 AND $+2$.

CONTACT PAUL S.ROBERTS, HUGHES AIRCRAFT CO., CULVER CITY, CALIFORNIA
EQUIPMENT REQUIRED - 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

CATEGORY - ELECTRIC UTILITIES PAC

09100-71374

REFER TO THE LAST ENTRY IN THIS PROGRAM CATEGORY FOR ORDERING INFORMATION ON SETS OF PRERECORDED MAGNETIC CARDS FOR THIS PACKET. IF CARDS ARE NOT AVAILABLE, AS INDICATED BY NO ORDERING ENTRY, CONSULT YOUR LOCAL HP CALCULATOR SALESMAN FOR FURTHER INFORMATION.

PROGRAM PRICE 7.50 MAGNETIC CARD PRICE 35.00

PART NUMBER	PROGRAM TITLE
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09100-71374	MOTOR STARTING VOLTAGE DROP
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PGM 1-1	LAST REVISION 10/01/70	UTILITIES PAC
	PUBLISHED	

CALCULATES PERCENT LINE VOLTAGE AVAILABLE AT MOTOR TERMINALS
MOTOR STARTING ON SAME LINE AS RUNNING MOTOR, OR STARTING
ALONE. ALSO AVAILABLE RUNNING LINE VOLTAGE.

EQUIPMENT REQUIRED - 9100B 9120A

09100-71374	FAULTS ON SUBSTATION BUS
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PGM 1-2	LAST REVISION 10/01/70	UTILITIES PAC
	PUBLISHED	

CALCULATES FAULT IMPEDANCES AND CURRENTS FOR FAULTS OCCURRING
AT THE SUBSTATION BUS.

EQUIPMENT REQUIRED - 9100B 9120A

09100-71374	FAULTS ON DISTRIBUTION FEEDER
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PGM 1-3	LAST REVISION 10/01/70	UTILITIES PAC
	PUBLISHED	

CALCULATES FAULT IMPEDANCES AND CURRENTS FOR FAULTS
OCCURRING ON THE DISTRIBUTION SYSTEM FOLLOWING THE
SUBSTATION EVALUATED IN PROGRAM 1-2.

EQUIPMENT REQUIRED - 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-71374 SAG AND TENSION (WITH PLOT)
PGM 1-4 LAST REVISION 12/01/70 UTILITIES PAC
 PUBLISHED
 CALCULATES SAG AND TENSION IN OVERHEAD TRANSMISSION LINE AND
 PLOTS PROFILE OF SUSPENDED CONDUCTOR.
EQUIPMENT REQUIRED - 9100B 9120A 9125A/B

09100-71374 LINE IMPEDANCE
PGM 1-5 LAST REVISION 10/01/70 UTILITIES PAC
 PUBLISHED
 CALCULATES POSITIVE SEQUENCE AND ZERO SEQUENCE IMPEDANCE,
 CAPACITANCE AND SHUNT SUSCEPTANCE OF A TRANSMISSION LINE.
EQUIPMENT REQUIRED - 9100B 9120A

09100-71374 COST OF TRANSFORMER CORE LOSSES
PGM 1-6 LAST REVISION 10/01/70 UTILITIES PAC
 PUBLISHED
 CALCULATES PRESENT WORTH OF CORE LOSSES BASED ON DEMAND AND
 ENERGY COSTS, COST OF MONEY, LOADS, AND LOAD GROWTH.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-71374 BILL FREQUENCY DISTRIBUTION
PGM 1-7 LAST REVISION 10/01/70 UTILITIES PAC
 PUBLISHED
 BREAKS DOWN CUSTOMER CONSUMPTION INTO APPROPRIATE RATE BLOCKS
 AND ACCUMULATES BLOCK TOTALS FOR ANY NUMBER OF CUSTOMERS.
EQUIPMENT REQUIRED - 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-71374 STRAIGHT LINE FIT
PGM 1-8 LAST REVISION 10/01/70 UTILITIES PAC
PUBLISHED
CALCULATES AND PLOTS BEST FIT STRAIGHT LINE THROUGH GIVEN
SET OF DATA POINTS.
EQUIPMENT REQUIRED - 9100B 9120A 9125A/B

09100-71374 COST OF TRANSFORMER VAR LOSSES
PGM 1-9 LAST REVISION 10/01/70 UTILITIES PAC
PUBLISHED
CALCULATES PRESENT WORTH OF COST OF VAR LOSSES BASED ON
CAPACITOR COST, FIXED CHARGE, XFMR RATING, LOADS, LOAD
GROWTH, AND MONEY COST.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-71374 COST OF TRANSFORMER COPPER LOSSES
PGM 1-10 LAST REVISION 10/01/70 UTILITIES PAC
PUBLISHED
CALCULATES PRESENT WORTH OF COPPER LOSSES BASED ON DEMAND AND
ENERGY COSTS, LOAD CONDITIONS, LOAD GROWTH, COST OF MONEY,
NUMBER OF YEARS, AND COPPER LOSS.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-71374 ZERO SEQUENCE LINE IMPEDANCE
PGM 1-11 LAST REVISION 10/01/70 UTILITIES PAC
PUBLISHED
CALCULATES ZERO SEQUENCE IMPEDANCE FOR TRANSMISSION LINES
HAVING ANY NUMBER OF STATIC WIRES.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-71374 ZERO SEQUENCE CAPACITANCE AND SUSCEPTANCE

PGM 1-12 LAST REVISION 10/01/70 UTILITIES PAC

PUBLISHED

CALCULATES ZERO SEQUENCE CAPACITIVE REACTANCE, CAPACITANCE,
AND SHUNT SUSCEPTANCE FOR TRANSMISSION LINES HAVING ANY
NUMBER OF STATIC WIRES.

EQUIPMENT REQUIRED - 9100B 9120A

09100-71374 SAG VS. SPAN LENGTH PLOT

PGM 1-13 LAST REVISION 10/01/70 UTILITIES PAC

PUBLISHED

PLOTS SAG VS. SPAN LENGTH CURVES AT VARIOUS TEMPERATURES.

EQUIPMENT REQUIRED - 9100B 9125A/B

09100-71374 LINE VOLTAGE DROP - RECEIVING END VOLTAGE

PGM 1-14 LAST REVISION 10/01/70 UTILITIES PAC

PUBLISHED

CALCULATES RECEIVING-END VOLTAGE ON RADIAL CIRCUIT, GIVEN
LINE CURRENT, SENDING VOLTAGE, AND LENGTH, RESISTANCE, AND
REACTANCE OF LINE.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09119-71374 SET OF PRERECORDED MAGNETIC CARDS FOR ELECTRIC UTILITIES PAC

LAST REVISION 10/01/70 ELECTRIC UTILITIES PAC

PUBLISHED

PRICE 35.00

SEND ALL ORDERS FOR PUBLICATIONS AND MAGNETIC CARDS TO THE
LOCAL HP SALES OFFICE.

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

CATEGORY - COMMUNICATIONS ENGINEERING

09100-71XXX

REFER TO THE LAST ENTRY IN THIS PROGRAM CATEGORY FOR ORDERING INFORMATION ON SETS OF PRERECORDED MAGNETIC CARDS FOR THIS PACKET. IF CARDS ARE NOT AVAILABLE, AS INDICATED BY NO ORDERING ENTRY, CONSULT YOUR LOCAL HP CALCULATOR SALESMAN FOR FURTHER INFORMATION.

PART NUMBER

PROGRAM TITLE

09100-71014 GAIN AND PHASE OF TRANSMISSION LINE (WITH LOSS)

LAST REVISION 12/01/68 G B ASMUS

UNPUBLISHED

PRICE 10.00

THIS PROGRAM CALCULATES THE GAIN AND PHASE OF A TRANSMISSION LINE (WITH LOSS). A(W) CAN BE REDUCED TO THE FORM WHICH LENDS ITSELF TO A MORE SUITABLE SOLUTION.

EQUIPMENT REQUIRED - 9100A 9100B

09100-71019 PRIMARY AND SECONDARY TRANSMISSION LINE PARAMETERS

LAST REVISION 01/15/70 KEYBOARD VOL. 2 NO. 1

PUBLISHED

PRICE 10.00

PROGRAM ACCEPTS TRANSMISSION LINE SHORT-CIRCUIT AND OPEN-CIRCUIT MEASUREMENTS AND CALCULATES CHARACTERISTIC IMPEDANCE, IMPEDANCE ANGLE, ATTENUATION PHASE CHANGE AND PROPAGATION VELOCITY.

THOMAS K. MC MANUS, LACHINE, QUEBEC

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-71020 TRANSMISSION LINE CONSTANTS

LAST REVISION 03/28/71 G.B. ASMUS

UNPUBLISHED

PRICE 10.00

GIVEN THE LENGTH, FREQUENCY, AND INPUT OPEN-AND SHORT-CIRCUIT MEASUREMENTS, THIS PROGRAM CALCULATES THE TRANSMISSION LINE R,L,G AND C, Z, ATTENUATION CONSTANT, PHASE CONSTANT AND VELOCITY OF PHASE PROPAGATION.

EQUIPMENT REQUIRED - 9100A 9100B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-71399 LINEAR MULTIELEMENT ARRAY BROADSIDE PATTERN = IN PHASE 1'S
LAST REVISION 03/20/70 G B ASMUS
UNPUBLISHED PRICE 10.00
YIELDS NORMALIZED POLAR PLOT OF 6 IN. DIAM FOR A SYMMETRICAL
INPHASE BROADSIDE ARRAYS OF N ELEMENTS SPACED D ELECTRICAL
DEGREES APART.
EQUIPMENT REQUIRED - 9100A 9100B 9125A/B

09100-71401 INTERMODULATION POSSIBILITIES IN A NETWORK OF N STATIONS
LAST REVISION 05/11/71 S. RAMEY
UNPUBLISHED PRICE 20.00
THIS PROGRAM CALCULATES THIRD-ORDER INTERMODULATION POSSIBILITIES OF TYPE 2A-B. INTERMODULATION FREQUENCIES FALLING WITHIN THE RECEIVER PASSBAND CAUSE A PRINTOUT OF THE TRANSMITTER FREQUENCIES, THE RECEIVER FREQUENCY, AND LOCATION OF THE I.M. PRODUCT IN THE RECEIVER PASSBAND.
EQUIPMENT REQUIRED - 9100A 9100B 9120A 9101A

09100-71402 PHASE MODULATION INDEX
LAST REVISION 04/25/71
CUSTOMER SUBMITTED PRICE 10.00
THIS PROGRAM COMPUTES THE PEAK PHASE DEVIATION OF A SINGLE-TONE MODULATED CARRIER FOR A GIVEN VALUE OF THE RMS RATIO OF A FIRST ORDER SIDEBAND TO THE CARRIER FREQUENCY COMPONENT.
CONTACT E.E.DODD, 1723 GUNWALE ROAD, HOUSTON, TEXAS 77058
EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

CATEGORY - MICROWAVE DESIGN PAC

09100-71200

REFER TO THE LAST ENTRY IN THIS PROGRAM CATEGORY FOR ORDERING INFORMATION ON SETS OF PRERECORDED MAGNETIC CARDS FOR THIS PACKET. IF CARDS ARE NOT AVAILABLE, AS INDICATED BY NO ORDERING ENTRY, CONSULT YOUR LOCAL HP CALCULATOR SALESMAN FOR FURTHER INFORMATION.

PROGRAM PRICE 25.00 MAGNETIC CARD PRICE 50.00

PART NUMBER	PROGRAM TITLE
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09100-71200	CONSTANT GAIN CIRCLE PLOT
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PGM 1-1	LAST REVISION 04/01/71	APPLICATION NOTE 117-3
	PUBLISHED	

PLOTS CONSTANT GAIN CIRCLES ON A SMITH CHART FOR UNILATERAL NETWORKS GIVEN AN INPUT REFLECTION COEFFICIENT AND SPECIFIED GAIN.

EQUIPMENT REQUIRED - 9100A 9100B 9125A/B

09100-71200	NOISE FIGURE CIRCLES
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PGM 1-2	LAST REVISION 04/01/71	APPLICATION NOTE 117-3
	PUBLISHED	

PLOTS NOISE FIGURE CIRCLES ON A SMITH CHART GIVEN THE OPTIMUM AND AN ARBITRARY NOISE FIGURE AND ITS ASSOCIATED REFLECTION COEFFICIENT.

EQUIPMENT REQUIRED - 9100B 9125A/B

09100-71200	OPTIMUM MATCHING / STABILITY
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PGM 1-3	LAST REVISION 04/01/71	APPLICATION NOTE 117-3
	PUBLISHED	

CALCULATES STABILITY FACTOR K, THE SOURCE AND LOAD REFLECTION COEFFICIENTS FOR MAXIMUM GAIN, AND THE MAXIMUM GAIN FOR SIMULTANEOUS SOURCE AND LOAD MATCH. PLOTS INPUT AND OUTPUT STABILITY CIRCLES ON A SMITH CHART. INPUT IS S11, S12, S21, AND S22.

EQUIPMENT REQUIRED - 9100B 9120A 9125A/B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-71200 MISMATCH LOSS

PGM 1-4 LAST REVISION 04/01/71 APPLICATION NOTE 117-3
PUBLISHED

CALCULATES THE MISMATCH LOSS IN DB GIVEN THE SOURCE AND LOAD
REFLECTION COEFFICIENTS.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-71200 IMPEDANCE MATCHING NETWORKS

PGM 1-5 LAST REVISION 04/01/71 APPLICATION NOTE 117-3
PUBLISHED

AN INTERACTIVE PROGRAM FOR CALCULATING MULTIELEMENT L AND C
IMPEDANCE MATCHING NETWORKS FOR A SINGLE FREQUENCY.

EQUIPMENT REQUIRED - 9100B 9120A 9125A/B

09100-71200 DB TO RATIO CONVERSION

PGM 1-6 LAST REVISION 04/01/71 APPLICATION NOTE 117-3
PUBLISHED

CALCULATES RATIO FROM SPECIFIED DECIBEL MAGNITUDE.

EQUIPMENT REQUIRED - 9100A 9100B

09100-71200 SMITH CHART POINT PLOTTING

PGM 1-7 LAST REVISION 04/01/71 APPLICATION NOTE 117-3
PUBLISHED

REFLECTION COEFFICIENT OR COMPLEX IMPEDANCE DATA IS ENTERED
FROM THE KEYBOARD AND PLOTTED ON A SMITH CHART.

EQUIPMENT REQUIRED - 9100A 9100B 9125A/B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-71200 MAPPING FUNCTION PLOT

PGM 1-8 LAST REVISION 04/01/71 APPLICATION NOTE 117-3
PUBLISHED

PROGRAM EVALUATES THE EFFECTS OF SERIES AND SHUNT FEEDBACK ON A TRANSISTOR'S FOUR S-PARAMETERS GIVEN THE THREE-PORT COMMON-GROUND AND FLOATING THREE-PORT S-PARAMETERS. OUTPUT CONSISTS OF THE FEEDBACK IMPEDANCE PLOTTED ON A S11 OR S22 SMITH CHART OR A POLAR PLOT FOR S12 AND S21. PROGRAM WILL ALSO DRAW SMITH CHARTS AT ANY ARBITRARY ORIENTATION.

EQUIPMENT REQUIRED - 9100B 9120A 9125A/B

09100-71200 TWO-PORT TO COMMON-GROUND THREE-PORT S-PARAMETER CONVERSION

PGM 1-9 LAST REVISION 04/01/71 APPLICATION NOTE 117-3
PUBLISHED

INPUT TWO-PORT S-PARAMETERS FOR ANY TRANSISTOR CONFIGURATION. PROGRAM CALCULATES C-G THREE-PORT S-PARAMETERS FOR USE WITH MAPPING FUNCTION PLOT TO EVALUATE EFFECTS OF SERIES FEEDBACK OR FOR USE WITH 3-PORT TO 2-PORT S-PARAMETER CONVERSION TO CONVERT TO EITHER OF THE OTHER TWO TRANSISTOR CONFIGURATIONS.

EQUIPMENT REQUIRED - 9100B 9120A

09100-71200 TWO-PORT TO FLOATING THREE-PORT S-PARAMETER CONVERSION

PGM 1-10 LAST REVISION 04/01/71 APPLICATION NOTE 117-3
PUBLISHED

INPUT 2-PORT S-PARAMETERS FOR ANY TRANSISTOR CONFIGURATION. PROGRAM CALCULATES FLOATING 3-PORT S-PARAMETERS FOR USE WITH MAPPING FUNCTION PLOT TO EVALUATE EFFECTS OF SHUNT FEEDBACK ON A 2-PORT NETWORK.

EQUIPMENT REQUIRED - 9100B 9120A

09100-71200 T-PARAMETER TO S-PARAMETER CONVERSION

PGM 1-20 LAST REVISION 04/01/71 APPLICATION NOTE 117-3
PUBLISHED

USED WITH MATRIX MULTIPLICATION PROGRAMS TO EVALUATE OVERALL PARAMETERS OF CASCADED 2-PORT NETWORKS.

EQUIPMENT REQUIRED - 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-71200 THREE-PORT TO TWO-PORT S-PARAMETER CONVERSION
PGM 1-11 LAST REVISION 04/01/70 APPLICATION NOTE 117-3
PUBLISHED
CALCULATES 2-PORT S-PARAMETERS FOR ANY CONFIGURATION GIVEN
THE 3-PORT COMMON-GROUND S-PARAMETERS AS INPUT.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-71200 MATRIX PREMULTIPLICATION
PGM 1-21 LAST REVISION 04/01/71 APPLICATION NOTE 117-3
PUBLISHED
PREMULTIPLIES A 2 X 2 COMPLEX MATRIX STORED IN CALCULATOR BY
2 X 2 COMPLEX MATRIX ENTERED FROM KEYBOARD.
EQUIPMENT REQUIRED - 9100B 9120A

09100-71200 GENERAL LOADER FOR TWO-PORT CONVERSION
PGM 1-12 LAST REVISION 04/01/71 APPLICATION NOTE 117-3
PUBLISHED
USED WITH S TO AND FROM Y, Z, H, AND T-PARAMETER CONVERSION
PROGRAMS.
EQUIPMENT REQUIRED - 9100B 9120A

09100-71200 MATRIX POSTMULTIPLICATION
PGM 1-22 LAST REVISION 04/01/71 APPLICATION NOTE 117-3
PUBLISHED
POSTMULTIPLIES A 2 X 2 COMPLEX MATRIX STORED IN CALCULATOR BY
A 2 X 2 COMPLEX MATRIX ENTERED FROM KEYBOARD.
EQUIPMENT REQUIRED - 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-71200 S-PARAMETER TO Y-PARAMETER CONVERSION
PGM 1-13 LAST REVISION 04/01/71 APPLICATION NOTE 117-3
PUBLISHED
USED WITH MATRIX MULTIPLICATION PROGRAMS TO EVALUATE OVERALL
PARAMETERS OF CASCADED 2-PORT NETWORKS.
EQUIPMENT REQUIRED - 9100B 9120A

09100-71200 Y-PARAMETER TO S-PARAMETER CONVERSION
PGM 1-14 LAST REVISION 04/01/71 APPLICATION NOTE 117-3
PUBLISHED
USED WITH MATRIX MULTIPLICATION PROGRAMS TO EVALUATE OVERALL
PARAMETERS OF CASCADED 2-PORT NETWORKS.
EQUIPMENT REQUIRED - 9100B 9120A

09100-71200 S-PARAMETER TO Z-PARAMETER CONVERSION
PGM 1-15 LAST REVISION 04/01/71 APPLICATION NOTE 117-3
PUBLISHED
USED WITH MATRIX MULTIPLICATION PROGRAMS TO EVALUATE OVERALL
PARAMETERS OF CASCADED 2-PORT NETWORKS.
EQUIPMENT REQUIRED - 9100B 9120A

09100-71200 Z-PARAMETER TO S-PARAMETER CONVERSION
PGM 1-16 LAST REVISION 04/01/71 APPLICATION NOTE 117-3
PUBLISHED
USED WITH MATRIX MULTIPLICATION PROGRAMS TO EVALUATE OVERALL
PARAMETERS OF CASCADED 2-PORT NETWORKS.
EQUIPMENT REQUIRED - 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER	PROGRAM TITLE
09100-71200	S-PARAMETER TO H-PARAMETER CONVERSION
PGM 1-17	LAST REVISION 04/01/71 APPLICATION NOTE 117-3
	PUBLISHED
	USED WITH MATRIX MULTIPLICATION PROGRAMS TO EVALUATE OVERALL
	PARAMETERS OF CASCADED 2-PORT NETWORKS.
EQUIPMENT REQUIRED -	9100B 9120A

09100-71200	H-PARAMETER TO S-PARAMETER CONVERSION
PGM 1-18	LAST REVISION 04/01/71 APPLICATION NOTE 117-3
	PUBLISHED
	USED WITH MATRIX MULTIPLICATION PROGRAMS TO EVALUATE OVERALL
	PARAMETERS OF CASCADED 2-PORT NETWORKS.
EQUIPMENT REQUIRED -	9100B 9120A

09100-71200	S-PARAMETER TO T-PARAMETER CONVERSION
PGM 1-19	LAST REVISION 04/01/71 APPLICATION NOTE 117-3
	PUBLISHED
	USED WITH MATRIX MULTIPLICATION PROGRAMS TO EVALUATE OVERALL
	PARAMETERS OF CASCADED 2-PORT NETWORKS.
EQUIPMENT REQUIRED -	9100B 9120A

09119-71200	SET OF PRERECORDED MAG CARDS FOR MICROWAVE DESIGN PAC
	LAST REVISION 04/01/71 APPLICATION NOTE 117-3
	PUBLISHED
	PRICE 50.00
SEND ALL ORDERS FOR PUBLICATIONS AND MAGNETIC CARDS TO THE	
LOCAL HP SALES OFFICE.	

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

CATEGORY - ELECTRIC UTILITIES

09100-713XX

REFER TO THE LAST ENTRY IN THIS PROGRAM CATEGORY FOR ORDERING INFORMATION ON SETS OF PRERECORDED MAGNETIC CARDS FOR THIS PACKET. IF CARDS ARE NOT AVAILABLE, AS INDICATED BY NO ORDERING ENTRY, CONSULT YOUR LOCAL HP CALCULATOR SALESMAN FOR FURTHER INFORMATION.

PART NUMBER

PROGRAM TITLE

09810-71376 LINE SAG CALCULATIONS- UTILITY DEMO NO. 1

LAST REVISION 06/17/71 GB ASMUS

UNPUBLISHED

CALCULATES SAG OF SINGLE SPAN OR CALCULATES SAG-SPAN
RELATIONSHIP OF LINE CONTAINING SEVERAL SPANS. ALSO PLOTS
SAG-SPAN CURVES AT 0 DEG., 30 DEG., 60 DEG., 90 DEG., AND
120 DEG. F. PLOTTING IS OPTIONAL.

EQUIPMENT REQUIRED - 9810A OPT 2 OPT 3 9861A 9862A 11211A

09810-71377 MOTOR STARTING VOLTAGE DROP-UTILITIES DEMO NO. 2

LAST REVISION 06/17/71 GB ASMUS

UNPUBLISHED

CALCULATES (LINE VOLTAGE AVAILABLE AT MOTOR TERMINALS..
-FOR MOTOR STARTING ON LINE WITH OTHER RUNNING MOTOR
-FOR MOTOR STARTING ALONE ON LINE
-FOR ONE OR MORE MOTORS RUNNING ON A LINE

EQUIPMENT REQUIRED - 9810A OPT 2 11219A 11211A 11210A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

CATEGORY - MECHANICS

09100-72XXX

REFER TO THE LAST ENTRY IN THIS PROGRAM CATEGORY FOR ORDERING INFORMATION ON SETS OF PRERECORDED MAGNETIC CARDS FOR THIS PACKET. IF CARDS ARE NOT AVAILABLE, AS INDICATED BY NO ORDERING ENTRY, CONSULT YOUR LOCAL HP CALCULATOR SALESMAN FOR FURTHER INFORMATION.

PART NUMBER

PROGRAM TITLE

09100-72001 MOMENT OF INERTIA OF A CIRCULAR SEGMENT
LAST REVISION 12/01/68 9100A LIBRARY
PUBLISHED

THIS PROGRAM CALCULATES THE DISTANCE TO THE CENTER OF GRAVITY THE AREA OF THE SEGMENT, AND THE MOMENT OF INERTIA ABOUT BOTH COORDINATE AXES.

EQUIPMENT REQUIRED - 9100A 9100B

09100-72002 TRANSCENDENTAL EQUATION (ARC INVOLUTE IN GEAR DESIGN)
LAST REVISION 09/01/69 9100A/B LIBRARY
PUBLISHED

SOLVES FOR AN ANGLE IN RADIANS.

EQUIPMENT REQUIRED - 9100A 9100B

09100-72003 SPRING DESIGN - COMPRESSION AND EXTENSION SPRINGS
LAST REVISION 09/01/69 9100A/B LIBRARY
PUBLISHED

THIS PROGRAM CALCULATES ONE OF THREE VARIABLES (DIAMETER OF WIRE, NUMBER OF TURNS OF WIRE, AND MEAN COIL DIAMETER) REMAINING TWO BEING SET, CALCULATES THE MAXIMUM ALLOWABLE STRESS.

EQUIPMENT REQUIRED - 9100A 9100B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-72004 STRESS AND FROM A RECTANGULAR ROSETTE
LAST REVISION 09/01/69 9100A/B LIBRARY
PUBLISHED
CALCULATES THE PRINCIPAL STRAINS AND STRESSES GIVEN
RECTANGULAR ROSETTE AND STRAIN GAUGE INPUTS.
EQUIPMENT REQUIRED - 9100A 9100B

09100-72008 HELICAL COIL COMPRESSION SPRING, INSIDE COIL DIAM. SPECIFIED
LAST REVISION 01/15/71 E. SCHANZLIN
CUSTOMER SUBMITTED PRICE 10.00
COMPUTES THEORETICAL WIRE DIAMETER, STRESS AT WORKING WITH
THE ST'D. WIRE DIAM., DEFLECTION PER COIL, TOTAL NR.OF COILS,
ACTIVE COILS, FREE LENGTH, STRESS AT SOLID HT., OUTSIDE COIL
DIAM., SPRING RATE, AND MEAN COIL DIAM. INPUTS ARE WORKING
LENGTH, LOAD AT WORKING LENGTH, INSIDE COIL DIAM., STRESS AT
WORKING LENGTH, CLOSEST ST'D MAT'L DIAM., TORSION MODULUS,
AND SOLID HEIGHT.
ERNEST SCHANZLIN, TUTHILL PUMP CO., CHICAGO, ILL.
EQUIPMENT REQUIRED - 9100B 9120A

09100-72009 HELICAL COIL COMPRESSION SPRING, OUTSIDE COIL DIAM. SPECIFIED
LAST REVISION 01/15/71 E. SCHANZLIN
CUSTOMER SUBMITTED PRICE 10.00
COMPUTES THEORETICAL WIRE DIAMETER, STRESS AT WORKING WITH
THE ST'D WIRE DIAM., DEFLECTION PER COIL, TOTAL NR OF COILS,
ACTIVE COILS, FREE LENGTH, STRESS AT SOLID HT., INSIDE COIL
DIAM., SPRING RATE, AND MEAN COIL DIAM. INPUTS ARE WORKING
LENGTH, LOAD AT WORKING LENGTH, STRESS AT WORKING LENGTH,
OUTSIDE COIL DIAM., CLOSEST ST'D. MAT'L DIAM., TORSION
MODULUS, AND SOLID HEIGHT.
ERNEST SCHANZLIN, TUTHILL PUMP CO., CHICAGO, ILL.
EQUIPMENT REQUIRED - 9100B 9120A

09100-72010 DRAWING OF TOOTHED GEARS
LAST REVISION 06/16/71
CUSTOMER SUBMITTED PRICE 20.00
GIVEN THE MODULE M, NUMBER OF TEETH, AND PRESSURE ANGLE IN
DEGREES, THIS PROGRAM DRAWS THE PROFILE OF HALF OF A TOOTHED
GEAR.
FULVIO DI MARINO, UNIVERSITY OF TRIESTE, ITALY
EQUIPMENT REQUIRED - 9100A 9100B 9125A/B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-72501 PROPERTIES OF AREAS

LAST REVISION 09/01/69 9100B LIBRARY
PUBLISHED

THIS PROGRAM DETERMINES THE PROPERTIES OF ANY AREA WHICH CAN
BE APPROXIMATED BY A SET OF RECTANGLES.
EQUIPMENT REQUIRED - 9100B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

CATEGORY - GEAR DESIGN PAC (BRITISH)

09100-79500

REFER TO THE LAST ENTRY IN THIS PROGRAM CATEGORY FOR ORDERING INFORMATION ON SETS OF PRERECORDED MAGNETIC CARDS FOR THIS PACKET. IF CARDS ARE NOT AVAILABLE, AS INDICATED BY NO ORDERING ENTRY, CONSULT YOUR LOCAL HP CALCULATOR SALESMAN FOR FURTHER INFORMATION.

PROGRAM PRICE 7.50

PART NUMBER

PROGRAM TITLE

09100-79500 INVOLUTE FUNCTION FOR A GIVEN ANGLE

PGM 1 LAST REVISION 06/15/70 GEAR TEST & DESIGN 1 (BRITISH)
PUBLISHED

THIS PROGRAM CALCULATES THE VALUE OF THE INVOLUTE FUNCTION,
USING THE PRESSURE ANGLE AT THE PITCH CIRCLE AS INPUT.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-79500 MEASUREMENT OVER TWO OR MORE TEETH FOR HELICAL GEARS

PGM 2 LAST REVISION 06/15/70 GEAR TEST & DESIGN 1 (BRITISH)
PUBLISHED

PROGRAM CALCULATES FOR HELICAL GEARS DESIGNED TO BS 436
THE NUMBER OF TEETH OVER WHICH THE MEASUREMENT SHOULD BE
MADE. IT THEN CALCULATES THE MEASUREMENT OVER THIS NUMBER
OF TEETH.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-79500 MEASUREMENT OVER TWO OR MORE TEETH FOR SPUR GEARS

PGM 3 LAST REVISION 06/15/70 GEAR TEST & DESIGN (BRITISH)
PUBLISHED

FOR SPUR GEARS DESIGNED TO BS 436, THIS PROGRAM CALCULATES
THE MEASUREMENT OVER A NUMBER OF TEETH.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-79500 MEASUREMENT BETWEEN ROLLERS FOR AN INTERNAL SPUR GEAR
PGM 4 LAST REVISION 06/15/70 GEAR TEST & DESIGN (BRITISH)
 PUBLISHED
 FOR A SPUR GEAR DESIGNED TO BS 436, THIS PROGRAM CALCULATES
 MEASUREMENT BETWEEN ROLLERS FOR GEARS WITH EITHER EVEN OR
 ODD NUMBERS OF TEETH. PROGRAM ASSUMES SIZE OF ROLLER IS
 KNOWN.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-79500 MEASUREMENT OVER ROLLERS FOR EXTERNAL SPUR GEARS
PGM 5 LAST REVISION 06/15/70 GEAR TEST & DESIGN (BRITISH)
 PUBLISHED
 FOR SPUR GEARS DESIGNED TO BS 436, THIS PROGRAM CALCULATES
 MEASUREMENT OVER THE ROLLERS FOR GEARS WITH EITHER EVEN OR
 ODD NUMBERS OF TEETH. PROGRAM ASSUMES SIZE OF ROLLER
 IS KNOWN.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-79500 MFG DETAILS FOR STR.BEVEL GEAR DES.PER GLEASON SYST. (U.S.A.)
PGM 6 LAST REVISION 06/15/70 GEAR TEST & DESIGN (BRITISH)
 PUBLISHED
 THIS PROGRAM CALCULATES ALL MANUFACTURING DETAILS FOR BOTH
 THE WHEEL AND PINION, GIVEN NUMBER OF TEETH, DIAMETRAL PITCH
 AND PRESSURE ANGLE.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-79500 MFG DETAILS & LOAD CAPACITY OF A WORM & WORM WHEEL PER BS 72
PGM 7 LAST REVISION 06/15/70 GEAR TEST & DESIGN (BRITISH)
 PUBLISHED
 CALCULATES ALL MANUFACTURING DIMENSIONS AND MAXIMUM TORQUE
 CAPACITY FOR NORMAL RUNNING LIFE 26,000 HOURS. THE REQUIRED
 MATERIAL AND SPEED FACTORS MAY BE OBTAINED FROM BS 721 (1963)
EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-79500 MFG DETAILS & LOAD CAPACITY OF A WORM & WORM WHEEL PER BS 721
PGM 8 LAST REVISION 06/15/70 GEAR TEST & DESIGN (BRITISH)
 PUBLISHED
 FUNCTION SAME AS PROGRAM 7 ABOVE BUT DESIGNED FOR 9100B ONLY.
EQUIPMENT REQUIRED - 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

CATEGORY - SURVEYING PAC FOR 9100A & 9120A

09100-74175

REFER TO THE LAST ENTRY IN THIS PROGRAM CATEGORY FOR ORDERING INFORMATION ON SETS OF PRERECORDED MAGNETIC CARDS FOR THIS PACKET. IF CARDS ARE NOT AVAILABLE, AS INDICATED BY NO ORDERING ENTRY, CONSULT YOUR LOCAL HP CALCULATOR SALESMAN FOR FURTHER INFORMATION.

PROGRAM PRICE 7.50 MAGNETIC CARD PRICE 35.00

PART NUMBER

PROGRAM TITLE

09100-74175 ANGLE CONVERSION AND SLOPE DISTANCE CONVERSION
PGM 1-1 LAST REVISION 04/15/71 SURVEYING PAC 9100A/9120A
PUBLISHED

THIS PROGRAM CONVERTS AN ANGLE GIVEN IN DEGREES, MINUTES AND SECONDS TO AN ANGLE IN DECIMAL DEGREES. IT CAN ALSO BE USED TO CONVERT SLOPE DISTANCES TO HORIZONTAL DISTANCE AND ELEVATION.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-74175 ANGLE CONVERSION
PGM 1-2 LAST REVISION 04/15/71 SURVEYING PAC 9100A/9120A
PUBLISHED

THIS PROGRAM CONVERTS AN ANGLE IN DECIMAL DEGREES TO AN ANGLE EXPRESSED IN DEGREES, MINUTES AND SECONDS.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-74175 HORIZONTAL ANGLE ACCUMULATION TO A BEARING (REVISED)
PGM 1-3 LAST REVISION 04/15/71 SURVEYING PAC 9100A/9120A
PUBLISHED

THIS PROGRAM ACCUMULATES HORIZONTAL ANGLES (INCLUDED OR DEFLECTED) RIGHT OR LEFT, TO BEARINGS AND PROVIDES NEW BEARING.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-74175 HORZ. INCLUDED ANGLE (RT. ONLY) ACC. TO A BEARING
PGM 1-4 LAST REVISION 04/15/71 SURVEYING PAC 9100A/9120A
PUBLISHED
THIS PROGRAM ACCUMULATES INCLUDED HORIZONTAL ANGLES (RIGHT
ONLY) TO BEARINGS AND PROVIDES NEW BEARING.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-74175 RIGHT TRIANGLE SOLUTION-ANY TWO DIMENSIONS KNOWN
PGM 1-5 LAST REVISION 04/15/71 SURVEYING PAC 9100A/9120A
PUBLISHED
THIS PROGRAM, WHEN GIVEN TWO KNOWN MEASUREMENTS OF A RIGHT
TRIANGLE, WILL SOLVE FOR THE OTHER THREE UNKNOWNNS.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-74175 PLANE TRIANGLE SOLUTION - THREE SIDES KNOWN
PGM 1-6 LAST REVISION 04/15/71 SURVEYING PAC 9100A/9120A
PUBLISHED
THIS PROGRAM, WHEN GIVEN THREE SIDES, SOLVES FOR THE THREE
UNKNOWN ANGLES AND AREA OF A PLANE TRIANGLE.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-74175 PLANE TRIANGLE SOLUTION-2 SIDES AND INCLUDED ANGLE KNOWN
PGM 1-7 LAST REVISION 04/15/71 SURVEYING PAC 9100A/9120A
PUBLISHED
THIS PROGRAM, WHEN GIVEN TWO SIDES AND AN INCLUDED ANGLE,
SOLVES FOR THE TWO UNKNOWN ANGLES, THE THIRD SIDE AND THE AREA
OF A PLANE TRIANGLE.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-74175 PLANE TRIANGLE SOLUTION-2 SIDES AND OPPOSITE ANGLE KNOWN
PGM 1-8 LAST REVISION 04/15/71 SURVEYING PAC 9100A/9120A
PUBLISHED

THIS PROGRAM WHEN GIVEN TWO SIDES AND THE ANGLE OPPOSITE THE FIRST SIDE, SOLVES FOR THE TWO UNKNOWN ANGLES, THE THIRD SIDE AND THE AREA OF A PLANE TRIANGLE. SINCE THE GIVEN DATA IS AMBIGUOUS, TWO SOLUTIONS WILL RESULT IF THE FIRST SIDE IS LESS THAN THE SECOND AND THE GIVEN ANGLE IS ACUTE. (AN AUTOMATIC RED LIGHT WILL INDICATE TWO SOLUTIONS).

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-74175 PLANE TRIANGLE SOLUTION-TWO ANGLES AND INCLUDED SIDE KNOWN
PGM 1-9 LAST REVISION 04/15/71 SURVEYING PAC 9100A/9120A
PUBLISHED

THIS PROGRAM, WHEN GIVEN TWO ANGLES AND THE INCLUDED SIDE, SOLVES FOR THE THIRD ANGLE, THE OTHER TWO SIDES AND THE AREA OF A PLANE TRIANGLE.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-74175 PLANE TRIANGLE SOLUTION-TWO ANGLES AND OPPOSITE SIDE KNOWN
PGM 1-10 LAST REVISION 04/15/71 SURVEYING PAC 9100A/9120A
PUBLISHED

THIS PROGRAM, WHEN GIVEN TWO ANGLES AND THE SIDE OPPOSITE THE FIRST ANGLE, SOLVES FOR THE THIRD ANGLE, THE OTHER TWO SIDES AND THE AREA OF A PLANE TRIANGLE.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-74175 OFFSETS (LATITUDES AND DEPARTURES) FROM TRAVERSE TO TRUE LINE
PGM 1-20 LAST REVISION 04/15/71 SURVEYING PAC 9100A/9120A
PUBLISHED

THIS PROGRAM, WHEN GIVEN STARTING COORDINATES, BEARING OF THE TRUE LINE AND SUCCESSIVE COORDINATE POINTS, WILL COMPUTE BOTH THE NORTH-SOUTH AND EAST-WEST OFFSETS AS WELL AS THE DISTANCE IN FEET AND CHAINS ALONG THE TRUE LINE.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-74175 CURVE SOLUTION. RADIUS AND ANGLE KNOWN
PGM 1-11 LAST REVISION 04/15/71 SURVEYING PAC 9100A/9120A
PUBLISHED
THIS PROGRAM CALCULATES FROM A GIVEN RADIUS AND ANGLE, THE
FOLLOWING CURVE DATA.. HALF ANGLE, TANGENT, ARC AND CHORD,
AREA OF SECTOR, SEGMENT AND FILLET.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-74175 TRUE MERIDIAN BY ALTITUDE OBSERVATION OF THE SUN
PGM 1-21 LAST REVISION 04/15/71 SURVEYING PAC 9100A/9120A
PUBLISHED
THIS PROGRAM WILL PROVIDE THE BEARING OF A LINE TO WITHIN
2' BY A SINGLE OBSERVATION OF THE SUN. THE AVERAGE OF
SEVERAL SUCH OBSERVATIONS WILL GIVE A HIGHER ACCURACY BY A
MINIMIZATION OF MEASUREMENT ERROR.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-74175 CURVE SOLUTION- RADIUS AND ARC KNOWN
PGM 1-12 LAST REVISION 04/15/71 SURVEYING PAC 9100A/9120A
PUBLISHED
THIS PROGRAM CALCULATES FROM A GIVEN RADIUS AND ARC, THE
FOLLOWING CURVE DATA.. ANGLE IN DEGREES, MINUTES AND SECONDS,
HALF ANGLE, TANGENT, ARC AND CHORD, AREA OF SECTOR, SEGMENT
AND FILLET.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-74175 THREE POINT PROBLEM
PGM 1-22 LAST REVISION 04/15/71 SURVEYING PAC 9100A/9120A
PUBLISHED
THIS PROBLEM, WHEN GIVEN THE COORDINATE OF THREE POINTS AND
THE TWO ANGLES BETWEEN, SOLVES FOR THE COORDINATES OF THE
POINT OF SIGHTING. NO SOLUTION IS POSSIBLE IF THE MIDDLE
COORDINATE WOULD INTERSECT THE TWO OTHER POINTS.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-74175 CURVE SOLUTION- RADIUS AND CHORD KNOWN
PGM 1-13 LAST REVISION 04/15/71 SURVEYING PAC 9100A/9120A
PUBLISHED

THIS PROGRAM CALCULATES FROM A GIVEN RADIUS AND CHORD, THE FOLLOWING CURVE DATA.. ANGLE IN DEGREES, MINUTES AND SECONDS, HALF ANGLE, TANGENT, ARC AND CHORD, AREA OF SECTOR, SEGMENT AND FILLET.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-74175 TRAVERSE WITH ENCLOSED AREA
PGM 1-23 LAST REVISION 04/15/71 SURVEYING PAC 9100A/9120A
PUBLISHED

THIS PROGRAM TRAVERSES BY BEARING AND DISTANCE INDICATING THE COORDINATES OF SUCCESSIVE POINTS AND COMPUTING THE AREA OF THE TRAVERSE. THE PROGRAM WORKS IN CONJUNCTION WITH PROGRAM I-24 FOR COMPUTATION OF CURVE DATA.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-74175 CURVE SOLUTION- RADIUS AND TANGENT KNOWN
PGM 1-14 LAST REVISION 04/15/71 SURVEYING PAC 9100A/9120A
PUBLISHED

THIS PROGRAM CALCULATES FROM A GIVEN RADIUS AND TANGENT, THE FOLLOWING CURVE DATA.. ANGLE IN DEGREES, MINUTES AND SECONDS, HALF ANGLE, TANGENT, ARC AND CHORD, AREA OF SECTOR, SEGMENT AND FILLET.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-74175 CURVE SOLUTION- RADIUS AND ANGLE KNOWN
PGM 1-24 LAST REVISION 04/15/71 SURVEYING PAC 9100A/9120A
PUBLISHED

THIS PROGRAM IS DESIGNED FOR USE AFTER PROGRAM I-23, TRAVERSE WITH ENCLOSED AREA, WHICH RETAINS THE AREA IN SQUARE FEET IN REGISTER A. THIS PROGRAM CALCULATES FROM A GIVEN RADIUS AND ANGLE THE FOLLOWING CURVE DATA.. HALF ANGLE, TANGENT, ARC AND CHORD, AREA OF SECTOR, SEGMENT AND FILLET. AFTER COMPUTATION AND DISPLAY OF THE ABOVE INFORMATION, THE AREA FROM THE TRAVERSE IS RECALLED FROM REGISTER A AND DISPLAYED IN REGISTER Y.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-74175 UNKNOWN BEARINGS SOLVED FROM TWO DISTANCES KNOWN
PGM 1-15 LAST REVISION 04/15/71 SURVEYING PAC 9100A/9120A
PUBLISHED

THIS PROGRAM, WHEN GIVEN TWO KNOWN DISTANCES AND COORDINATES
OF END POINTS SOLVES FOR THE TWO UNKNOWN BEARINGS AND
COORDINATES OF POINT OF INTERSECTION.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-74175 TRAVERSE WITH ENCLOSED AREA AND CURVE DATA OPTION
PGM 1-25 LAST REVISION 04/15/71 SURVEYING PAC 9100A/9120A
PUBLISHED

THIS PROGRAM TRAVERSES BY BEARING AND DISTANCE AND CALCULATES
COORDINATES, ENCLOSED AREA AND THE FOLLOWING CURVE DATA..
CENTRAL ANGLE, HALF ANGLE, ARC LENGTH CHORD LENGTH,
COORDINATES OF TANGENT POINTS.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-74175 BEARING AND DISTANCE SOLVED FROM OTHER BEARING AND DISTANCE
PGM 1-16 LAST REVISION 04/15/71 SURVEYING PAC 9100A/9120A
PUBLISHED

THIS PROGRAM, WHEN GIVEN THE BEARING FROM ONE COORDINATE
POINT AND THE DISTANCE FROM A SECOND, SOLVES FOR THE
COORDINATES OF POINT OF INTERSECTION, AND THE UNKNOWN
DISTANCE AND BEARING. SINCE TWO SOLUTIONS COULD RESULT FROM
THE GIVEN DATA, THE PROGRAM WILL PROVIDE THE FAR POINT
SOLUTION FIRST, THEN THE NEAR POINT SOLUTION.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-74175 TWO DISTANCES SOLVED FROM TWO BEARINGS
PGM 1-17 LAST REVISION 04/15/71 SURVEYING PAC 9100A/9120A
PUBLISHED

THIS PROGRAM, WHEN GIVEN THE BEARINGS FROM TWO COORDINATE
POINTS SOLVES FOR THE COORDINATES OF THE POINT OF
INTERSECTION AND THE TWO UNKNOWN DISTANCES.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-74175 INVERSE TRANVERSE- FROM SUCCESSIVE COORDINATES
PGM 1-18 LAST REVISION 04/15/71 SURVEYING PAC 9100A/9120A
PUBLISHED

THIS PROGRAM, WHEN GIVEN TWO COORDINATES POINTS WILL SOLVE
FOR THE BEARING AND DISTANCE BETWEEN THE TWO POINTS. IT
RETAINS THE LAST COORDINATE ENTERED SO AS TO ALLOW INVERSING
BETWEEN SUCCESSIVE COORDINATES.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-74175 INVERSE TRAVERSE- FROM FIXED COORDINATES
PGM 1-19 LAST REVISION 04/15/71 SURVEYING PAC 9100A/9120A
PUBLISHED

THIS PROGRAM, WHEN GIVEN TWO COORDINATE POINTS WILL SOLVE FOR
THE BEARING AND DISTANCE BETWEEN THE TWO POINTS. IT RETAINS
THE ORIGINAL COORDINATE SO AS TO ALLOW INVERSING BETWEEN A
NUMBER OF COORDINATES.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09119-74175 SET OF PRERECORDED MAGNETIC CARDS FOR 9100,9120 SURVEYING P
LAST REVISION 05/27/71 SURVEYING PAC FOR 9100A & 9120A
PUBLISHED PRICE 35.00

SEND ALL ORDERS FOR PUBLICATIONS AND MAGNETIC CARDS TO THE
LOCAL HP SALES OFFICE.

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

CATEGORY - STADSMÄTNING (SWEDISH SURVEYING PAC) 09100-78100

REFER TO THE LAST ENTRY IN THIS PROGRAM CATEGORY FOR ORDERING INFORMATION ON SETS OF PRERECORDED MAGNETIC CARDS FOR THIS PACKET. IF CARDS ARE NOT AVAILABLE, AS INDICATED BY NO ORDERING ENTRY, CONSULT YOUR LOCAL HP CALCULATOR SALESMAN FOR FURTHER INFORMATION.

PART NUMBER

PROGRAM TITLE

09100-78101 POLAER UTSTÄKNING (RIKTNINGAR)

LAST REVISION 02/01/71 STADSMÄTNING (SWEDISH SURVEY)
PUBLISHED

PROGRAMMET BERÄKNAR POLAERA UTSTÄKNINGSDATA, LÄNGD LI OCH
ORIENTERAD RIKTNING PHI I FRÅN STATIONSPUNKT A TILL
UTSTÄKNINGSPUNKT PI.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-78102 POLAER UTSTÄKNING (VINKLAR)

LAST REVISION 02/01/71 STADSMÄTNING (SWEDISH SURVEY)
PUBLISHED

PROGRAMMET BERÄKNAR POLAERA UTSTÄKNINGSDATA, LÄNGD LI OCH
VINKEL ALPHA I FRÅN STATIONSPUNKT A TILL UTSTÄKNINGSPUNKT PI.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-78103 ORTOGONAL UTSTÄKNING

LAST REVISION 02/01/71 STADSMÄTNING (SWEDISH SURVEY)
PUBLISHED

PROGRAMMET BERÄKNAR LÄNGD LAB OCH ORIENTERAD RIKTNING
PHI AB FÖR MÄTNINGSLINJEN AB SAMT ORTOGONALA
UTSTÄKNINGSDATA, ÅRSKISSA AI OCH ORDINATA BI FÖR
UTSTÄKNINGSPUNKTEN PI.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-78104 POLAER OCH ORTOGONAL UTSTAKNING

LAST REVISION 02/01/71 STADSMAETNING (SWEDISH SURVEY)
PUBLISHED

PROGRAMMET BERAEKNER LAENGD LAB OCH ORIENTERAD RIKTNING
PHI AB FOER MAETNINGSLINJEN AB SAMT POLAERA OCH ORTOGONALA
UTSTAKNINGSDATA, LAENGD LI, ORIENTERAD RIKTNING PHI I,
ABSKISSA AI OCH ORDINATA BI FOER UTSTAKNINGSPUNKT PI.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-78105 SKAERNINGSUTSTAKNING

LAST REVISION 02/01/71 STADSMAETNING (SWEDISH SURVEY)
PUBLISHED

PROGRAMMET BERAEKNR AVSTANDEN AI OCH BI FRAN A OCH PI TILL
SKAERNINGSPUNKTEN SI FOER MAETNINGSLINJEN AB OCH EN LINJE
GENOM UTSTAKNINGSPUNKTEN PI PARALLELL MED EN GIVEN LINJE
GENOM PUNKTERNA C OCH D SAMT RIKTNINGEN PHI I FRAN
SKAERNINGSPUNKTEN TILL UTSTAKNINGSPUNKTEN.

EQUIPMENT REQUIRED - 9100B 9120A

09100-78106 POLAER INMAETNING

LAST REVISION 02/01/71 STADSMAETNING (SWEDISH SURVEY)
PUBLISHED

PROGRAMMET BERAEKNR AVSTAND LAB OCH ORIENTERAD RIKTNING FRAN
STATIONSPUNKT A TILL SYFTPUNKT B SAMT KOORDINATER XI OCH YI
FOER INMAETT PUNKT PI.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-78107 ORTOGONAL INMAETNING

LAST REVISION 02/01/71 STADSMAETNING (SWEDISH SURVEY)
PUBLISHED

PROGRAMMET BERAEKNR LAENGD LAB OCH ORIENTERAD RIKTNING
PHI AB FOER MAETNINGSLINJEN AB SAMT KOORDINATER XI, YI FOER
INMAETT PUNKT PI.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-78108 ORTOGONAL INMAETNING (UTJAEMNING)

LAST REVISION 02/01/71 STADSMÄTNING (SWEDISH SURVEY)
PUBLISHED

PROGRAMMET BERÄKNAR KOORDINATER X1, Y1 FÖR INMÄTT PUNKT P1
EFTER UTJÄMNING AV ABSKISSORNA A1 OCH ORDINATORNA B1 MED
HÄNSYN TILL SLUTMÄTT AAB OCH KOORDINATBERÄKNAD LÄNGD FÖR
MÄTNINGSLINJEN AB.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-78109 TAKYMETERMÄTNING (TEODOLIT)

LAST REVISION 02/01/71 STADSMÄTNING (SWEDISH SURVEY)
PUBLISHED

PROGRAMMET BERÄKNAR KOORDINATERNA X1, Y1 OCH Z1 FÖR
DETALJPUNKT P1 INMÄTT MED TEODOLIT.

EQUIPMENT REQUIRED - 9100B 9120A

09100-78110 AVSKÄRNING

LAST REVISION 02/01/71 STADSMÄTNING (SWEDISH SURVEY)
PUBLISHED

PROGRAMMET BERÄKNAR KOORDINATERNA X1, Y1 FÖR AVSKUREN PUNKT
P1 FRÅN STATIONSPUNKTERNA A OCH B.

EQUIPMENT REQUIRED - 9100B 9120A

09100-78111 INSKÄRNING

LAST REVISION 02/01/71 STADSMÄTNING (SWEDISH SURVEY)
PUBLISHED

PROGRAMMET BERÄKNAR KOORDINATERNA XP, YP FÖR INSKUREN PUNKT
P MOT TRE KÄNDA PUNKTER A, B OCH C.

EQUIPMENT REQUIRED - 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-78112 SIDDAVSKAERNING

LAST REVISION 02/01/71 STADSMÄTNING (SWEDISH SURVEY)

PUBLISHED

PROGRAMMET BERÄKNAR KOORDINATENA x_P OCH y_P FÖR AVSKUREN
PUNKT P FRÅN PUNKTEN A MOT PUNKTEN B.

EQUIPMENT REQUIRED - 9100B 9120A

09100-78113 INBÄNDNING OCH COS - TEOREMET

LAST REVISION 02/01/71 STADSMÄTNING (SWEDISH SURVEY)

PUBLISHED

PROGRAMMET BERÄKNAR KOORDINATENA FÖR INBÄNDEN PUNKT P
FRÅN DE GIVNA PUNKTERNA A OCH B SAMT LÄNGDEN LA OM
MÖTSTÅENDE VINKEL BETA OCH ANSLUTANDE LÄNGDER LAQ OCH LQI
ÄR MÄTTA.

EQUIPMENT REQUIRED - 9100B 9120A

09100-78114 HUSHÖRN

LAST REVISION 02/01/71 STADSMÄTNING (SWEDISH SURVEY)

PUBLISHED

PROGRAMMET BERÄKNAR KOORDINATER FÖR PUNKTER PÅ GIVEN LINJE
ELLER PÅ VINKELRÄT MOT ELLER PARALLELL MED DEN GIVNA LINJEN.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-78115 SKÄRNINGSPUNKTER FÖR LINJER

LAST REVISION 02/01/71 STADSMÄTNING (SWEDISH SURVEY)

PUBLISHED

PROGRAMMET BERÄKNAR KOORDINATENA x_i , y_i FÖR
SKÄRNINGSPUNKTEN P I MELLAN LINJEN AB OCH LINJEN CD....

EQUIPMENT REQUIRED - 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-78116 SKAERNINGSPUNKTER FOER LINJE OCH CIRKEL
LAST REVISION 02/01/71 STADSMÄTNING (SWEDISH SURVEY)
PUBLISHED
PROGRAMMET BERAÄKNAR LÄNGDERNA A OCH B FRÄN LINJEN ÄB TILL
CIRKELMEDELPUKTEK M SAMT KOORDINATERNA X1, Y1 OCH X2, Y2
FOER LINJENS OCH CIRKELNS SKAERNINGSPUNKTER P1 OCH P2.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-78117 SKAERNINGSPUNKTER FOER CIRKELBÄGAR
LAST REVISION 02/01/71 STADSMÄTNING (SWEDISH SURVEY)
PUBLISHED
PROGRAMMET BERAÄKNAR KOORDINATERNA X1, Y1 OCH X2, Y2 FOER IVA
CIRKLARS SKAERNINGSPUNKTER P1 OCH P2.
EQUIPMENT REQUIRED - 9100B 9120A

09100-78118 POLYGONTÄG (MAX 5 NYPUNKTER)
LAST REVISION 02/01/71 STADSMÄTNING (SWEDISH SURVEY)
PUBLISHED
PROGRAMMET BERAÄKNAR DEFINITIVA KOORDINATER FOER MAXIMALT 5
NYA POLGONPUNKTER. VINKELMÄTNINGSFELET FOERDELAS LIKA PÄ
BRYTNINGSVINKLÄRNA KOORDINATFELEN FOERDELAS PROPOTIONELLT MOT
SIDLÄNGDERNA.
EQUIPMENT REQUIRED - 9100B 9120A

09100-78119 POLYGONTÄG (OBEGRÄNSÄT)
LAST REVISION 02/01/71 STADSMÄTNING (SWEDISH SURVEY)
PUBLISHED
PROGRAMMET BERAÄKNAR DEFINITIVA KOORDINATER FOER NYA
POLGONPUNKTER. VINKELMÄTNINGSFELET FOERDELAS LIKA PÄ
BRYTNINGSVINKLÄRNA, KOORDINATFELEN FOERDELAS PROPOTIONELLT
MOT SIDLÄNGDERNA.
EQUIPMENT REQUIRED - 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-78120 CENTRERINGSKORREKTIONER

LAST REVISION 02/01/71 STADSMAETNING
PUBLISHED

PROGRAMMET BERAEKNAER LAENGDEN LAC FRAN STATIONSPUNKT A TILL
SYFTPUNKT C, KORRIGERAD BRYTNINGSVINKEL BETA A OCH
CENTRERINGSKORREKTION DELTA C VID EXCENTRISKT UPPSTAELLT
INSTRUMENT RESPECTIVE SIGNAL.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-78121 LAENGDMAETNINGSKORREKTIONER

LAST REVISION 02/01/71 STADSMAETNING (SWEDISH SURVEY)
PUBLISHED

PROGRAMMET BERAEKNAER KORRIGERAD LAENG D LM, TILLATEN DIFFERENS
DELTA L TILL OCH ABSOLUT DIFFERENS DELTA L VID DUBBELMAETNING
MED LUTANDE BAND.

EQUIPMENT REQUIRED - 9100B 9120A

09100-78122 FLYGANDE POLYGONTAG

LAST REVISION 02/01/71 STADSMAETNING (SWEDISH SURVEY)
PUBLISHED

PROGRAMMET BERAEKNAER KOORDINATERNA FOER NYA POLYGONPUNKTER
UTAN UTJAEMNING.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-78123 AREALER, SIDLAENGDER, BAGLAENGDER OCH CIRKELSEGMENT

LAST REVISION 02/01/71 STADSMAETNING (SWEDISH SURVEY)
PUBLISHED

PROGRAMMET BERAEKNAER SIDLAENG D S1, BAGLAENG D B OCH AREAL A
FOER ETT OMRÅDE SOM BEGRAENSAS AV RAETA LINJER OCH / ELLER
CIRKELBAGAR MELLAN PUNKTERNA PI - PN.

EQUIPMENT REQUIRED - 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

CATEGORY - VERMESSUNG 1 (GERMAN SURVEYING PAC)

09100-78000

REFER TO THE LAST ENTRY IN THIS PROGRAM CATEGORY FOR ORDERING INFORMATION ON SETS OF PRERECORDED MAGNETIC CARDS FOR THIS PACKET. IF CARDS ARE NOT AVAILABLE, AS INDICATED BY NO ORDERING ENTRY, CONSULT YOUR LOCAL HP CALCULATOR SALESMAN FOR FURTHER INFORMATION.

PROGRAM PRICE 15.00

PART NUMBER	PROGRAM TITLE
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09100-78001	STANDPUNKTZENTRIERUNG
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LAST REVISION 05/15/70	VERMESSUNG 1 (GERMAN SURVEYING)
PUBLISHED	

DIESES PROGRAMM GIBT DIE LOESUNG FUER DEN FALL AN, DASS DER ZIELPUNKT VOM AUSGANGSPUNKT AUS NICHT SICHTBAR IST UND MAN DAHER VON EINEM EXZENTRISCHEN STANDPUNKT MESSEN MUSS.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-78002	ZIELPUNKTZENTRIERUNG
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LAST REVISION 05/15/70	VERMESSUNG 1 (GERMAN SURVEYING)
PUBLISHED	

DAS PROGRAMM BERECHNET DEN GESUCHTEN WINKEL DELTA BEI EXZENTRISCH STEHENDEM ZIELPUNKTSSIGNAL.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-78003	HERABLEGUNG
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LAST REVISION 05/15/70	VERMESSUNG 1 (GERMAN SURVEYING)
PUBLISHED	

MIT DIESEM PROGRAMM HERABLEGUNG WIRD BEI DER POLYGONIERUNG AN UNZUGAENGLICHE PUNKTE (HOCHPUNKTE) ANGESCHLOSSEN.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-78004 STRECKE UND RICHTUNGSWINKEL

LAST REVISION 05/15/70 VERMESSUNG 1 (GERMAN SURVEYING)
PUBLISHED

ALS GRUNDAUFGABE DER EBENEN KOORDINATENRECHNUNG WERDEN IN
DIESEM PROGRAMM STRECKE UND RICHTUNGSWINKEL BEI VORGEgebenEN
KOORDINATEN DER PUNKTE P1, P2 BERECHNET.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-78005 POLARE PUNKTE

LAST REVISION 05/15/70 VERMESSUNG 1 (GERMAN SURVEYING)
PUBLISHED

DIESES PROGRAMM ERRECHNET DIE RECHTWINKLIGEN KOORDINATEN VON
PUNKTEN, DIE POLAR AUFGENOMMEN WURDEN.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-78006 STRECKENMESSUNG MIT 2 M- BASISLATTE

LAST REVISION 05/15/70 VERMESSUNG 1 (GERMAN SURVEYING)
PUBLISHED

DIESES PROGRAMM GIBT DIE ENTFERNUNG S ZWISCHEN ZWEI PUNKTEN
P1, P2 NACH MESSUNG DES PARALLAKTISCHEN WINKELS AN.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-78007 VORWAERTSEINSCHNITT MIT DREIECKSWINKELN

LAST REVISION 05/15/70 VERMESSUNG 1 (GERMAN SURVEYING)
PUBLISHED

DIESES PROGRAMM BERECHNET DIE KOORDINATEN DES NEURENKTES N
(YN,XN) AUS DEN GEGEBENEN KOORDINATEN ZWEIER PUNKTE P1, P2
UND DEN EINGESCHLOSSENEN WINKELN.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-78008 VORWAERTSEINSCHNITT MIT RICHTUNGSWINKELN
LAST REVISION 05/15/70 VERMESSUNG 1 (GERMAN SURVEYING)
PUBLISHED
DIESES PROGRAMM BERECHNET DIE KOORDINATEN DES NEUPUNKTES N
(YN, XN) AUS DEN GEBEBENEN KOORDINATEN ZWEIER PUNKTE P1, P2
UND DEN GEBEBENEN RICHTUNGSWINKELN T1, T2.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-78009 RUECKWAERTSEINSCHNITT NACH CASSINI
LAST REVISION 05/15/70 VERMESSUNG 1 (GERMAN SURVEYING)
PUBLISHED
BEI DIESER ART DES TRIGONOMETRISCHEN EINSCHNEIDENS WERDEN AUS
DEN GEBEBENEN KOORDINATEN DREIER PUNKTE P1, P2, P3 SOWIE AUS
DEN GEMESSENEN WINKELN ALPHA UND BETA KOORDINATEN DES
NEUPUNKTES N BESTIMMT.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-78010 HOEHE HOEHENFUSSPUNKT, BOGENSCHNITT
LAST REVISION 05/15/70 VERMESSUNG 1 (GERMAN SURVEYING)
PUBLISHED
MIT DIESEM PROGRAMM LASSEN SICH HOEHE, HOEHENFUSSPUNKT UND
BOGENSCHNITTPUNKT IM ZUGE EINFACHER KOORDINATENRECHNUNGEN
ERMITTELN.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-78011 POLYGONZUG MIT GEBEBENEN BRECHUNGSWINKELN
LAST REVISION 05/15/70 VERMESSUNG 1 (GERMAN SURVEYING)
PUBLISHED
DAS PROGRAMM ERMOEGLICHT EINE ZUEGIGE UND UMFASSENDE
DURCHRECHNUNG EINES POLYGONZUGES, BEI DEM DIE BRECHUNGSWINKEL
GEBEBEN SIND.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-78012 POLYGONZUG MIT GEGEBENEN RICHTUNGSWINKELN
LAST REVISION 05/15/70 VERMESSUNG 1 (GERMAN SURVEYING)
PUBLISHED
DAS PROGRAMM ERMOEGLICHT EINE ZUEGIGE UND UMFASSENDE
DURCHRECHNUNG EINES POLYGONZUGES, BEI DEM DIE RICHTUNGSWINKEL
GEGEBEN SIND.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-78013 KOORDINATENTRANSFORMATION
LAST REVISION 05/15/70 VERMESSUNG 1 (GERMAN SURVEYING)
PUBLISHED
DAS PROGRAMM LOEST DIE AUFGABE, PUNKTE EINES
KOORDINATENSYSTEM ZU UEBERFUEHREN, WAS BEI RANDPUNKTEN ZWEIER
BENACHBARTER SYSTEME HAEVFIG AUFTRITT. DAZU SIND DIE
KOORDINATENANGABEN ZWEIER AUSGANGSPUNKTE PA UND PE IN BEIDEN
SYSTEMEN NOETIG
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-78014 PYTHAGORASPROBE
LAST REVISION 05/15/70 VERMESSUNG 1 (GERMAN SURVEYING)
PUBLISHED
DIESES PROGRAMM BERECHNET AUS GEGEBENEN KOORDINATEN DIE
ENTFERNUNG S' ZWISCHEN ZWEI PUNKTEN, GIBT DEN UNTERSCHIED FS
ZUR GEMESSENEN STRECKE S AN SOWIE DIE AMTLICHE FEHLERGRENZE
 D .
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-78015 KLEINPUNKTBERECHNUNG
LAST REVISION 05/15/70 VERMESSUNG 1 (GERMAN SURVEYING)
PUBLISHED
BERECHNET WERDEN BEI DIESEM PROGRAMM DIE KOORDINATEN DER
KLEINPUNKTE P_1 .
EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-78016 GERADENSCHNITT

LAST REVISION 05/15/70 VERMESSUNG 1 (GERMAN SURVEYING)
PUBLISHED

DIESES PROGRAMM BERECHNET DIE KOORDINATEN (YS, XS,) DES
SCHNITTPUNKTES S DER MESSUNGSLINIEN P1 P2 UND P3 P4.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-78017 FLAECHEBERECHNUNG EINES N - ECKS

LAST REVISION 05/15/70 VERMESSUNG 1 (GERMAN SURVEYING)
PUBLISHED

DIESES PROGRAMM BERECHNET DEN FLAECHEINHALT EINES POLYGONS
(N - ECKS) MIT BELIEBIG VIELEN ECKPUNKTEN P1,2...N AUS DEREN
KOORDINATEN.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-78018 FLAECHEBERECHNUNG VON DREIECKEN

LAST REVISION 05/15/70 VERMESSUNG 1 (GERMAN SURVEYING)
PUBLISHED

DIESES PROGRAMM BERECHNET AUS DEN GEGEBENEN STUECKEN EINES
DREIECKES DESSEN FLAECHEINHALT.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-78019 FLAECHEBERECHNUNG VON TRAPEZ, SEKTOR UND SEGMENT

LAST REVISION 05/15/70 VERMESSUNG 1 (GERMAN SURVEYING)
PUBLISHED

DAS PROGRAMM ERRECHNET DIE FLAECHE VON TRAPEZ, SEKTOR,
SEGMENT. TROTZ SEINER EINFACHHEIT IST ES FUER HAEUEFIGE
ANWENDUNG NUETZLICH.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-78020 SINUSSATZ (W,S,W ODER W,W,S)
LAST REVISION 05/15/70 VERMESSUNG 1 (GERMAN SURVEYING)
PUBLISHED
DIESES PROGRAMM ERRECHNET DREIECKSSTUECKE MIT DEM SINUSSATZ.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-78021 COSINUSSATZ (S,W,S)
LAST REVISION 05/15/70 VERMESSUNG 1 (GERMAN SURVEYING)
PUBLISHED
DIESES PROGRAMM BERECHNET DREIECKSSTUECKE MIT DEM COSINUSSATZ
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-78022 DREIECKSBERECHNUNG (S,S,S)
LAST REVISION 05/15/70 VERMESSUNG 1 (GERMAN SURVEYING)
PUBLISHED
DIESES PROGRAMM BERECHNET DREIECKSWINKEL AUS DEN VORGEgebenEN
SEITEN MIT DEM COSINUSSATZ UND DEM PROJEKTIONSSATZ.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-78023 KREISBOGEN, HAUPTPUNKTE
LAST REVISION 05/15/70 VERMESSUNG 1 (GERMAN SURVEYING)
PUBLISHED
MIT DIESEM PROGRAMM WERDEN DIE HAUPTPUNKTE FUEER DIE
KREISBOGENABSTECKUNG BESTIMMT.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-78024 KREISBOGEN, UNZUGAENGLICHER TANGENTENSCHNITT
LAST REVISION 05/15/70 VERMESSUNG 1 (GERMAN SURVEYING)
PUBLISHED
BEI EINEM UNZUGAENGLICHEN TANGENTENSCHNITTPUNKT TS ERHAELT
MAN DURCH DIE HILFSGERADE G DAS DREIECK TS,Q,N, MIT DEM MAN
DIE FEHLENDEN WERTE ERRECHNET.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-78025 KREISBOGENABSTECKUNG (ZWISCHENPUNKTE)
LAST REVISION 05/15/70 VERMESSUNG 1 (GERMAN SURVEYING)
PUBLISHED
DAS PROGRAMM BERECHNET VON DER TANGENTE AUS MASSE ZUR
ABSTECKUNG DER BOGENKLEINPUNKTE. ES BESTEHT AUS ZWEI
SELBSTAENDIGEN PROGRAMMEN, WOBEI DAS ERSTE FUER STATIONIERUNG
VORWAERTS, DAS ZWEITE FUER STATIONIERUNG RUECKWAERTS
LOESUNGEN LIEFERT.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-78026 KREISBOGEN, SEHNE UND PFEILHOEHE
LAST REVISION 05/15/70 VERMESSUNG 1 (GERMAN SURVEYING)
PUBLISHED
MIT DIESEM PROGRAMM WERDEN DIE ABSTECKUNGSELEMENTE SEHNE UND
PFEILHOEHE ERRECHNET.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-78027 KLOTOIDE
LAST REVISION 05/15/70 VERMESSUNG 1 (GERMAN SURVEYING)
PUBLISHED
DIESES PROGRAMM BERECHNET DIE ABSTECKELEMENTE VON KLOTOIDEN.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-78028 TRIGONOMETRISCHE HOEHENMESSUNG (INGENIEURFORMEL)
LAST REVISION 05/15/70 VERMESSUNG 1 (GERMAN SURVEYING)
PUBLISHED
DIESES PROGRAMM ERRECHNET DIE HOEHEN VON ZIELPUNKTEN
(TUERME ETC.) AUF TRIGONOMETRISCHEM WEGE.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-78029 TACHYMETRIE, HOEHE UND HORIZONTALE ENTFERNUNG
LAST REVISION 05/15/70 VERMESSUNG 1 (GERMAN SURVEYING)
PUBLISHED
BEI GELAENDEAUFNAHMEN IN SEHR HUEGELIGEM GELAENDE WERDEN
HOEHEN TACHYMETRISCH ERFASST. DIESES PROGRAMM BERECHNET DIE
HOEHEN UND DIE HORIZONTALENTFERNUNGEN.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

CATEGORY - SURVEYING VOL. 1 (BRITISH)

09100-78200

REFER TO THE LAST ENTRY IN THIS PROGRAM CATEGORY FOR ORDERING INFORMATION ON SETS OF PRERECORDED MAGNETIC CARDS FOR THIS PACKET. IF CARDS ARE NOT AVAILABLE, AS INDICATED BY NO ORDERING ENTRY, CONSULT YOUR LOCAL HP CALCULATOR SALESMAN FOR FURTHER INFORMATION.

PROGRAM PRICE 15.00

PART NUMBER

PROGRAM TITLE

09100-78201 SUMMATION OF ANGLES IN A POLYGON
LAST REVISION 08/15/70 SURVEYING 1 (BRITISH)
PUBLISHED
THIS PROGRAM TESTS THE ACCURACY OF THE SUM OF ANGLES OF A
POLYGON BY COMPARING IT TO $(2N-4)90$ DEGREES.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-78202 SUMMATION OF ANGLES BETWEEN LINES JOINING TWO POINTS
LAST REVISION 08/15/70 SURVEYING 1 (BRITISH)
PUBLISHED
SOLVES A TRAVERSE BETWEEN TWO POINTS. THIS IS A FORM OF
CLOSED TRAVERSE AND AS SUCH THE SUM OF THE OBSERVED ANGLES IS
RELATED TO THE DIFFERENCE BETWEEN THE TWO KNOWN BEARINGS.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-78203 CALCULATION OF TRAVERSE COORDINATES PROCEEDING ANTICLOCKWISE
LAST REVISION 08/15/70 SURVEYING 1 (BRITISH)
PUBLISHED
CALCULATES THE COORDINATES OF SUCCESSIVE POINTS AROUND A
TRAVERSE. GIVES MISCLOSURE, ITS DIRECTION AND THE FRACTIONAL
LINEAR ERROR.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-78204 CALCULATION OF TRAVERSE COORDINATES PROCEEDING CLOCKWISE
LAST REVISION 08/15/70 SURVEYING 1 (BRITISH)
PUBLISHED
CALCULATES THE COORDINATES OF SUCCESSIVE POINTS AROUND A
TRAVERSE. GIVES MISCLOSURE, ITS DIRECTION AND THE FRACTIONAL
LINEAR ERROR.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-78205 BOWDITCH TRAVERSE ADJUSTMENT
LAST REVISION 08/15/70 SURVEYING 1 (BRITISH)
PUBLISHED
DISTRIBUTES MISCLOSURE IN BOTH EASTINGS AND NORTHINGS
RESULTING AFTER COMPUTING COORDINATES OF A TRAVERSE.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-78206 CALCULATION OF BEARING AND DISTANCE FROM COORDINATES
LAST REVISION 08/15/70 SURVEYING 1 (BRITISH)
PUBLISHED
THIS PROGRAM DERIVES BEARING AND DISTANCE BETWEEN GIVEN
COORDINATES OF TWO POINTS.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-78207 CALCULATION OF COORDINATES FROM BEARING AND DISTANCE
LAST REVISION 08/15/70 SURVEYING 1 (BRITISH)
PUBLISHED
FINDS THE COORDINATES OF THE SECOND POINT WHEN GIVEN THE
COORDINATES OF ONE POINT AND THE BEARING AND DISTANCE OF THE
SECOND POINT.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-78208 SOLUTION OF A TRIANGLE USING ANGLES
LAST REVISION 08/15/70 SURVEYING 1 (BRITISH)
PUBLISHED
FINDS THE COORDINATES OF A THIRD POINT WHEN GIVEN THE
COORDINATES OF TWO CORNERS OF A TRIANGLE AND THE ANGLE AT
THOSE POINTS.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-78209 SOLUTION OF A TRIANGLE USING BEARINGS
LAST REVISION 08/15/70 SURVEYING 1 (BRITISH)
PUBLISHED
FINDS THE COORDINATES OF THE THIRD POINT WHEN GIVEN THE
COORDINATES OF TWO POINTS AND THE BEARINGS FROM THESE POINTS
TO THE THIRD POINT.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-78210 SOLUTION OF A TRIANGLE BY TRILATERATION
LAST REVISION 08/15/70 SURVEYING 1 (BRITISH)
PUBLISHED
FINDS THE COORDINATES OF THE THIRD POINT WHEN GIVEN THE
COORDINATES OF TWO POINTS AND THE LENGTHS OF THE THREE SIDES
OF A TRIANGLE.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-78211 REDUCTION OF STADIA TACHEOMETRY
LAST REVISION 08/15/70 SURVEYING 1 (BRITISH)
PUBLISHED
THIS PROGRAM FINDS THE HEIGHTS OF AND HORIZONTAL DISTANCES TO
STATIONS FROM THE GIVEN HEIGHT OF ONE POINT AND THEODOLITE
OBSERVATIONS FROM THAT POINT TO ONE OR MORE OF THESE STATIONS
EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-78212 AREA FROM COORDINATES

LAST REVISION 08/15/70 SURVEYING 1 (BRITISH)
PUBLISHED

THIS PROGRAM FINDS THE AREA OF A FIGURE WHEN GIVEN THE
COORDINATES OF THE CORNERS OF A POLYGON.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-78213 CHANGE OF GRID

LAST REVISION 08/15/70 SURVEYING 1 (BRITISH)
PUBLISHED

THIS PROGRAM FINDS THE COORDINATES OF ONE GRID ON ANOTHER

GRID BY USING A MINIMUM OF TWO POINTS COMMON TO BOTH SYSTEMS.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-78214 SCALE FACTOR

LAST REVISION 08/15/70 SURVEYING 1 (BRITISH)
PUBLISHED

CALCULATES SCALE FACTOR AND CONVERTS DISTANCES FROM
PROJECTION TO GROUND LENGTHS AND VICE VERSA.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-78215 RESECTION

LAST REVISION 08/15/70 SURVEYING 1 (BRITISH)
PUBLISHED

FINDS THE COORDINATES OF THE OBSERVATION POINT BY MAKING
OBSERVATIONS FROM A POINT OF UNKNOWN COORDINATES TO THREE
POINTS WHOSE POSITIONS ARE KNOWN.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-78216 TRIGONOMETRICAL HEIGHTS

LAST REVISION 08/15/70 SURVEYING 1 (BRITISH)
PUBLISHED

THIS PROGRAM DETERMINES THE DIFFERENCE OF HEIGHT BETWEEN TWO
TWO POINTS SOME DISTANCE APART BY MEASURING THE VERTICAL
ANGLE AT EACH POINT IF THE DISTANCE BETWEEN THE POINTS IS
KNOWN.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-78217 REFRACTIVE INDEX FOR RADIO WAVES

LAST REVISION 08/15/70 SURVEYING 1 (BRITISH)
PUBLISHED

CALCULATES THE VALUE OF THE REFRACTIVE INDEX FROM ATMOSPHERIC
OBSERVATIONS THEREBY REDUCING OBSERVATIONS MADE WITH
INSTRUMENTS SUCH AS THE TELLUROMETER.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-78218 REFRACTIVE INDEX FOR LIGHT WAVES

LAST REVISION 08/15/70 SURVEYING 1 (BRITISH)
PUBLISHED

CALCULATES THE VALUE OF THE REFRACTIVE INDEX FROM ATMOSPHERIC
OBSERVATIONS THEREBY REDUCING OBSERVATIONS FROM SUCH
INSTRUMENTS AS THE GEODIMETER.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-78219 REDUCTION OF EDM SLOPE DISTANCES TO THE SPHEROID

LAST REVISION 08/15/70 SURVEYING 1 (BRITISH)
PUBLISHED

THIS PROGRAM REDUCES ANY DISTANCES MEASURED WITH
ELECTROMAGNETIC DISTANCE MEASURING EQUIPMENT TO THE SPHEROID
AS A COMMON REFERENCE SURFACE.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-78220 GEODIMETER REDUCTION

LAST REVISION 08/15/70 SURVEYING 1 (BRITISH)
PUBLISHED

THIS PROGRAM RECEIVES DATA IN THE FORM OF KNOWN WAVE LENGTHS
AND CONVERTS TO A DISTANCE.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-78221 COORDINATES ROUND A CIRCULAR ARC

LAST REVISION 08/15/70 SURVEYING 1 (BRITISH)
PUBLISHED

THIS PROGRAM CALCULATES THE COORDINATES OF POINTS ON THE
CURVE AT GIVEN INTERVALS INCLUDING ANY SHORT CHORDS WHEN
GIVEN THE BASIC DATA FOR THE CURVE.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-78222 COORDINATES OF POINTS ON A CLOTHOID

LAST REVISION 08/15/70 SURVEYING 1 (BRITISH)
PUBLISHED

THIS PROGRAM CALCULATES THE COORDINATES OF POINTS ON THE
CURVE AT GIVEN INTERVALS INCLUDING ANY SHORT CHORDS WHEN
GIVEN THE BASIC DATA FOR THE CURVE.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-78223 COORDINATES ON CIRCULAR ARC RELATED TO PRECEEDING CLOTHOID

LAST REVISION 08/15/70 SURVEYING 1 (BRITISH)
PUBLISHED

THIS PROGRAM GIVES THE COORDINATES FOR POINTS ON THE CIRCULAR
ARC AS RELATED TO THE START OF THE CLOTHOID TRANSITION BEFORE
IT.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-78224 EARTHWORK AREAS

LAST REVISION 08/15/70 SURVEYING 1 (BRITISH)
PUBLISHED

THIS PROGRAM CALCULATES THE AREAS OF CROSS SECTIONS EITHER
WHOLLY CUT OR WHOLLY FILL OR A COMBINATION OF BOTH.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-78225 VERTICAL CURVE WITH CUT AND FILL

LAST REVISION 08/15/70 SURVEYING 1 (BRITISH)
PUBLISHED

THIS PROGRAM GIVES THE ELEVATION AT ANY POINT ON A SUMMIT
CURVE, A SAG CURVE, OR A STRAIGHT LINE AND ALSO GIVES THE
AMOUNT OF CUT OR FILL REQUIRED.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-78226 STANDARD ERROR

LAST REVISION 08/15/70 SURVEYING 1 (BRITISH)
PUBLISHED

THIS PROGRAM WILL PRODUCE THE STANDARD ERROR OF A SINGLE
OBSERVATION AND THE STANDARD ERROR OF THE MEAN WHEN GIVEN A
SERIES OF OBSERVATIONS OF A QUANTITY.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-78227 AZIMUTH BY ALTITUDE OF SUN OR STARS

LAST REVISION 08/15/70 SURVEYING 1 (BRITISH)
PUBLISHED

THIS PROGRAM DETERMINES AZIMUTH BY ALTITUDE OF THE SUN OR
STARS, USING EX-MERIDIAN ALTITUDES.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

CATEGORY - FLUID MECHANICS/HYDRAULICS

09100-750XX

REFER TO THE LAST ENTRY IN THIS PROGRAM CATEGORY FOR ORDERING INFORMATION ON SETS OF PRERECORDED MAGNETIC CARDS FOR THIS PACKET. IF CARDS ARE NOT AVAILABLE, AS INDICATED BY NO ORDERING ENTRY, CONSULT YOUR LOCAL HP CALCULATOR SALESMAN FOR FURTHER INFORMATION.

PART NUMBER	PROGRAM TITLE
09100-73203	VENTURI METER
	LAST REVISION 09/01/69 9100A/B LIBRARY
	PUBLISHED
	CALCULATES FLOW BY USING BERNOULLI'S EQUATION.
	EQUIPMENT REQUIRED - 9100A 9100B

09100-75001	CHEZY - MANNING EQUATION
	LAST REVISION 09/01/69 9100A/B LIBRARY
	PUBLISHED
	FINDS CHANNEL FLOW WHEN CHANNEL IS CIRCULAR PIPE AND FLOWING FULL.
	EQUIPMENT REQUIRED - 9100A 9100B

09100-75002	CALC. OF FLOW CORRECTION IN A SYSTEM OF PIPES HARDY CROSS MT
	LAST REVISION 12/01/68 9100A LIBRARY
	PUBLISHED
	FOR AN ASSUMED FLOW COMPUTES A CORRECTION. THEN PROCESS MAY BE REPEATED.
	EQUIPMENT REQUIRED - 9100A 9100B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-75003 RECTANGULAR WEIR

LAST REVISION 09/01/69 9100A/B LIBRARY
PUBLISHED

CALCULATES THE RATE OF FLUID FLOW OVER A RECTANGULAR WEIR.

EQUIPMENT REQUIRED - 9100A 9100B

09100-75004 WATER FLOW IN PIPE

LAST REVISION 09/01/69 9100A/B LIBRARY
PUBLISHED

CALCULATES THE LOSS FACTOR (F) AND THE HEAD LOSS FOR A PIPE
OF SPECIFIED DIMENSIONS WITH A KNOWN FLOW RATE.

EQUIPMENT REQUIRED - 9100A 9100B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

CATEGORY - SURVEYING PAC VOL. 1

09100-74100

REFER TO THE LAST ENTRY IN THIS PROGRAM CATEGORY FOR ORDERING INFORMATION ON SETS OF PRERECORDED MAGNETIC CARDS FOR THIS PACKET. IF CARDS ARE NOT AVAILABLE, AS INDICATED BY NO ORDERING ENTRY, CONSULT YOUR LOCAL HP CALCULATOR SALESMAN FOR FURTHER INFORMATION.

PROGRAM PRICE 15.00 MAGNETIC CARD PRICE 75.00

PART NUMBER

PROGRAM TITLE

09100-74100 TRAVERSE WITH COMPASS RULE ADJUSTMENT AND ENCLOSED AREA
PGM 1-1 LAST REVISION 10/01/70 SURVEY PAC. VOL. 1
PUBLISHED

THIS PROGRAM TRAVERSES BY BEARING AND DISTANCE AND CALCULATES COORDINATES, PRECISION RATIO AND AREA FOR AN OPEN OR A CLOSED TRAVERSE.

EQUIPMENT REQUIRED - 9100B 9120A

09100-74100 COORDINATE GEOMETRY AND ENCLOSED AREA
PGM 1-2 LAST REVISION 10/01/70 SURVEY PAC. VOL. 1
PUBLISHED

THIS PROGRAM TRAVERSES BY BEARING DISTANCE AND CALCULATES COORDINATES, AREA, AND THE FOLLOWING CURVE DATA---LENGTH, CHORD, COORDINATES OF TANGENT POINTS.

EQUIPMENT REQUIRED - 9100B 9120A 9160A

09100-74100 MULTI-PURPOSE TRAVERSE
PGM 1-3 LAST REVISION 10/01/70 SURVEY PAC. VOL. 1
PUBLISHED

THIS PROGRAM SOLVES A TRAVERSE WITH THE FOLLOWING OPTIONS---TRAVERSE, INVERSE, HOLD, CURVE, AND FORCED CLOSURE.

EQUIPMENT REQUIRED - 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-74100 TRAVERSE WITH LAW OF SINES OPTION

PGM 1-4 LAST REVISION 10/01/70 SURVEY PAC. VOL. 1
PUBLISHED

THIS PROGRAM WILL TRAVERSE BY BEARING AND DISTANCES AND WILL
MAKE A LAW OF SINES SOLUTION USING END COORDINATES AND
BEARINGS OF THE INTERSECTING LINES.

EQUIPMENT REQUIRED - 9100B 9120A

09100-74100 THREE-DIMENSIONAL TRAVERSE

PGM 1-5 LAST REVISION 10/01/70 SURVEY PAC. VOL. 1
PUBLISHED

THIS PROGRAM WILL CALCULATE THE COORDINATES AND ELEVATION OF
SUCCESSIVE POINTS GIVEN VERTICAL ANGLE, SLOPE DISTANCE, HI
HO, AND AZIMUTH.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-74100 BEARING AND LENGTH OF A LINE GIVEN ENDPOINTS IN SUCCESSION

PGM 1-6 LAST REVISION 10/01/70 SURVEY PAC. VOL. 1
PUBLISHED

THIS PROGRAM WILL CALCULATE THE BEARINGS AND DISTANCES
BETWEEN SUCCESSIVE COORDINATES.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-74100 FIELD ANGLE TRAVERSE WITH COMPASS RULE ADJUSTMENT OPTION

PGM 1-7 LAST REVISION 10/01/70 SURVEY PAC. VOL. 1
PUBLISHED

THIS PROGRAM WILL ACCEPT FIELD ANGLES AND DISTANCES AND MAKE
A COMPASS RULE ADJUSTMENT. THE PROGRAM ALSO WILL ACCEPT
ZENITH OR VERTICAL ANGLES AND SLOPE DISTANCES.

EQUIPMENT REQUIRED - 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-74100 BEARING OF LINES BETWEEN 1 FIXED POINT AND ANOTHER FIXED POINT
PGM 1-8 LAST REVISION 10/01/70 SURVEY PAC. VOL. 1
PUBLISHED

THIS PROGRAM WILL CALCULATE THE BEARINGS AND DISTANCE BETWEEN
FIXED COORDINATES AND A NUMBER OF OTHER COORDINATE POINTS.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-74100 RADIAL SURVEY
PGM 1-9 LAST REVISION 10/01/70 SURVEY PAC. VOL. 1
PUBLISHED

THIS PROGRAM COMPUTES THE BEARING AND DISTANCE BETWEEN A
SERIES OF POINTS BY RADIATION.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-74100 CIRCULAR SECTOR
PGM 2-1 LAST REVISION 10/01/70 SURVEY PAC. VOL. 1
PUBLISHED

THIS PROGRAM CALCULATES ARC AND CHORD LENGTH, SECTOR AND
SEGMENT AREA FOR A CIRCULAR SECTOR GIVEN THE RADIUS AND
CENTRAL ANGLE.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-74100 CURVE TABLE FOR FIELD LAYOUT, GIVEN RADIUS & LENGTH OF ARC
PGM 2-2 LAST REVISION 10/01/70 SURVEY PAC. VOL. 1
PUBLISHED

THIS PROGRAM USES A GIVEN RADIUS AND LENGTH OF ARC AND
CALCULATES THE CENTRAL ANGLE, HALF ANGLE, AND THE CHORD FOR
SUCCESSIVE ENTRY OF DESIRED ARC LENGTH.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-74100 SAME AS 2-2 GIVEN RADIUS, STARTING STATION AND NEW STATION
PGM 2-3 LAST REVISION 10/01/70 SURVEY PAC. VOL. 1
PUBLISHED

THIS PROGRAM CALCULATES THE REQUIRED DATA FOR STAKING OUT A
ROADWAY INCLUDING SUCCESSIVE STATIONS.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-74100 CURVE AND LINE TANGENCY
PGM 2-4 LAST REVISION 10/01/70 SURVEY PAC. VOL. 1
PUBLISHED

THIS PROGRAM CALCULATES THE COORDINATES OF THE POINT OF
TANGENCY OF A LINE AND CURVE, AND THE DISTANCE FROM THE
STARTING POINT TO THE TANGENT POINT.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-74100 CURVE SOLUTION - RADIUS AND ANGLE KNOWN
PGM 2-5 LAST REVISION 10/01/70 SURVEY PAC. VOL. 1
PUBLISHED

THIS PROGRAM CALCULATES THE HALF ANGLE, TANGENT, ARC AND
CHORD, SECTOR, SEGMENT, AND FILLET AREAS GIVEN RADIUS AND
ANGLE OF THE CURVE.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-74100 LINE-TO-CURVE INTERSECTION
PGM 2-6 LAST REVISION 10/01/70 SURVEY PAC. VOL. 1
PUBLISHED

THIS PROGRAM WILL CALCULATE THE MISSING LENGTH OF A LINE
INTERSECTING A CURVE AND THE BEARING OF THE RADIAL LINE TO
THE POINT OF INTERSECTION.

EQUIPMENT REQUIRED - 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-74100 HORIZONTAL ANGLE (RIGHT OR LEFT) ACCUMULATION TO A BEARING
PGM 3-1 LAST REVISION 10/01/70 SURVEY PAC. VOL. 1
PUBLISHED

THIS PROGRAM ACCUMULATES HORIZONTAL ANGLES (INCLUDED OR
DEFLECTED) RIGHT OR LEFT, AND CONVERTS THE ACCUMULATED ANGLE
TO A BEARING.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-74100 ANGLE CONVERSION AND SLOPE DISTANCE CONVERSION
PGM 3-2 LAST REVISION 10/01/70 SURVEY PAC. VOL. 1
PUBLISHED

THIS PROGRAM CONVERTS AN ANGLE IN DEGREES, MINUTES, SECONDS
TO DECIMAL DEGREES. IT WILL ALSO CONVERT SLOPE DISTANCE TO
HORIZONTAL DISTANCE AND ELEVATION.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-74100 ANGLE CONVERSION
PGM 3-3 LAST REVISION 10/01/70 SURVEY PAC. VOL. 1
PUBLISHED

THIS PROGRAM CONVERTS AN ANGLE IN DEGREES, MINUTES, SECONDS
TO DECIMAL DEGREES OR THE REVERSE.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-74100 ANGLE ACCUMULATION
PGM 3-4 LAST REVISION 10/01/70 SURVEY PAC. VOL. 1
PUBLISHED

THIS PROGRAM ACCUMULATES ANGLES IN DEGREES, MINUTES, SECONDS.
ANGLES CAN BE ENTERED IN ANY COMBINATION OF DECIMAL PARTS AND
ADDED OR SUBTRACTED AS DESIRED.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-74100 TRUE MERIDIAN BY ALTITUDE OBSERVATION OF THE SUN
PGM 3-5 LAST REVISION 10/01/70 SURVEY PAC. VOL. 1
PUBLISHED

THIS PROGRAM WILL CALCULATE THE BEARING OF A LINE BY AN
OBSERVATION OF THE SUN.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-74100 TRIANGLE SOLUTION RIGHT TRIANGLE-FIVE SOLUTIONS
PGM 4-1 LAST REVISION 10/01/70 SURVEY PAC. VOL. 1
PUBLISHED

THIS PROGRAM CALCULATES ONE SIDE AND TWO ANGLES GIVEN TWO
SIDES IT CAN ALSO CALCULATE TWO SIDES AND ONE ANGLE GIVEN ONE
ANGLE AND ONE SIDE.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-74100 TRIANGLE SOLUTION---SIDES GIVEN
PGM 4-2 LAST REVISION 10/01/70 SURVEY PAC. VOL. 1
PUBLISHED

THIS PROGRAM WILL SOLVE FOR THE INCLUDED ANGLES AND AREA
WHERE THE LENGTHS OF SIDES ARE GIVEN.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-74100 TRIANGLE SOLUTION - OBLIQUE TRIANGLE 1 SIDE, 2 ANGLES KNOWN
PGM 4-3 LAST REVISION 10/01/70 SURVEY PAC. VOL. 1
PUBLISHED

THIS PROGRAM WILL SOLVE FOR ONE ANGLE AND TWO SIDES WHEN THE
ANGLES AND AN OPPOSITE SIDE ARE KNOWN.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-74100 TRAVERSE PLOT USING BEARING AND DISTANCES
PGM 5-1 LAST REVISION 10/01/70 SURVEY PAC. VOL. 1
PUBLISHED

THIS PROGRAM WILL PLOT ANY TRAVERSE CONSISTING OF STRAIGHT
LINE SEGMENTS.

EQUIPMENT REQUIRED - 9100B 9120A

09100-74100 TRAVERSE WITH COMPASS RULE ADJ, & ENCLOSED AREA WITH PLOT
PGM 5-2 LAST REVISION 10/01/70 SURVEY PAC. VOL. 1
PUBLISHED

THIS PROGRAM TRAVERSES BY BEARING AND DISTANCE. THE PROGRAM
WILL ALSO ADJUST AND PLOT THE CORRECTED TRAVERSE.

EQUIPMENT REQUIRED - 9100B 9120A 9125A/B 9160A

09100-74100 THREE POINT PROBLEM
PGM 6-1 LAST REVISION 10/01/70 SURVEY PAC. VOL. 1
PUBLISHED

THIS PROGRAM WILL COMPUTE THE OBSERVER'S POSITION GIVEN THE
ANGLES BETWEEN THREE KNOWN POINTS.

EQUIPMENT REQUIRED - 9100B 9120A

09100-74100 INTERSECTION OF TWO CIRCLES - LAW OF COSINES
PGM 6-2 LAST REVISION 10/01/70 SURVEY PAC. VOL. 1
PUBLISHED

THIS PROGRAM COMPUTES THE POINTS OF INTERSECTION OF TWO
CIRCLES GIVEN RADIUS POINT COORDINATES AND RADIUS LENGTH.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-74100 GEODIMETER REDUCTION MODELS 4 AND 6

PGM 7-1 LAST REVISION 10/01/70 SURVEY PAC. VOL. 1

PUBLISHED

THIS PROGRAM WILL REDUCE DATA FROM AGA GEODIMETERS MODEL
4 AND 6.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-74100 GEODIMETER REDUCTION MODEL 6A

PGM 7-2 LAST REVISION 10/01/70 SURVEY PAC. VOL. 1

PUBLISHED

THIS PROGRAM WILL REDUCE DATA FROM AGA GEODIMETER MODEL 6A.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09119-74100 SET OF PRERECORDED MAGNETIC CARDS FOR SURVEY PAC

LAST REVISION 10/01/70 SURVEY PAC VOL. 1

PUBLISHED

PRICE 75.00

SEND ALL ORDERS FOR PUBLICATIONS AND MAGNETIC CARDS TO THE
LOCAL HP SALES OFFICE.

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

CATEGORY - STRUCTURES

09100-74XXX

REFER TO THE LAST ENTRY IN THIS PROGRAM CATEGORY FOR ORDERING INFORMATION ON SETS OF PRERECORDED MAGNETIC CARDS FOR THIS PACKET. IF CARDS ARE NOT AVAILABLE, AS INDICATED BY NO ORDERING ENTRY, CONSULT YOUR LOCAL HP CALCULATOR SALESMAN FOR FURTHER INFORMATION.

PART NUMBER

PROGRAM TITLE

09100-74256 SYMMETRICAL RECTANGULAR TWO-HINGED FRAME
LAST REVISION 03/29/71 R. CLSON

UNPUBLISHED

PRICE 10.00

GIVEN THE DIMENSIONS OF A SYMMETRICAL RECTANGULAR TWO-HINGED FRAME WITH A CANTILEVER BEAM FIXED AT THE LEFT LEG, THE LOAD P APPLIED TO THIS CANTILEVER AND THE SECOND MOMENTS OF AREA OF THE MEMBERS FORMING THE BRACKET, THIS PROGRAM COMPUTES THE BENDING MOMENTS AND THE HORIZONTAL AND VERTICAL REACTIONS.

EQUIPMENT REQUIRED - 9100A 9100B

09100-74257 GRADING OF TYPES OF SAND USING AFS NUMBERS
LAST REVISION 03/29/71 R. CLSON

UNPUBLISHED

PRICE 10.00

GIVEN THE RESULTS OF THE SPECTRUM ANALYSIS OF THE SAND INTO ITS CONSTITUENTS, USUALLY INTO FIVE OR 10 OF THESE, THIS PROGRAM CALCULATES THE AFS (AMERICAN FOUNDRYMENS ASSOCIATION) NUMBER FOR EACH CONSTITUENT.

EQUIPMENT REQUIRED - 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

CATEGORY - SURVEYING

09100-74XXX

REFER TO THE LAST ENTRY IN THIS PROGRAM CATEGORY FOR ORDERING INFORMATION ON SETS OF PRERECORDED MAGNETIC CARDS FOR THIS PACKET. IF CARDS ARE NOT AVAILABLE, AS INDICATED BY NO ORDERING ENTRY, CONSULT YOUR LOCAL HP CALCULATOR SALESMAN FOR FURTHER INFORMATION.

PART NUMBER	PROGRAM TITLE
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09100-74030	UNIVERSAL TRIANGLE SOLUTION
	LAST REVISION 12/29/69 KEYBOARD VOL. 1 NO. 3
	PUBLISHED
	PRICE 10.00
	SOLVES A PLANE TRIANGLE, GIVEN ANY OF 6 SETS OF INPUT DATA.
	ANGLES ARE DISPLAYED BOTH DECIMALLY AND IN DEGREES, MINUTES
	AND SECONDS.
CARL M. KING	
EQUIPMENT REQUIRED - 9100A	9100B

09100-74054	FIELD DATA TRAVERSE WITH ADJUSTMENT
	LAST REVISION 02/11/71 T. GILDEA
	UNPUBLISHED
	PRICE 90.00
	ACCEPTS KEYBOARD OR MARKED CARD DATA. INPUT IS TURNED FIELD
	ANGLES AND DISTANCES. REDUCES SLOPE DISTANCES TO HORIZONTAL
	DISTANCES, HOLDS COORDINATES OF SIDE SHOTS. ADJUSTS DATA WITH
	COMPASS RULE, PLOTS TRAVERSE, OFFERS FORMATTED OUTPUT. WILL
	OPERATE WITH MINIMUM EQUIP'T OF 9100A AND 9101A. PRINTED
	OUTPUT IS AVAILABLE FROM EITHER 9120A OR 9106A/IBM 73.
EQUIPMENT REQUIRED - 9100A	9100B 9120A 9125A/B 9160A 9101A

09101-90002	TRAVERSE WITH COMPASS RULE ADJUST. OPTION W/ENCLOSED AREA
PGM 1-3	LAST REVISION 07/01/70 EXTENDED MEMORY LIBRARY
	PUBLISHED
	THIS PROGRAM WILL ADJUST A 99 LEG TRAVERSE WITH ONE ENTRY OF
	TRAVERSES BY BEARING AND DISTANCE, CALCULATES COORDINATES,
	CLOSURE ERROR, TOTAL TRAVERSE DISTANCE PRECISION RATIO AND
	ENCLOSED AREA.
EQUIPMENT REQUIRED - 9100A	9100B 9120A 9101A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09810-74052 TRAVERSE WITH COMPASS RULE ADJUSTMENT
LAST REVISION 07/01/71 R.C. OLSON
UNPUBLISHED

THIS PROGRAM TRAVERSES BY BEARING AND DISTANCE OR AZIMUTH
AND DISTANCE. UP TO 45 LEGS MAY BE STORED FOR ADJUSTMENT
BY THE COMPASS RULE. USE OF THE PLOTTER IS OPTIONAL.
THE ADJUSTED COORDINATES ARE PRINTED AND STORED AND THE
AREA IS CALCULATED.

EQUIPMENT REQUIRED - 9810A OPT 3 11219A 11211A 11210A 11215A

09810-74056 CIRCULAR CURVE LAYOUT
LAST REVISION 07/01/71 R.C. OLSON
UNPUBLISHED

THIS PROGRAM GENERATES THE DATA NECESSARY FOR STARTING OUT
CIRCULAR CURVES FOR HIGHWAYS AND STREETS BY THE METHOD OF
DEFLECTION ANGLES AND DISTANCES

EQUIPMENT REQUIRED - 9810A OPT 3 11219A 11211A 11210A

09810-74057 THREE DIMENSIONAL RADIAL TRAVERSE
LAST REVISION 07/17/71 R. C. OLSON
UNPUBLISHED

THIS PROGRAM TAKES COORDINATES EITHER ENTERED OR FROM MEMORY,
INVERSES BETWEEN THEM TO DETERMINE A BACKSIGHT BEARING, AND
PROCEEDS TO PROCESS INPUT FIELD ANGLES AND FIELD DISTANCES TO
DETERMINE LOCATIONS OF OTHER POINTS LOCATED RADIALY ABOUT
THE INSTRUMENT LOCATION.

EQUIPMENT REQUIRED - 9810A OPT 3 11219A 11211A 11210A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

CATEGORY - STRUCTURES PAC

09100-74200

REFER TO THE LAST ENTRY IN THIS PROGRAM CATEGORY FOR ORDERING INFORMATION ON SETS OF PRERECORDED MAGNETIC CARDS FOR THIS PACKET. IF CARDS ARE NOT AVAILABLE, AS INDICATED BY NO ORDERING ENTRY, CONSULT YOUR LOCAL HP CALCULATOR SALESMAN FOR FURTHER INFORMATION.

PROGRAM PRICE 19.50 MAGNETIC CARD PRICE 165.00

PART NUMBER	PROGRAM TITLE
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09100-74200	FIXED END MOMENTS
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PGM 1-1	LAST REVISION 03/01/71	STRUCTURES-PAC
	PUBLISHED	

COMPUTES THE FIXED END MOMENTS FOR A PRISMATIC BEAM WITH A UNIFORM LOAD AND ANY NUMBER OF CONCENTRATED LOADS PLACED ANYWHERE ON THE MEMBER. THE BEAM MAY BE (1) FIXED AT BOTH ENDS OR (2) FIXED AT ONE END AND SIMPLY SUPPORTED AT THE OTHER.

NICHOLS, NORTON AND ZALDASTANI, INC., BOSTON, MASS.
EQUIPMENT REQUIRED - 9100A

09100-74200	MOMENT DISTRIBUTION-UNIFORM LOADS
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PGM 1-2	LAST REVISION 03/01/71	STRUCTURES-PAC
	PUBLISHED	

COMPUTES THE INTERIOR SUPPORT MOMENTS FOR A THREE OR FOUR SPAN CONTINUOUS BEAM WITH UNIFORM LOADS. THE BEAM MUST BE PRISMATIC BETWEEN SUPPORTS. HOWEVER, BETWEEN SUPPORTS THE MEMBER MAY HAVE ANY LENGTH, MOMENT OF INERTIA AND UNIFORM LOAD. THE EXTERIOR SUPPORTS ARE CONSIDERED SIMPLY SUPPORTED.

NICHOLS, NORTON AND ZALDASTANI, INC., BOSTON, MASS.
EQUIPMENT REQUIRED - 9100B

09100-74200	BEAM ANALYSIS-REACTION, MAX. MOM., SEC. MOD., BENDING STRESS
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PGM 1-3	LAST REVISION 03/01/71	STRUCTURES-PAC
	PUBLISHED	

TO DETERMINE THE REACTIONS AND MAX. MOMENT FOR A SIMPLY SUPPORTED BEAM WITH A UNIFORM LOAD AND UP TO 3 CONCENTRATED LOADS PLACED ANYWHERE ON THE MEMBER. IN ADDITION TO COMPUTING THE REACTIONS & MAX. MOM., THIS PROGRAM DETERMINES LOCATION OF THE MAX. MOM. AS MEASURED FROM THE LEFT SUPPORT. IT ALSO GIVES THE SEC. MODULUS REQUIRED & AFTER INSERTING ACTUAL SEC. MOD. FROM THE SELECTED BEAM, IT GIVES ACTUAL BENDING STRESS.

NICHOLS, NORTON, AND ZALDASTANI, INC., BOSTON, MASS.
EQUIPMENT REQUIRED - 9100B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-74200 BEAM DEFLECTIONS AT 1/6 POINTS

PGM 1-4 LAST REVISION 03/01/71 STRUCTURES-PAC
PUBLISHED

DETERMINES THE 1/6-POINT DEFLECTIONS FOR A SIMPLY SUPPORTED
PRISMATIC BEAM WITH A UNIFORM LOAD AND ANY NUMBER OF CONCEN-
TRATED LOADS PLACED ANYWHERE ON THE MEMBER.

NICHOLS, NORTON, AND ZALDASTANI, INC., BOSTON, MASS.
EQUIPMENT REQUIRED - 9100B

09100-74200 PIN ENDED FRAME ANALYSIS

PGM 1-5 LAST REVISION 03/01/71 STRUCTURES-PAC
PUBLISHED

TO ANALYZE, GIVEN FIXED MOMENTS, ANY 3 MEMBER, 90 DEGREE
PIN-ENDED FRAME.

EQUIPMENT REQUIRED - 9100B

09100-74200 RIGID FRAME ANALYSIS

PGM 1-6 LAST REVISION 03/01/71 STRUCTURES PAC
PUBLISHED

TO ANALYZE, GIVEN FIXED END MOMENTS, ANY 3 MEMBER, 90 DEGREE
RIGID FRAME.

EQUIPMENT REQUIRED - 9100B

09100-74200 FRAME DEFLECTIONS

PGM 1-7 LAST REVISION 03/01/71 STRUCTURES PAC
PUBLISHED

TO COMPUTE DEFLECTIONS FOR FIXED ENDED OR PIN ENDED,
3 MEMBERED, 90 DEGREE FRAMES.

EQUIPMENT REQUIRED - 9100B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-74200 COLUMN BASE PLATE DESIGN

PGM 1-8 LAST REVISION 03/01/71 STRUCTURES PAC
PUBLISHED

DESIGNS STEEL COLUMN BASE PLATES IN ACCORDANCE WITH THE
DESIGN PROCEDURE OF AISC, 'MANUAL OF STEEL CONSTRUCTION,'
1963.

NICHOLS, NORTON, AND ZALDASTANI, INC., BOSTON, MASS.
EQUIPMENT REQUIRED - 9100A

09100-74200 MOMENT DISTRIBUTION-FIXED END MOMENTS

PGM 1-9 LAST REVISION 03/01/71 STRUCTURES-PAC
PUBLISHED

COMPUTES THE INTERIOR SUPPORT MOMENTS FOR A 3 OR 4 SPAN CON-
TINUOUS BEAM LOADED BY FIXED END MOMENTS. THE BEAM MUST BE
PRISMATIC BETWEEN SUPPORTS. HOWEVER, BETWEEN SUPPORTS THE
MEMBER MAY HAVE ANY LENGTH, MOMENT OF INERTIA, OR LOADING
CONDITION. IN COMPUTING THE FIXED END MOMENTS THE FIRST AND
FOURTH SPANS MUST BE CONSIDERED AS FIXED AT ONE END AND
SIMPLY SUPPORTED AT THE OTHER.

NICHOLS, NORTON AND ZALDASTANI, INC., BOSTON, MASS.
EQUIPMENT REQUIRED - 9100B

09100-74200 BEAM DESIGN

PGM 1-10 LAST REVISION 03/01/71 STRUCTURES-PAC
PUBLISHED

DETERMINES THE REACTIONS, MAX. MOMENT, & THE REQUIRED SECTION
MODULUS FOR A SIMPLY SUPPORTED BEAM UNIFORMLY LOADED WITH
EQUAL CONCENTRATED LOADS AT THE 3RD POINTS OR ONE CONCENTRA-
TED LOAD AT THE CENTER. AFTER REQUIRED SEC. MOD. HAS BEEN
COMPUTED, ACTUAL SEC. MOD. & MOMENT OF INERTIA FOR SELECTED
STEEL BEAM IS ENTERED INTO COMPUTER. THEN ACTUAL BEND. STRESS
& MIN. REQ'D. DEPTH OF BEAM, & MAX. DEFLECTION ARE COMPUTED.

NICHOLS, NORTON AND ZALDASTANI, INC., BOSTON, MASS.
EQUIPMENT REQUIRED - 9100B

09100-74200 STABILITY OF CANTILEVER RETAINING WALL (LEVEL BACKFILL)

PGM 1-11 LAST REVISION 03/01/71 STRUCTURES-PAC
PUBLISHED

THIS PROGRAM ANALYZES THE STABILITY OF A CANTILEVER RETAINING
WALL. IT DETERMINES THE FACTOR OF SAFETY AGAINST OVERTURNING,
THE FACTOR OF SAFETY AGAINST SLIDING, AND THE DISTRIBUTION
OF PRESSURE UNDER THE BASE.

NICHOLS, NORTON AND ZALDASTANI, INC., BOSTON, MASS.
EQUIPMENT REQUIRED - 9100B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-74200 FRAME ANALYSIS WITH UNBALANCED LOADS
PGM 2-1 LAST REVISION 03/01/71 STRUCTURES-PAC
PUBLISHED

THIS PROGRAM ANALYZES FRAMES OR CONTINUOUS BEAMS HAVING UP TO TEN SPANS, AND ONE OR BOTH ENDS MAY BE CANTILEVERED. ANY NUMBER OF POINT LOADS OR UNIFORM LOADS MAY BE APPLIED. THE PROGRAM IS DESIGNED FOR USE WITH THE TYPEWRITER AND THE 9160 CARD READER, WHICH IS OPTIONAL. THE PROGRAM CAN BE RUN WITH THE 9120 PRINTER.

EDWARD R. BIERBACH, CONSULTING ENGINEERS, DENVER, COLORADO
EQUIPMENT REQUIRED - 9100A 9100B 9120A 9160A 9101A 9102A

09100-74200 FIXED END MOMENTS WITH SIMPLE BEAM REACTIONS
PGM 2-2 LAST REVISION 03/01/71 STRUCTURES-PAC
PUBLISHED

THIS PROGRAM CALCULATES TOTAL FIXED END MOMENTS FOR EACH END OF A BEAM GIVEN ANY COMBINATION OF UNIFORM AND CONCENTRATED LOADS. IT ALSO CALCULATES THE REACTIONS AS THOUGH THE BEAM WERE SIMPLY SUPPORTED.

EDWARD R. BIERBACH, CONSULTING ENGINEERS, DENVER, COLORADO
EQUIPMENT REQUIRED - 9100B 9120A

09100-74200 THREE-CYCLE MOMENT DISTRIBUTION
PGM 2-3 LAST REVISION 03/01/71 STRUCTURES-PAC
PUBLISHED

THIS PROGRAM COMPUTES THE THREE-CYCLE MOMENT DISTRIBUTION FOR A CONTINUOUS BEAM OR AN ISOLATED FLOOR IN A FRAME. THE USE OF THE 9160 CARD READER IS OPTIONAL.

EDWARD R. BIERBACH, CONSULTING ENGINEERS, DENVER, COLORADO
EQUIPMENT REQUIRED - 9100B 9120A 9160A

09100-74200 LIVE LOAD MOMENT DISTRIBUTION
PGM 2-4 LAST REVISION 03/01/71 STRUCTURES-PAC
PUBLISHED

THIS PROGRAM COMPUTES THE DISTRIBUTION OF THE LIVE LOAD FIXED END MOMENTS FOR A CONTINUOUS BEAM OR AN ISOLATED FLOOR IN A FRAME. THE RESULTS ARE ONE LINE OF LIVE LOAD DISTRIBUTION FOR THE LOADED SPAN. PROGRAM 2-6 SUMS THE LINES TO COMPUTE TOTALS.

EDWARD R. BIERBACH, CONSULTING ENGINEERS, DENVER, COLORADO
EQUIPMENT REQUIRED - 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-74200 LIVE LOAD MOMENT DISTRIBUTION (EQUAL SPANS-EQUAL LOADS)
PGM 2-5 LAST REVISION 03/01/71 STRUCTURES-PAC
PUBLISHED

THIS PROGRAM IS THE SAME AS 2-4 EXCEPT IT ALLOWS SIMPLIFICATION IF SPANS ARE EQUAL AND LOADS ARE EQUAL.

EDWARD R. BIERBACH, CONSULTING ENGINEERS, DENVER, COLORADO
EQUIPMENT REQUIRED - 9100B 9120A

09100-74200 LIVE LOAD MOMENT DISTRIBUTION TOTALS
PGM 2-6 LAST REVISION 03/01/71 STRUCTURES-PAC
PUBLISHED

THIS PROGRAM COMPUTES THE MINIMUM NEGATIVE MOMENT AND MAXIMUM NEGATIVE MOMENT CONSIDERING ALTERNATE SPANS LOADED AND ADJACENT SPANS LOADED.

EDWARD R. BIERBACH, CONSULTING ENGINEERS, DENVER, COLORADO
EQUIPMENT REQUIRED - 9100B 9120A

09100-74200 SHEAR CORRECTION DUE TO MOMENT DISTRIBUTION
PGM 2-7 LAST REVISION 03/01/71 STRUCTURES-PAC
PUBLISHED

THIS PROGRAM COMPUTES THE ADJUSTMENT TO THE SIMPLE BEAM SHEAR COMPUTED IN PROGRAM 2-2 REQUIRED TO ACCOUNT FOR THE SHEAR INDUCED BY MOMENT.

EDWARD R. BIERBACH, CONSULTING ENGINEERS, DENVER, COLORADO
EQUIPMENT REQUIRED - 9100B 9120A

09100-74200 STEEL COLUMN DESIGN (AISC)
PGM 3-1 LAST REVISION 03/01/71 STRUCTURES-PAC
PUBLISHED

THIS PROGRAM WILL ANALYZE A STEEL COLUMN WITH BIAXIAL BENDING AND AXIAL LOAD ACCORDING TO 1969 AISC SPECIFICATION.
(A 36 STEEL ONLY)

B. T. FELDER OF WM. F. FREEMAN ASSOCIATES, HIGH POINT, N. C.
EQUIPMENT REQUIRED - 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-74200 ULTIMATE STRENGTH RECTANGULAR TIED CONCRETE COLUMN DESIGN
PGM 3-2 LAST REVISION 03/01/71 STRUCTURES-PAC
PUBLISHED

THIS PROGRAM WILL DESIGN A CONCRETE COLUMN BY ACI 318-63
ULTIMATE STRENGTH THEORY ASSUMING A RECTANGULAR TIED COLUMN.
B. T. FELDER OF WM. F. FREEMAN ASSOCIATES, HIGH POINT, N. C.
EQUIPMENT REQUIRED - 9100B 9120A

09100-74200 AASHTO COLUMN ANALYSIS-UNCRACKED SECTION
PGM 3-3 LAST REVISION 03/01/71 STRUCTURES-PAC
PUBLISHED

THIS PROGRAM ANALYZES TIED OR SPIRAL, RECTANGULAR OR CIRCULAR
COLUMNS ACCORDING TO AASHTO 1969-1970 INTERIM SPECIFICATIONS.
THE SECTION MUST BE UNCRACKED (E/T MUST BE LESS THAN .5).
EQUIPMENT REQUIRED - 9100B 9120A

09100-74200 AASHTO COLUMN ANALYSIS-CRACKED SECTION
PGM 3-4 LAST REVISION 03/01/71 STRUCTURES PAC
PUBLISHED

THIS PROGRAM CALCULATES THE COMPRESSIVE STRESS IN THE
CONCRETE AND THE TENSILE AND COMPRESSIVE STEEL STRESS IN A
COLUMN WHERE E/T IS LESS THAN IT WILL ANALYZE A RECTANGULAR
SECTION ONLY.
EQUIPMENT REQUIRED - 9100B 9120A

09100-74200 ULTIMATE STRENGTH CONCRETE BEAM
PGM 3-5 LAST REVISION 03/01/71 STRUCTURES-PAC
PUBLISHED

THIS PROGRAM CALCULATES THE AREA OF STEEL REQUIRED FOR A
CONCRETE BEAM BY ULTIMATE STRENGTH DESIGN. THE BEAM IS
CONSIDERED AS EITHER RECTANGULAR OR 'T' BEAM IN ACCORDANCE
WITH ACI CODE 318-63, SECTION 16.
B. T. FELDER OF WM. F. FREEMAN ASSOCIATES, HIGH POINT, N. C.
EQUIPMENT REQUIRED - 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-74200 ULTIMATE STRENGTH DESIGN-BEAM SHEAR
PGM 3-6 LAST REVISION 03/01/71 STRUCTURES-PAC
PUBLISHED

THIS PROGRAM CALCULATES THE ULTIMATE SHEAR STRESS IN A BEAM
AND THE ALLOWABLE STRESS AND PRINTS THE REQUIRED STIRRUP
SPACING FOR ANY GIVEN SIZE OF STIRRUPS.

B. T. FELDER OF WM. F. FREEMAN ASSOCIATES, HIGH POINT, N. C.
EQUIPMENT REQUIRED - 9100B 9120A

09100-74200 PRESTRESSED BEAM ANALYSIS-ACI 318-63
PGM 3-7 LAST REVISION 03/01/71 STRUCTURES-PAC
PUBLISHED

THIS PROGRAM CALCULATES TOP AND BOTTOM FIBER STRESSES IN A
PRESTRESSED BEAM DUE TO DEAD LOAD MOMENT, LIVE LOAD MOMENT,
PRESTRESSING FORCE INITIAL AND FINAL.

B. T. FELDER OF WM. F. FREEMAN ASSOCIATES, HIGH POINT, N. C.
EQUIPMENT REQUIRED - 9100B 9120A

09100-74200 ULTIMATE SHEAR PRESTRESSED BEAM
PGM 3-8 LAST REVISION 03/01/71 STRUCTURES-PAC
PUBLISHED

THIS PROGRAM COMPUTES THE STIRRUP SPACING REQUIRED BY THE
ACI CODE FOR A PRESTRESSED CONCRETE BEAM.

B. T. FELDER OF WM. F. FREEMAN ASSOCIATES, HIGH POINT, N. C.
EQUIPMENT REQUIRED - 9100B 9120A

09100-74200 BEAM ANALYSIS-MOMENT AND DEFLECTION AT 1/10 POINTS
PGM 3-9 LAST REVISION 03/01/71 STRUCTURES-PAC
PUBLISHED

THIS PROGRAM CALCULATES THE MOMENT AND DEFLECTION OF THE
1/10 POINTS FOR A SINGLE SPAN PRISMATIC BEAM.

B. T. FELDER OF WM. F. FREEMAN ASSOCIATES, HIGH POINT, N. C.
EQUIPMENT REQUIRED - 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-74200 MOMENT AND SHEAR AT 1/10 POINT OF A BEAM
PGM 3-10 LAST REVISION 03/01/71 STRUCTURES PAC
PUBLISHED

THIS PROGRAM SOLVES FOR THE MOMENT AND SHEAR AT 1/10 POINTS
OF A BEAM WHEN END MOMENTS AND LOADS ARE KNOWN.

B. T. FELDER OF WM. F. FREEMAN ASSOCIATES, HIGH POINT, N. C.
EQUIPMENT REQUIRED - 9100B 9120A

09100-74200 SECTION PROPERTIES FOR PLATE GIRDER WITH COMPOSITE DECKS
PGM 3-11 LAST REVISION 03/01/71 STRUCTURES-PAC
PUBLISHED

THIS PROGRAM COMPUTES TEN IMPORTANT SECTION PROPERTIES FOR A
PLATE GIRDER WITH COMPOSITE DECK.

B. T. FELDER OF WM. F. FREEMAN ASSOCIATES, HIGH POINT, N. C.
EQUIPMENT REQUIRED - 9100B 9120A

09100-74200 BRIDGE PLATE GIRDER STIFFENER AND WEB ANALYSIS
PGM 3-12 LAST REVISION 03/01/71 STRUCTURES PAC
PUBLISHED

THIS PROGRAM CALCULATES THE SHEAR STRESS IN THE WEB AND
SOLVES FOR STIFFENER SPACING REQUIRED. IT ALSO SOLVES FOR THE
WEB THICKNESS BASED ON THE COMPRESSION FLANGE STRESS.

EQUIPMENT REQUIRED - 9100B 9120A

09100-74200 INFLUENCE LINE-CONTINUOUS BEAMS
PGM 3-13 LAST REVISION 03/01/71 STRUCTURES-PAC
PUBLISHED

THIS PROGRAM WILL PRINT OUT MOMENT COEFFICIENTS FOR A UNIT
CONCENTRATED LOAD AT THE 1/10 POINTS OF A CONTINUOUS BEAM.
THE LOAD MAY BE IN ANY SPAN.

B. T. FELDER OF WM. F. FREEMAN ASSOCIATES, HIGH POINT, N. C.
EQUIPMENT REQUIRED - 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-74200 INFLUENCE LINE CONTINUOUS BEAM WITH EXPANSION HINGE
PGM 3-14 LAST REVISION 03/01/71 STRUCTURES-PAC
PUBLISHED

THIS PROGRAM IS THE SAME AS 3-13 EXCEPT THAT IT ALLOWS AN
EXPANSION HINGE.

B. T. FELDER OF WM. F. FREEMAN ASSOCIATES, HIGH POINT, N. C.
EQUIPMENT REQUIRED - 9100B 9120A

09100-74200 INFLUENCE LINE ORDINATE-FRAME WITH HINGED SPAN
PGM 3-15 LAST REVISION 03/01/71 STRUCTURES-PAC
PUBLISHED

THIS PROGRAM CALCULATES INFLUENCE LINE ORDINATES AT 1/10
POINTS FOR A POINT IN THE HINGED SPAN WITH THE LOAD IN AN
ADJACENT SPAN.

B. T. FELDER OF WM. F. FREEMAN ASSOCIATES, HIGH POINT, N. C.
EQUIPMENT REQUIRED - 9100B 9120A

09100-74200 INFLUENCE LINE ORDINATES-FRAME WITH HINGED SPAN
PGM 3-16 LAST REVISION 03/01/71 STRUCTURES-PAC
PUBLISHED

THIS PROGRAM CALCULATES INFLUENCE LINE ORDINATES AT 1/10
POINTS FOR A POINT IN THE SOLID SPAN WITH THE LOAD IN THE
HINGED SPAN.

B. T. FELDER OF WM. F. FREEMAN ASSOCIATES, HIGH POINT, N. C.
EQUIPMENT REQUIRED - 9100B 9120A

09100-74200 UNIFORM LOAD COEFFICIENT FOR HINGED SPAN
PGM 3-17 LAST REVISION 03/01/71 STRUCTURES-PAC
PUBLISHED

THIS PROGRAM COMPUTES THE UNIFORM LOAD COEFFICIENT FOR
MOMENT AT A POINT IN A HINGED SPAN BY CALCULATING THE AREA
UNDER THE INFLUENCE LINE CURVE FOR THE POINT.

B. T. FELDER OF WM. F. FREEMAN ASSOCIATES, HIGH POINT, N. C.
EQUIPMENT REQUIRED - 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-74200 SIMPLY SUPPORTED BEAM-REACTIONS AT SUPPORT
PGM 4-1 LAST REVISION 03/01/71 STRUCTURES-PAC
 PUBLISHED

THIS PROGRAM CALCULATES THE REACTIONS AT THE SUPPORTS FOR A
SINGLE SPAN SIMPLY SUPPORTED BEAM. THE PROGRAM WILL ACCEPT
ANY COMBINATION OF END COUPLES, CONCENTRATED AND UNIFORM
LOADS.

EQUIPMENT REQUIRED - 9100A 9100B

09100-74200 SIMPLE BEAM-UNIFORM LOAD
PGM 4-2 LAST REVISION 03/01/71 STRUCTURES-PAC
 PUBLISHED

THIS PROGRAM COMPUTES THE REACTIONS, SHEAR, MOMENT AND
DEFLECTION FOR A SIMPLE BEAM WITH A FULL UNIFORM LOAD.

EQUIPMENT REQUIRED - 9100A 9100B

09100-74200 SIMPLE BEAM ANALYSIS-CONCENTRATED LOAD
PGM 4-3 LAST REVISION 03/01/71 STRUCTURES-PAC
 PUBLISHED

THIS PROGRAM COMPUTES THE DEFLECTIONS, SLOPES, REACTIONS AND
STRESSES FOR A SIMPLE BEAM WITH AN INTERMEDIATE CONCENTRATED
LOAD.

EQUIPMENT REQUIRED - 9100A 9100B

09100-74200 SIMPLE BEAM-TRIANGULAR LOAD
PGM 4-4 LAST REVISION 03/01/71 STRUCTURES-PAC
 PUBLISHED

THIS PROGRAM DETERMINES THE REACTIONS, MOMENT, SHEAR AND
DEFLECTION FOR A SIMPLE BEAM WITH A FULL TRIANGULAR LOAD.

EQUIPMENT REQUIRED - 9100A 9100B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-74200 SIMPLE BEAM ANALYSIS-INTERMEDIATE COUPLE LOAD
PGM 4-5 LAST REVISION 03/01/71 STRUCTURES-PAC
PUBLISHED

THIS PROGRAM COMPUTES THE DEFLECTIONS, SLOPES, REACTIONS AND
STRESSES FOR A SIMPLE BEAM WITH AN INTERMEDIATE COUPLE LOAD.
EQUIPMENT REQUIRED - 9100A 9100B

09100-74200 SIMPLE BEAM REACTION & MAX. MOM. UNDER A SYSTEM OF LOADS
PGM 4-6 LAST REVISION 03/01/71 STRUCTURES-PAC
PUBLISHED

THIS PROGRAM COMPUTES THE SUPPORT REACTIONS, THE MAXIMUM
MOMENT, AND THE LOCATION OF THE MAXIMUM MOMENT FOR A BEAM
UNDER A SYSTEM OF THREE CONCENTRATED LOADS, ONE FULL UNIFORM
LOAD, AND TWO PARTIAL UNIFORM LOADS.
EQUIPMENT REQUIRED - 9100B 9120A 9160A

09100-74200 OVERHANGING BEAM ANALYSIS
PGM 4-7 LAST REVISION 03/01/71 STRUCTURES-PAC
PUBLISHED

THIS PROGRAM DETERMINES THE DEFLECTIONS, SLOPES, REACTIONS
AND STRESSES FOR A SIMPLE OVERHANGING BEAM WITH A CONCENTRA-
TED END LOAD.
EQUIPMENT REQUIRED - 9100A 9100B

09100-74200 SIMPLE BEAM-PLOT OF SHEAR AND MOMENT DIAGRAM
PGM 4-8 LAST REVISION 03/01/71 STRUCTURES-PAC
PUBLISHED

THIS PROGRAM WILL PLOT THE SHEAR AND BENDING MOMENT
DIAGRAMS FOR A BEAM SUBJECTED TO ANY COMBINATION OF
CONCENTRATED AND UNIFORM LOADS.
EQUIPMENT REQUIRED - 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-74200 PLOT OF SHEAR FORCE ON A BEAM

PGM 4-9 LAST REVISION 03/01/71 STRUCTURES-PAC
PUBLISHED

THIS PROGRAM WILL PLOT THE CURVE OF SHEAR FORCE ON A BEAM
SUBJECTED TO A COMBINATION OF CONCENTRATED, UNIFORMLY
DISTRIBUTED, AND TRIANGULAR LOADS. THE FORCE AND LENGTH OF
DISTRIBUTION OF EACH LOAD, AND ALL REACTIONS MUST BE KNOWN.

EQUIPMENT REQUIRED - 9100A 9100B

09100-74200 CANTILEVER BEAM-UNIFORM LOAD

PGM 5-1 LAST REVISION 03/01/71 STRUCTURES-PAC
PUBLISHED

THIS PROGRAM COMPUTES THE SHEAR, MOMENT, REACTION,
DEFLECTION AND END SLOPE FOR A CANTILEVER BEAM WITH A FULL
UNIFORM LOAD.

EQUIPMENT REQUIRED - 9100A 9100B

09100-74200 CANTILEVER BEAM-END LOAD

PGM 5-2 LAST REVISION 03/01/71 STRUCTURES-PAC
PUBLISHED

THIS PROGRAM COMPUTES THE SHEAR, MOMENT, DEFLECTION, REACTION
AND END SLOPE FOR A CANTILEVER BEAM WITH A CONCENTRATED
END LOAD.

EQUIPMENT REQUIRED - 9100A 9100B

09100-74200 CANTILEVER BEAM-INTERMEDIATE LOAD

PGM 5-3 LAST REVISION 03/01/71 STRUCTURES-PAC
PUBLISHED

THIS PROGRAM COMPUTES THE SHEAR, MOMENT, DEFLECTION, REACTION
AND END SLOPE FOR A CANTILEVER BEAM WITH AN INTERMEDIATE
CONCENTRATED LOAD.

EQUIPMENT REQUIRED - 9100A 9100B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-74200 CANTILEVER BEAM-TRIANGULAR LOAD (MAXIMUM LOAD AT FREE END)
PGM 5-4 LAST REVISION 03/01/71 STRUCTURES-PAC
PUBLISHED

THIS PROGRAM COMPUTES THE SHEAR, MOMENT DEFLECTION, REACTION
AND END SLOPE FOR A CANTILEVER BEAM WITH A TRIANGULAR LOAD
WHEN THE MAXIMUM LOAD IS AT THE FREE END.
EQUIPMENT REQUIRED - 9100A 9100B

09100-74200 CANTILEVER BEAM-TRIANGULAR LOAD (MINIMUM LOAD AT FREE END)
PGM 5-5 LAST REVISION 03/01/71 STRUCTURES-PAC
PUBLISHED

THIS PROGRAM DETERMINES THE SHEAR, MOMENT, DEFLECTION AND
REACTION FOR A CANTILEVER BEAM WITH A TRIANGULAR LOAD WHEN
THE MINIMUM LOAD IS AT THE FREE END.
EQUIPMENT REQUIRED - 9100A 9100B

09100-74200 CANTILEVER BEAM-END COUPLE
PGM 5-6 LAST REVISION 03/01/71 STRUCTURES-PAC
PUBLISHED

THIS PROGRAM COMPUTES THE DEFLECTION AND END SLOPE FOR A
CANTILEVER BEAM WITH END COUPLE LOADING.
EQUIPMENT REQUIRED - 9100A 9100B

09100-74200 PROPPED CANTILEVER BEAM-CONCENTRATED LOAD
PGM 5-7 LAST REVISION 03/01/71 STRUCTURES-PAC
PUBLISHED

THIS PROGRAM CALCULATES THE REACTIONS, SHEARS, BENDING
MOMENTS AND DEFLECTION FOR A PROPPED CANTILEVER BEAM WITH
A CONCENTRATED LOAD APPLIED AT ANY POINT.
EQUIPMENT REQUIRED - 9100A 9100B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-74200 DISTRIBUTION FACTORS

PGM 6-1 LAST REVISION 03/01/71 STRUCTURES-PAC

PUBLISHED

THIS PROGRAM DETERMINES THE DISTRIBUTION FACTORS AT A SUPPORT
OF A CONTINUOUS BEAM.

EQUIPMENT REQUIRED - 9100A 9100B

09100-74200 DISTRIBUTION FACTORS FOR BUILDING FRAMES

PGM 6-2 LAST REVISION 03/01/71 STRUCTURES-PAC

PUBLISHED

THIS PROGRAM CALCULATES THE DISTRIBUTION AND STIFFNESS
FACTORS FOR A JOINT IN A BUILDING FRAME.

EQUIPMENT REQUIRED - 9100A 9100B

09100-74200 FIXED MOMENTS FOR CONTINUOUS BEAMS

PGM 6-3 LAST REVISION 03/01/71 STRUCTURES-PAC

PUBLISHED

THIS PROGRAM CALCULATES FIXED END MOMENTS FOR BEAMS WITH
CONCENTRATED OR FULL UNIFORM LOADING.

EQUIPMENT REQUIRED - 9100A 9100B

09100-74200 FIXED END MOMENTS-PARTIAL UNIFORM LOAD

PGM 6-4 LAST REVISION 03/01/71 STRUCTURES-PAC

PUBLISHED

THIS PROGRAM CALCULATES FIXED END MOMENTS FOR A BEAM WITH A
PARTIAL UNIFORM LOAD.

EQUIPMENT REQUIRED - 9100A 9100B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-74200 TWO-CYCLE MOMENT DISTRIBUTION FOR CONTINUOUS BEAMS
PGM 6-5 LAST REVISION 03/01/71 STRUCTURES-PAC
PUBLISHED

THIS PROGRAM DETERMINES THE MAXIMUM MOMENTS AT A SUPPORT IN A CONTINUOUS BEAM BY THE TWO-CYCLE METHOD OF MOMENT DISTRIBUTION. THE PROGRAM REQUIRES DISTRIBUTION FACTORS AND FIXED END MOMENTS AS INPUT.

EQUIPMENT REQUIRED - 9100A 9100B

09100-74200 CONTINUOUS BEAM MOMENT DISTRIB.- MODIF. HARDY CROSS METHOD
PGM 6-6 LAST REVISION 03/01/71 STRUCTURES-PAC
PUBLISHED

THIS PROGRAM DETERMINES THE MOMENTS AT THE SUPPORTS OF A CONTINUOUS BEAM BY BALANCING THE MOMENTS AT A PARTICULAR SUPPORT CONSIDERING ONLY THE TWO ADJACENT SUPPORTS IN THE CYCLIC PROCESS OF MOMENT DISTRIBUTION. THE PROGRAM REQUIRES DISTRIBUTION FACTORS AND FIXED END MOMENTS AS INPUT.

EQUIPMENT REQUIRED - 9100A 9100B

09100-74200 SUPPORT MOMENTS OF A TWO-SPAN BEAM
PGM 6-7 LAST REVISION 03/01/71 STRUCTURES-PAC
PUBLISHED

THIS PROGRAM DETERMINES THE MOMENTS AT THE SUPPORTS OF A TWO-SPAN BEAM BY THE HARDY CROSS METHOD OF MOMENT DISTRIBUTION. THE DISTRIBUTION FACTORS AND THE FIXED END MOMENTS OF THE BEAM ARE THE REQUIRED INPUT.

EQUIPMENT REQUIRED - 9100A 9100B

09100-74200 MIDDLE SUPPORT MOMENT OF A THREE SUPPORT BEAM
PGM 6-8 LAST REVISION 03/01/71 STRUCTURES-PAC
PUBLISHED

THIS PROGRAM CALCULATES THE UNKNOWN CENTER MOMENT OF A THREE SUPPORT INDETERMINATE BEAM WITH KNOWN END MOMENTS BY THE THREE MOMENT EQUATION. THE LOADING CONDITION OF THE BEAM IS THE REQUIRED INPUT.

EQUIPMENT REQUIRED - 9100A 9100B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-74200 BENDING MOMENT DIAGRAM PLOT

PGM 6-9 LAST REVISION 03/01/71 STRUCTURES-PAC
PUBLISHED

THIS PROGRAM PLOTS THE MOMENT DIAGRAM FOR A BEAM SUBJECTED TO ANY COMBINATION OF UNIFORM AND CONCENTRATED LOADS WITH PROVISION FOR END MOMENTS. THE 9160 CARD READER IS OPTIONAL.
EQUIPMENT REQUIRED - 9100B 9120A 9125A/B 9160A

09100-74200 ECCENTRICALLY LOADED SHORT COLUMNS

PGM 7-1 LAST REVISION 03/01/71 STRUCTURES-PAC
PUBLISHED

THIS PROGRAM CALCULATES THE MAXIMUM STRESS PRODUCED BY A SPECIFIED LOAD ON A SHORT COLUMN USING THE SECANT FORMULA.
EQUIPMENT REQUIRED - 9100A 9100B

09100-74200 ALLOWABLE STRESS IN AXIALLY LOADED COMPRESSION MEMBERS

PGM 7-2 LAST REVISION 03/01/71 STRUCTURES-PAC
PUBLISHED

THIS PROGRAM DETERMINES THE ALLOWABLE STRESS, FACTOR OF SAFETY, AND THE COLUMN SLENDERNESS RATIO FOR AXIALLY LOADED STEEL COMPRESSION MEMBERS USING ASIC COLUMN FORMULAS FOR STEEL BUILDINGS.
EQUIPMENT REQUIRED - 9100A 9100B

09100-74200 STRESS ANALYSIS OF A REINFORCED CONCRETE BEAM

PGM 7-3 LAST REVISION 03/01/71 STRUCTURES-PAC
PUBLISHED

THIS PROGRAM DETERMINES THE TENSILE STRESS OF THE STEEL AND THE COMPRESSIVE STRESS OF THE CONCRETE IN A RECTANGULAR CONCRETE BEAM WITH TENSION REINFORCEMENT. THE INPUTS TO THE PROGRAM ARE THE BEAM DIMENSIONS, AREA OF STEEL, BENDING MOMENT, AND THE MODULUS OF ELASTICITY RATIO.
EQUIPMENT REQUIRED - 9100A 9100B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-74200 BALANCED REINFORCEMENT OF A CONCRETE BEAM
PGM 7-4 LAST REVISION 03/01/71 STRUCTURES-PAC
PUBLISHED

THIS PROGRAM DETERMINES THE AREA OF STEEL NECESSARY, THE
STEEL RATIO, AND THE MAXIMUM ALLOWABLE MOMENT FOR BALANCED
REINFORCEMENT OF A RECTANGULAR BEAM WITH GIVEN DIMENSIONS
AND ALLOWABLE STRESSES.

EQUIPMENT REQUIRED - 9100A 9100B

09100-74200 EVALUATION OF FORCES FOR A HOWE BRIDGE TRUSS
PGM 8-1 LAST REVISION 03/01/71 STRUCTURES-PAC
PUBLISHED

THIS PROGRAM CALCULATES THE FORCE IN EACH MEMBER OF THE
BRIDGE TRUSS BY THE METHOD OF JOINTS. LOADS AND REACTIONS ARE
APPLIED TO THE TRUSS ONLY AT THE JOINTS.

EQUIPMENT REQUIRED - 9100A 9100B

09100-74200 RETAINING WALL LOADING
PGM 8-2 LAST REVISION 03/01/71 STRUCTURES-PAC
PUBLISHED

THIS PROGRAM CALCULATES AND PLOTS THE LATERAL PRESSURE ON A
RETAINING WALL DUE TO A STRIP LOAD WHICH IS PARALLEL TO THE
RETAINING WALL.

EQUIPMENT REQUIRED - 9100A 9100B

09100-74200 BOLT PRELOADS
PGM 8-3 LAST REVISION 03/01/71 STRUCTURES-PAC
PUBLISHED

THIS PROGRAM CALCULATES THE STRESSES INDUCED AND THE TORQUE
REQUIRED TO PLACE A SPECIFIED PRELOAD ON A BOLT.

EQUIPMENT REQUIRED - 9100A 9100B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-74200 NATURAL FREQUENCIES OF N DEGREE OF FREEDOM SYSTEMS
PGM 8-4 LAST REVISION 03/01/71 STRUCTURES-PAC
PUBLISHED

THIS PROGRAM COMPUTES THE N NATURAL FREQUENCIES OF AN N
DEGREE OF FREEDOM SYSTEM UNDER THE ASSUMPTION THAT ALL OF THE
N SYSTEM ELEMENTS ARE IDENTICAL.
EQUIPMENT REQUIRED - 9100A 9100B

09100-74200 COMBINED STRESSES (WITH PLOT)
PGM 8-5 LAST REVISION 03/01/71 STRUCTURES-PAC
PUBLISHED

THIS PROGRAM DETERMINES THE PRINCIPAL STRESSES OF AN ELEMENT
TAKEN FROM A BODY UNDER A COMBINATION OF STRESSES AND WILL
PLOT STRESS ELEMENTS ORIENTED IN THE PRINCIPAL DIRECTIONS.
EQUIPMENT REQUIRED - 9100A 9100B 9125A/B

09119-74200 SET OF PRERECORDED MAGNETIC CARDS FOR STRUCTURES PAC
LAST REVISION 05/01/71 STRUCTURES PAC
PUBLISHED PRICE 165.00
SEND ALL ORDERS FOR PUBLICATIONS AND MAGNETIC CARDS TO THE
LOCAL HP SALES OFFICE.

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

CATEGORY - GEODETIC SURVEYING

09100-741XX

REFER TO THE LAST ENTRY IN THIS PROGRAM CATEGORY FOR ORDERING INFORMATION ON SETS OF PRERECORDED MAGNETIC CARDS FOR THIS PACKET. IF CARDS ARE NOT AVAILABLE, AS INDICATED BY NO ORDERING ENTRY, CONSULT YOUR LOCAL HP CALCULATOR SALESMAN FOR FURTHER INFORMATION.

PART NUMBER

PROGRAM TITLE

09100-74028 INVERSE GEOGRAPHIC POSITION COMPUTATIONS

LAST REVISION 08/15/69 KEYBOARD VOL. 1 NO. 2

PUBLISHED

PRICE 20.00

THIS PROGRAM COMPUTES THE FORWARD AND BACK AZIMUTHS AND DISTANCE BETWEEN TWO POINTS. INPUT DATA ARE LONGITUDES AND LATITUDES OF THE TWO POINTS.

EQUIPMENT REQUIRED - 9100A 9100B

09100-74151 SATELLITE GROUND TRACK INTERPOLATION

LAST REVISION 06/04/71

CUSTOMER SUBMITTED

PRICE 10.00

GIVEN TWO POINTS ON A SATELLITE GROUND TRACK AND THEIR TIMES OF OCCURRENCE, THIS PROGRAM CALCULATES THE GROUND TRACK POSITION AT ANY OTHER INTERPOLATED TIME.

CONTACT R.A. WALL, 12260 VIA RONCILE, SARATOGA, CALIF., 95070

EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

CATEGORY - PHYSICS

09100-73XXX

REFER TO THE LAST ENTRY IN THIS PROGRAM CATEGORY FOR ORDERING INFORMATION ON SETS OF PRERECORDED MAGNETIC CARDS FOR THIS PACKET. IF CARDS ARE NOT AVAILABLE, AS INDICATED BY NO ORDERING ENTRY, CONSULT YOUR LOCAL HP CALCULATOR SALESMAN FOR FURTHER INFORMATION.

PART NUMBER

PROGRAM TITLE

09100-73201 BLOCK ON INCLINE (FRICTION PRESENT)

LAST REVISION 12/01/68 9100A LIBRARY
PUBLISHED

GIVES ACCELERATION, IF ANY, OF A BLOCK ON AN INCLINE WITH COEFFICIENT OF FRICTION.

EQUIPMENT REQUIRED - 9100A 9100B

09100-73202 FLUX DENSITY

LAST REVISION 09/01/69 9100A/B LIBRARY
PUBLISHED

CALCULATES THE FLUX DENSITY ALONG AN AXIS OF A CIRCULAR LOOP FOR A SPECIFIED RADIUS R, CURRENT I, AND DISTANCE D.

EQUIPMENT REQUIRED - 9100A 9100B

09100-73204 ORBITAL MECHANICS

LAST REVISION 09/01/69 9100A/B LIBRARY
PUBLISHED

CALCULATES THE VELOCITY OF A SATELLITE AT APOGEE AND PERIGEE AND THE ORBITAL TIME IN SECONDS OF A SATELLITE ORBITING A BODY IN SPACE.

EQUIPMENT REQUIRED - 9100A 9100B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-73205 BLACK BODY RADIATION

LAST REVISION 08/01/69 KEYBOARD VOL. 1 NO.2

PUBLISHED

PRICE 10.00

THIS PROGRAM CALCULATES SPECTRAL RADIANT EMITTANCE AND
WAVELENGTH OF MAXIMUM ENERGY FOR A SPECIFIED BLACK BODY
TEMPERATURE.

H. P. LEET

EQUIPMENT REQUIRED - 9100A 9100B

09100-73206 MOTION UNDER A CENTRAL FORCE PLOT

LAST REVISION 06/01/70 M. J. WINGERT

UNPUBLISHED

PRICE 10.00

PLOTS TRAJECTORY OF A PARTICLE UNDER THE INFLUENCE OF A
CENTRAL FORCE THAT VARIES AS SOME POWER OF THE RADIUS.

EQUIPMENT REQUIRED - 9100A 9100B 9125A/B

09100-73951 ORTHOGONAL VECTOR TRANSFORMATION IN EUCLIDIAN SPACE

LAST REVISION 04/06/71

CUSTOMER SUBMITTED

PRICE 20.00

THE FIRST PART OF THIS PROGRAM DETERMINES THE RESULTING
ORTHOGONAL MATRIX AS A PRODUCT OF A VARIETY OF ROTATION
AND/OR REFLECTION MATRICES. THE SECOND PART ENABLES THE USER
TO TRANSFORM SEQUENTIALLY AN ARBITRARY NUMBER OF VECTORS
USING THE ORTHOGONAL MATRIX STORED BY THE FIRST PART OF THE
PROGRAM.

IVO BAUERSIMA, BERN, SWITZERLAND

EQUIPMENT REQUIRED - 9100B

09100-75805 CHARLES' LAW PLOT (VOLUME VS. TEMPERATURE)

LAST REVISION 01/10/70 H. J. WEISSMAN

PUBLISHED

PRICE 10.00

PLOTS CHARLES' LAW RELATIONSHIP.

EQUIPMENT REQUIRED - 9100A 9100B 9125A/B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER	PROGRAM TITLE	PRICE
09100-75806	BOYLE'S LAW PLOT (VOLUME VS. PRESSURE)	
	LAST REVISION 01/10/70 H. J. WEISSMAN	
	PUBLISHED	10.00
	PLOTS BOYLE'S LAW SHOWING RELATIONSHIP BETWEEN VOLUME AND PRESSURE.	
EQUIPMENT REQUIRED -	9100A 9100B 9120A 9125A/B	

09100-75809	ELECTRON MOTION IN AN ELECTRO MAGNETIC FIELD (PLOT)	
	LAST REVISION 01/10/70 J. MERRILL	
	UNPUBLISHED	10.00
	PLOTS THE PATH OF AN ELECTRON IN AN ELECTRO MAGNETIC FIELD	
	INPUT INITIAL VELOCITY OF ELECTRON, FIELD STRENGTHS, DELTA-TIME AND INITIAL DIRECTION.	
EQUIPMENT REQUIRED -	9100A 9100B 9125A/B	

09100-75810	PLOT OF PROJECTILE MOTION WITH DRAG	
	LAST REVISION 01/10/70 EDUC. DEMO	
	PUBLISHED	10.00
	PLOTS THE PATH OF A PROJECTILE IN A RESISTIVE MEDIUM, SUCH AS AIR. INPUT INITIAL DIRECTION AND VELOCITY, AND RESISTANCE.	
EQUIPMENT REQUIRED -	9100A 9100B 9125A/B	

09100-75812	PLOT OF SIMPLE PENDULUM	
	LAST REVISION 01/10/70 T. L. GILDEA	
	UNPUBLISHED	10.00
	PLOTS DISPLACEMENT VS. TIME FOR A SIMPLE PENDULUM.	
EQUIPMENT REQUIRED -	9100A 9100B 9120A 9125A/B	

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-75817 FALLING BODY TRAJECTORY PLOT

LAST REVISION 10/02/70 H. J. WEISSMAN
UNPUBLISHED

PRICE 10.00

PLOTS THE PATH OF A FALLING BODY USING A STROBE EFFECT TO
STOP THE ACTION AT A SPECIFIED TIME INCREMENT.

EQUIPMENT REQUIRED - 9100A 9100B 9120A 9125A/B

09100-75820 PATH LENGTH OF A FALLING BODY

LAST REVISION 10/02/70 T.L. GILDEA
UNPUBLISHED

PRICE 10.00

CALCULATES THE PATH LENGTH OF A FALLING BODY BY APPROXIMATING
THE LENGTH OF THE CURVE USING STRAIGHT LINE SEGMENTS BETWEEN
POINTS ON CURVE.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-75831 SIMPLE PENDULUM MOTION

LAST REVISION 05/07/70 T. L. GILDEA
UNPUBLISHED

PRICE 10.00

PLOTS ANGULAR DISPLACEMENT VS. TIME FOR SIMPLE PENDULUM
GIVEN LENGTH AND INITIAL ANGLE.

EQUIPMENT REQUIRED - 9100A 9100B 9125A/B

09100-75863 SATELLITE ORBIT PLOT (HARVARD PROJECT PHYSICS)

PGM 0001 LAST REVISION 01/10/70 H. J. WEISSMAN
UNPUBLISHED

PRICE 10.00

PLOTS THE PATH OF A SATELLITE UNDER THE INFLUENCE OF CENTRAL
GRAVITATIONAL FORCE. PLOT USES STROBE TECHNIQUE.

EQUIPMENT REQUIRED - 9100A 9100B 9125A/B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

CATEGORY - THERMODYNAMICS

09100-73XXX

REFER TO THE LAST ENTRY IN THIS PROGRAM CATEGORY FOR ORDERING INFORMATION ON SETS OF PRERECORDED MAGNETIC CARDS FOR THIS PACKET. IF CARDS ARE NOT AVAILABLE, AS INDICATED BY NO ORDERING ENTRY, CONSULT YOUR LOCAL HP CALCULATOR SALESMAN FOR FURTHER INFORMATION.

PART NUMBER	PROGRAM TITLE
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09100-73701	TEMPERATURE CONVERSION
	LAST REVISION 12/01/68 9100A LIBRARY
	PUBLISHED
	CALCULATES THE TEMPERATURE EQUIVALENTS OF A TEMPERATURE GIVEN
	IN ANY OF THE THREE TEMPERATURE SCALES--FAHRENHEIT,
	CENTIGRADE, AND KELVIN (ABSOLUTE).
EQUIPMENT REQUIRED -	9100A 9100B

09100-73851	HEAT TRANSFER THROUGH A MULTILAYERED CYLINDER
	LAST REVISION 09/01/69 9100B LIBRARY
	PUBLISHED
	THIS PROGRAM CALCULATES THE RATE OF HEAT FLOW THROUGH A
	MULTILAYER CYLINDER. BOTH CONVECTIVE AND CONDUCTIVE LAYERS
	ARE CONSIDERED.
EQUIPMENT REQUIRED -	9100A 9100B

09100-73852	TRANSIENT CONDUCTION IN A SLAB
	LAST REVISION 09/01/69 9100B LIBRARY
	PUBLISHED
	GIVEN THE INITIAL TEMPERATURE OF A SLAB AND A FLUID, THIS
	PROGRAM DETERMINES THE TEMPERATURE (AS A FUNCTION OF TIME AND
	DISTANCE) OF THE SLAB AS IT IS IMMERSSED INTO THE FLUID.
EQUIPMENT REQUIRED -	9100B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

CATEGORY - OPTICS

09100-739XX

REFER TO THE LAST ENTRY IN THIS PROGRAM CATEGORY FOR ORDERING INFORMATION ON SETS OF PRERECORDED MAGNETIC CARDS FOR THIS PACKET. IF CARDS ARE NOT AVAILABLE, AS INDICATED BY NO ORDERING ENTRY, CONSULT YOUR LOCAL HP CALCULATOR SALESMAN FOR FURTHER INFORMATION.

PART NUMBER

PROGRAM TITLE

09100-73901 FRESNEL INTEGRALS

LAST REVISION 04/16/71

CUSTOMER SUBMITTED

PRICE 10.00

THIS PROGRAM CALCULATES DISCRETE FUNCTION OF THE FRESNEL
INTEGRALS $S(t)$ AND $C(t)$. FUNCTIONS USED YIELD SOLUTIONS ACCU-
RATE TO 10 SIGNIFICANT FIGURES FOR VALUES OF t BETWEEN -2 AND
 $+2$.

CONTACT PAUL S.ROBERTS, HUGHES AIRCRAFT CO., CULVER CITY, CALIFORNIA
EQUIPMENT REQUIRED - 9100B 9120A

09100-75811 PLOT OF FRAUNHOFER DIFFRACTION

LAST REVISION 01/10/70 T. L. GILDEA

UNPUBLISHED

PRICE 10.00

PLOT THE INTERFERENCE PATTERNS PRODUCED BY A FRAUNHOFER
DIFFRACTION OF MONOCHROMATIC LIGHT THRU MULTIPLE SLIT GRATING

EQUIPMENT REQUIRED - 9100A 9100B 9125A/B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

CATEGORY - ASTRONOMY

09100-739XX

REFER TO THE LAST ENTRY IN THIS PROGRAM CATEGORY FOR ORDERING INFORMATION ON SETS OF PRERECORDED MAGNETIC CARDS FOR THIS PACKET. IF CARDS ARE NOT AVAILABLE, AS INDICATED BY NO ORDERING ENTRY, CONSULT YOUR LOCAL HP CALCULATOR SALESMAN FOR FURTHER INFORMATION.

PART NUMBER

PROGRAM TITLE

09100-73951 ORTHOGONAL VECTOR TRANSFORMATION IN EUCLIDIAN SPACE
LAST REVISION 04/06/71

CUSTOMER SUBMITTED

PRICE 20.00

THE FIRST PART OF THIS PROGRAM DETERMINES THE RESULTING ORTHOGONAL MATRIX AS A PRODUCT OF A VARIETY OF ROTATION AND/OR REFLECTION MATRICES. THE SECOND PART ENABLES THE USER TO TRANSFORM SEQUENTIALLY AN ARBITRARY NUMBER OF VECTORS USING THE ORTHOGONAL MATRIX STORED BY THE FIRST PART OF THE PROGRAM.

IVD BAUERSIMA, BERN, SWITZERLAND
EQUIPMENT REQUIRED - 9100B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

CATEGORY - HYDRAULIC ENGINEERING PAC

09100-75100

REFER TO THE LAST ENTRY IN THIS PROGRAM CATEGORY FOR ORDERING INFORMATION ON SETS OF PRERECORDED MAGNETIC CARDS FOR THIS PACKET. IF CARDS ARE NOT AVAILABLE, AS INDICATED BY NO ORDERING ENTRY, CONSULT YOUR LOCAL HP CALCULATOR SALESMAN FOR FURTHER INFORMATION.

PROGRAM PRICE 9.50

PART NUMBER

PROGRAM TITLE

09100-75100 FRICTIONAL SLOPE FOR A PIPE

PGM 1-1 LAST REVISION 04/05/71 HYDRAULIC ENGINEERING PAC
PUBLISHED

GIVEN THE DISCHARGE, MANNING'S N, AND PIPE DIAMETER, THIS PROGRAM COMPUTES THE FRICTION SLOPE, AREA OF THE PIPE, MEAN VELOCITY, VELOCITY HEAD, AND TOTAL FRICTION LOSS WHEN GIVEN THE LENGTH OF THE PIPE.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-75100 FLOW IN A PARTIALLY FULL PIPE

PGM 1-2 LAST REVISION 04/05/71 HYDRAULIC ENGINEERING PAC
PUBLISHED

GIVEN THE DISCHARGE, MANNING'S N, DIAMETER OF PIPE AND WATER DEPTH IN PIPE, THIS PROGRAM COMPUTES THE RELATIVE DEPTH OF FLOW, MEAN VELOCITY, VELOCITY HEAD, HYDRAULIC RADIUS, AND THE FRICTION SLOPE.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-75100 OPEN CHANNEL HYDRAULIC DATA

PGM 1-3 LAST REVISION 04/05/71 HYDRAULIC ENGINEERING PAC
PUBLISHED

GIVEN THE DISCHARGE, MANNING'S N, CHANNEL SIDE SLOPE, BOTTOM WIDTH, AND FRICTION SLOPE, THIS PROGRAM COMPUTES THE CONVEYANCE AT NORMAL DEPTH, AREA, MEAN VELOCITY, VELOCITY HEAD, ENERGY HEAD AND OTHER HYDRAULIC DATA.

EQUIPMENT REQUIRED - 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-75100 UNIT HYDROGRAPH

PGM 1-4 LAST REVISION 04/05/71 HYDRAULIC ENGINEERING PAC
PUBLISHED

THIS PROGRAM COMPUTES THE RUNOFF HYDROGRAPH RESULTING FROM A
GIVEN RAINFALL INTENSITY PATTERN.

EQUIPMENT REQUIRED - 9100B 9120A

09100-75100 DETERMINING FRICTION SLOPE OF A TRAPEZOIDAL CHANNEL
PGM 1-5 LAST REVISION 04/05/71 HYDRAULIC ENGINEERING PAC
PUBLISHED

GIVEN DEPTH OF FLOW, BOTTOM WIDTH, DISCHARGE, MANNING'S N,
AND CHANNEL SIDE SLOPE, THIS PROGRAM COMPUTES THE AREA, MEAN
VELOCITY, VELOCITY HEAD, WETTED PERIMETER, HYDRAULIC RADIUS,
CONVEYANCE, AND THE FRICTION SLOPE.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-75100 DETERMINING DISCHARGE OF A PIPE
PGM 1-6 LAST REVISION 04/05/71 HYDRAULIC ENGINEERING PAC
PUBLISHED

THIS PROGRAM WILL DETERMINE THE DISCHARGE OF A PIPE USING
MANNING'S FORMULA. THE PIPE MAY BE EITHER FLOWING FULL OR
PARTIALLY FULL.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-75100 PIPE SIZING
PGM 1-7 LAST REVISION 04/05/71 HYDRAULIC ENGINEERING PAC
PUBLISHED

GIVEN THE DISCHARGE, MANNING'S N, AND THE FRICTION SLOPE, THIS
PROGRAM COMPUTES A PIPE DIAMETER. THIS CAN BE ROUNDED UP TO
THE NEAREST COMMERCIAL SIZE AND ENTERED IN THE PROGRAM TO
COMPUTE A NEW FRICTION SLOPE, AREA, MEAN VELOCITY, AND
VELOCITY HEAD.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-75100 BACKWATER CURVE FOR TRAPEZOIDAL CHANNEL
PGM 1-8 LAST REVISION 04/05/71 HYDRAULIC ENGINEERING PAC
PUBLISHED

THIS PROGRAM COMPUTES A BACKWATER CURVE IN A TRAPEZOIDAL CHANNEL USING MANNING'S FORMULA. WHEN GIVEN THE DISCHARGE, MANNING'S N, THE SIDE SLOPE, BOTTOM WIDTH AND THE CHANNEL SLOPE, WITH A STARTING DEPTH AND ENDING DEPTH, IT COMPUTES THE DISTANCE ALONG THE CHANNEL TO REACH THE ENDING DEPTH.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-75100 CIRCULAR PIPE HYDRAULIC DATA
PGM 1-9 LAST REVISION 04/05/71 HYDRAULIC ENGINEERING PAC
PUBLISHED

FOR A PIPE PARTIALLY FULL, GIVEN THE DISCHARGE, MANNING'S N, PIPE DIAMETER AND FRICTION SLOPE, THIS PROGRAM COMPUTES THE CONVEYANCE AT NORMAL DEPTH, RATIO OF NORMAL DEPTH TO DIAMETER, NORMAL DEPTH, AREA, VELOCITY AT NORMAL DEPTH, VELOCITY HEAD, AND OTHER DATA.

EQUIPMENT REQUIRED - 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

CATEGORY - NUCLEAR PHYSICS

09100-733XX

REFER TO THE LAST ENTRY IN THIS PROGRAM CATEGORY FOR ORDERING INFORMATION ON SETS OF PRERECORDED MAGNETIC CARDS FOR THIS PACKET. IF CARDS ARE NOT AVAILABLE, AS INDICATED BY NO ORDERING ENTRY, CONSULT YOUR LOCAL HP CALCULATOR SALESMAN FOR FURTHER INFORMATION.

PART NUMBER

PROGRAM TITLE

09100-73301 NUCLEAR REACTION KINEMATICS & TRANSF. OF DIFF. DATA & ANGLES
LAST REVISION 05/11/71

CUSTOMER SUBMITTED

PRICE 10.00

PROGRAM 1 CALCULATES FOR NON-RELATIVISTIC ENERGIES THE ENERGY
EB OF PARTICLE B EMITTED AT LABORATORY ANGLE THETA. PROGRAM 2
CALCULATES THE CENTER OF MASS ANGLE θ -BAR CORRESPONDING
TO THE LABORATORY ANGLE THETA.

CONTACT DR. J.D.A.ROEDERS, UNIV. OF GRONINGEN, GRONINGEN, NETHERLANDS
EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

CATEGORY - CHEMICAL

09100-755XX

REFER TO THE LAST ENTRY IN THIS PROGRAM CATEGORY FOR ORDERING INFORMATION ON SETS OF PRERECORDED MAGNETIC CARDS FOR THIS PACKET. IF CARDS ARE NOT AVAILABLE, AS INDICATED BY NO ORDERING ENTRY, CONSULT YOUR LOCAL HP CALCULATOR SALESMAN FOR FURTHER INFORMATION.

PART NUMBER

PROGRAM TITLE

09100-75501 FLEMENTAL PERCENTAGES AND MOLECULAR WEIGHT
LAST REVISION 12/01/68 9100A LIBRARY
PUBLISHED

CALCULATES ELEMENTAL PERCENTAGES AND MOLECULAR WEIGHT OF
COMPOUNDS CONTAINING 4 ELEMENTS OF LESS.

EQUIPMENT REQUIRED - 9100A 9100B

09100-75502 ELEMENTAL PERCENTAGE AND MOLECULAR WEIGHT - 6 ELEMENT
LAST REVISION 09/01/69 9100A/B LIBRARY
PUBLISHED

CALCULATES PERCENTAGES AND MOLECULAR WEIGHT OF COMPOUNDS
CONTAINING 6 ELEMENTS OR LESS.

EQUIPMENT REQUIRED - 9100A 9100B

09100-75503 CHN ANALYSIS (K VALUES)
LAST REVISION 09/01/69 9100A/B LIBRARY
PUBLISHED

CALCULATES K VALUES GIVEN C, H AND N, BLANK VALUES, AND
PERCENTAGES FOR A KNOWN STANDARD.

EQUIPMENT REQUIRED - 9100A 9100B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-75504 CHN PERCENTAGES

LAST REVISION 09/01/69 9100A/B LIBRARY
PUBLISHED

GIVEN C, H, AND N VALUES AND USING PREVIOUSLY CALCULATED K
VALUES AND KNOWN BLANK VALUES, CALCULATES C, H AND N
PERCENTAGES.

EQUIPMENT REQUIRED - 9100A 9100B

09100-75505 MOLECULAR WEIGHT BY VPO

LAST REVISION 09/01/69 9100A/B LIBRARY
PUBLISHED

CALCULATES MOLECULAR WEIGHT FOR AN UNKNOWN BASED ON A SERIES
OF VAPOR PRESSURE OSMOMETER (VPO) READING AT VARIOUS
DILUTIONS BY EXTRAPOLATING A LEAST SQUARES CURVE FIT TO
INFINITE DILUTION.

EQUIPMENT REQUIRED - 9100A 9100B

09100-75506 MEMBRANE OSMOMETER

LAST REVISION 09/01/69 9100A/B LIBRARY
PUBLISHED

DETERMINES THE NUMBER-AVERAGE MOLECULAR WEIGHT BY
EXTRAPOLATING A LEAST SQUARES CURVE FIT TO INFINITE DILUTION.

EQUIPMENT REQUIRED - 9100A 9100B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

CATEGORY - ANALYTICAL CHEMISTRY

09100-756XX

REFER TO THE LAST ENTRY IN THIS PROGRAM CATEGORY FOR ORDERING INFORMATION ON SETS OF PRERECORDED MAGNETIC CARDS FOR THIS PACKET. IF CARDS ARE NOT AVAILABLE, AS INDICATED BY NO ORDERING ENTRY, CONSULT YOUR LOCAL HP CALCULATOR SALESMAN FOR FURTHER INFORMATION.

PART NUMBER

PROGRAM TITLE

09100-75626 KOVATS INDICES-GAS CHROMATOGRAPHY

LAST REVISION 03/28/71 W. A. CUMMINGS

UNPUBLISHED

PRICE 10.00

GIVEN THE CHROMATOGRAM OF A MIXTURE ANALYZED BY GAS CHROMATOGRAPHY, THE RETENTION TIME OF AN UNKNOWN SUBSTANCE IS KNOWN. WITH THIS PROGRAM, THE KOVATS-INDEX (REL. RETENTION INDEX) OF THE UNKNOWN SUBSTANCE IS COMPUTED BY LOGARITHMIC INTERPOLATION BETWEEN THE VALUES OF THE HYDROCARBON REFERENCE SUBSTANCES. IT IS ALSO POSSIBLE TO USE EXTRAPOLATION.

EQUIPMENT REQUIRED - 9100A 9100B

09810-75651 SOLUTION OF FUOSS-ONSAGER CONDUCTANCE EQUATION

LAST REVISION 06/11/71 W. A. CUMMINGS

UNPUBLISHED

THIS PROGRAM SOLVES THE FUOSS-ONSAGER CONDUCTANCE EQUATION AND PLOTS A LEAST SQUARES BEST STRAIGHT LINE OF CONDUCTANCE VS. CONCENTRATION. THE LIMITING CONDUCTANCE IS DETERMINED TO THE PRECISION DESIRED.

EQUIPMENT REQUIRED - 9810A OPT 1 OPT 3 11219A 11211A 11210A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

CATEGORY - CHEMICAL PROCESS PAC VOL. 1

09100-75598

REFER TO THE LAST ENTRY IN THIS PROGRAM CATEGORY FOR ORDERING INFORMATION ON SETS OF PRERECORDED MAGNETIC CARDS FOR THIS PACKET. IF CARDS ARE NOT AVAILABLE, AS INDICATED BY NO ORDERING ENTRY, CONSULT YOUR LOCAL HP CALCULATOR SALESMAN FOR FURTHER INFORMATION.

PROGRAM PRICE 15.00 MAGNETIC CARD PRICE 45.00

PART NUMBER

PROGRAM TITLE

09100-75598 COLEBROOK FRICTION FACTOR, F
PGM 1-1 LAST REVISION 10/01/70 CHEMICAL PROCESS PAC VOL. 1
PUBLISHED

THIS PROGRAM CALCULATES THE FRICTION FACTOR, F, USING THE COLEBROOK FUNCTION. THE PROGRAM USES AN ITERATIVE ROOT FINDING ROUTINE TO DETERMINE FRICTION FACTOR ACCURATE TO 8 DIGITS.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-75598 CHEZY-MANNING EQUATION
PGM 1-2 LAST REVISION 10/01/70 CHEMICAL PROCESS PAC VOL. 1
PUBLISHED

THIS PROGRAM WILL CALCULATE THE FLOW (Q), OR THE PIPE DIAMETER (D), OR THE SLOPE OF THE PIPE (S), AND IS SPECIALIZED FOR OPEN-CHANNEL FLOW IN A CIRCULAR PIPE W/FLOW DEPTH DESIGNATED AT FULL.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-75598 FANNING EQUATION
PGM 1-3 LAST REVISION 10/01/70 CHEMICAL PROCESS PAC VOL. 1
PUBLISHED

THIS PROGRAM UTILIZES THE FANNING (OR DARCY) EQUATION TO CALCULATE THE FLUID VELOCITY, THE REYNOLDS NUMBER, AND THE PRESSURE DROP FOR 100 FEET OF PIPE.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-75598 ORIFICE DISCHARGE COEFFICIENT

PGM 1-4 LAST REVISION 10/01/70 CHEMICAL PROCESS PAC VOL. 1
PUBLISHED

THIS PROGRAM CALCULATES THE ORIFICE DISCHARGE COEFFICIENT
(K), THE ORIFICE DIAMETER TO INSIDE PIPE DIAMETER RATIO (R),
AND THE REYNOLDS NUMBER REFERRED TO THE DIAMETER OF ORIFICE
(RE).

EQUIPMENT REQUIRED - 9100B 9120A

09100-75598 PANHANDLE GAS FLOW FORMULA

PGM 1-5 LAST REVISION 10/01/70 CHEMICAL PROCESS PAC VOL. 1
PUBLISHED

THIS PROGRAM ALLOWS THE USER TO SOLVE FOR PRESSURE AT A POINT
DOWNSTREAM, GIVEN THE VALUE OF Q, OR TO SOLVE FOR AN
INCREMENTAL VALUE OF Q GIVEN THE DOWNSTREAM PRESSURE.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-75598 PIPE SIZING FOR SINGLE OR TWO-PHASE FLOW

PGM 1-6 LAST REVISION 10/01/70 CHEMICAL PROCESS PAC VOL. 1
PUBLISHED

THIS PROGRAM SOLVES THE MECHANICAL ENERGY BALANCE FOR LIQUID,
VAPOR, OR TWO-PHASE FLOW SYSTEMS. THE PROGRAM WILL DETERMINE
AND PRINTOUT THE FLOW DATA FOR THE CALCULATED PIPE DIAMETER.

EQUIPMENT REQUIRED - 9100A 9100B 9120A 9101A

09100-75598 OVERALL HEAT TRANSFER COEFFICIENT, UO

PGM 1-7 LAST REVISION 10/01/70 CHEMICAL PROCESS PAC VOL. 1
PUBLISHED

THIS PROGRAM CALCULATES THE OVERALL HEAT TRANSFER
COEFFICIENT, UO.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-75598 SEIDER-TATE EQUATION
PGM 1-8 LAST REVISION 10/01/70 CHEMICAL PROCESS PAC VOL. 1
PUBLISHED
THIS PROGRAM SOLVES THE SEIDER-TATE EQUATION FOR THE PHASE
HEAT TRANSFER COEFFICIENT, H. THE PROGRAM ALSO DETERMINES
REYNOLDS (RF) AND PRANDTL (PR) NUMBERS.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-75598 CONVECTION FILM COEFFICIENT, H
PGM 1-9 LAST REVISION 10/01/70 CHEMICAL PROCESS PAC VOL. 1
PUBLISHED
THIS PROGRAM UTILIZES AN EQUATION TO DETERMINE THE CONVECTION
FILM COEFFICIENT.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-75598 FORCED CONVECTION HEAT TRANSFER COEFFICIENT-PRESSURE DROP
PGM 1-10 LAST REVISION 10/01/70 CHEMICAL PROCESS PAC VOL. 1
PUBLISHED
THIS PROGRAM UTILIZES EQUATIONS TO CALCULATE HEAT TRANSFER
COEFFICIENTS AND THEIR CORRESPONDING PRESSURE DROPS FOR
FORCED CONVECTION.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-75598 TUBE SIDE HEAT TRANSFER COEFFICIENT
PGM 1-11 LAST REVISION 10/01/70 CHEMICAL PROCESS PAC VOL. 1
PUBLISHED
THE TUBE SIDE HEAT TRANSFER COEFFICIENT OF A HEAT EXCHANGER
CAN BE EXPRESSED WITHIN REASONABLE LIMITS OF ACCURACY. THE
PROGRAM CALCULATES QT SEPARATELY AND THEN HT.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-75598 GURNEY & LURIE CHART CALCULATIONS FOR SOLID SLAB OR SPHERE
PGM 1-12 LAST REVISION 10/01/70 CHEMICAL PROCESS PAC VOL. 1
PUBLISHED

THIS PROGRAM OFFERS THE ADVANTAGE OF WORKING ACCURATELY FOR
ANY DESIRED VALUES OF X, N, AND WILL PROVIDE ACCURACY TO
EIGHT SIGNIFICANT FIGURES.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-75598 BARNETT CRITICAL HEAT FLUX, QHF (1)
PGM 1-13 LAST REVISION 10/01/70 CHEMICAL PROCESS PAC VOL. 1
PUBLISHED

THE PROGRAM CALCULATES CRITICAL HEAT FLUX FOR BUNDLES OF
HEATED RODS IN WHICH WATER FLOWS PAST THE RODS IN THE AXIAL
DIRECTION.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09119-75598 SET OF PRERECORDED MAGNETIC CARDS FOR CPI PAC VOL. 1
LAST REVISION 10/01/70 CHEMICAL PROCESS PAC VOL. 1
PUBLISHED PRICE 45.00

SEND ALL ORDERS FOR PUBLICATIONS AND MAGNETIC CARDS TO THE
LOCAL HP SALES OFFICE.

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

CATEGORY - CHEMICAL PROCESS PAC VOL. 2

09100-75599

REFER TO THE LAST ENTRY IN THIS PROGRAM CATEGORY FOR ORDERING INFORMATION ON SETS OF PRERECORDED MAGNETIC CARDS FOR THIS PACKET. IF CARDS ARE NOT AVAILABLE, AS INDICATED BY NO ORDERING ENTRY, CONSULT YOUR LOCAL HP CALCULATOR SALESMAN FOR FURTHER INFORMATION.

PROGRAM PRICE 15.00 MAGNETIC CARD PRICE 20.00

PART NUMBER

PROGRAM TITLE

09100-75599 RELATIVE VOLATILITY TABLE

PGM 2-1 LAST REVISION 01/15/71 CHEMICAL PROCESS PAC VOL. 2
PUBLISHED

THIS PROGRAM EMPLOYS ANTOINE CONSTANTS TO CALCULATE AND PRINT OUT A TABLE OF IDEAL RELATIVE VOLATILITIES FOR A BINARY MIXTURE.

EQUIPMENT REQUIRED - 9100B 9120A

09100-75599 VAPOR - LIQUID EQUILIBRIUM TABLE

PGM 2-2 LAST REVISION 01/15/71 CHEMICAL PROCESS PAC VOL. 2
PUBLISHED

THIS PROGRAM EMPLOYS ANTOINE CONSTANTS TO CALCULATE AND PRINT OUT A TABLE OF IDEAL K VALUES.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-75599 VAPOR PRESSURE TABLE

PGM 2-3 LAST REVISION 01/15/71 CHEMICAL PROCESS PAC VOL. 2
PUBLISHED

THIS PROGRAM EMPLOYS THE ANTOINE EQUATION TO CALCULATE AND PRINT OUT A VAPOR PRESSURE TABLE.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-75599 RELATIVE VOLATILITY CALCULATION

PGM 2-4 LAST REVISION 01/15/71 CHEMICAL PROCESS PAC VOL. 2
PUBLISHED

THIS PROGRAM CALCULATES THE RELATIVE VOLATILITY OF BINARY
COMPONENTS FROM X-Y DATA (VAPOR - LIQUID EQUILIBRIUM DATA).

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-75599 X-Y DATA CALCULATION

PGM 2-5 LAST REVISION 01/15/71 CHEMICAL PROCESS PAC VOL. 2
PUBLISHED

THIS PROGRAM CALCULATES THE X-Y DATA (VAPOR EQUILIBRIUM DATA)
OF BINARY COMPONENTS AT CONSTANT RELATIVE VOLATILITY. IT CAN
ALSO DETERMINE THE NUMBER OF THEORETICAL STAGES AT TOTAL
REFLUX.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-75599 BUBBLE POINT CALCULATION

PGM 2-6 LAST REVISION 01/15/71 CHEMICAL PROCESS PAC VOL. 2
PUBLISHED

THIS PROGRAM COMPUTES THE BUBBLE POINT OF A BINARY OR MULTI-
COMPONENT MIXTURE AT A SPECIFIED PRESSURE.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-75599 DEW POINT CALCULATION

PGM 2-7 LAST REVISION 01/15/71 CHEMICAL PROCESS PAC VOL. 2
PUBLISHED

THIS PROGRAM CALCULATES THE DEW POINT OF A BINARY OR MULTI-
COMPONENT MIXTURE AT A SPECIFIED PRESSURE.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-75599 FLASH CALCULATION, ISOTHERMAL/ISOBARIC
PGM 2-8 LAST REVISION 01/15/71 CHEMICAL PROCESS PAC VOL. 2
PUBLISHED
THIS PROGRAM PERFORMS A FLASH CALCULATION FOR AN UNLIMITED
NUMBER OF COMPONENTS USING THE 9160A MARKED CARD READER.
EQUIPMENT REQUIRED - 9100A 9100B 9120A 9160A

09100-75599 FLASH CALCULATION, ISOTHERMAL/ISOBARIC
PGM 2-9 LAST REVISION 01/15/71 CHEMICAL PROCESS PAC VOL. 2
PUBLISHED
THIS PROGRAM PERFORMS A FLASH CALCULATION ON A TEN COMPONENT
SYSTEM. THE PROGRAM WILL ACCEPT TOTAL MOLES OR MOLE FRACTIONS
AS FEED INPUT.
EQUIPMENT REQUIRED - 9100B 9120A

09100-75599 FLASH CALCULATION, ISOTHERMAL/ISOBARIC
PGM 2-10 LAST REVISION 01/15/71 CHEMICAL PROCESS PAC VOL. 2
PUBLISHED
THIS PROGRAM WILL PERFORM A FLASH CALCULATION ON A SYSTEM OF
UP TO 200 COMPONENTS. IT WILL ACCEPT TOTAL MOLES OR MOLE
FRACTIONS AS FEED INPUT.
EQUIPMENT REQUIRED - 9100A 9100B 9120A 9101A

09119-75599 SET OF PRERECORDED MAGNETIC CARDS FOR CPI PAC VOL. 2
LAST REVISION 01/15/71 CHEMICAL PROCESS PAC VOL. 2
PUBLISHED PRICE 20.00
SEND ALL ORDERS FOR PUBLICATIONS AND MAGNETIC CARDS TO THE
LOCAL HP SALES OFFICE.

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

CATEGORY - CHEMICAL ENGINEERING

09100-756XX

REFER TO THE LAST ENTRY IN THIS PROGRAM CATEGORY FOR ORDERING INFORMATION ON SETS OF PRERECORDED MAGNETIC CARDS FOR THIS PACKET. IF CARDS ARE NOT AVAILABLE, AS INDICATED BY NO ORDERING ENTRY, CONSULT YOUR LOCAL HP CALCULATOR SALESMAN FOR FURTHER INFORMATION.

PART NUMBER

PROGRAM TITLE

09100-75601 LIQUID GRADIENT ACROSS A TRAY

LAST REVISION 03/15/71 W. A. CUMMINGS

UNPUBLISHED

PRICE 10.00

THIS PROGRAM CALCULATES THE LIQUID GRADIENT ACROSS A TRAY
USED IN DESIGNING A MASS TRANSFER TOWER.

EQUIPMENT REQUIRED - 9100B

09100-75610 DISTILLATION HEAT BALANCE

LAST REVISION 03/15/71 UNKNOWN

CUSTOMER SUBMITTED

PRICE 10.00

THIS PROGRAM DEFINES HEATING MEDIUM FOR SPECIFIED REFLUX
RATIO. IT COMPUTES TOP AND BOTTOM PRODUCT RATES, THEN REFLUX
AND OVERHEAD VAPOR FLOW RATES. A HEAT BALANCE IS PERFORMED.
IT CALCULATES ENTHALPIES FOR EACH STREAM ABOVE 0 DEG C USING
WEIGHT OR MOLE AVERAGE SPECIFIED AND LATENT HEATS.

COURTESY APV LIMITED, SURREY, ENGLAND

EQUIPMENT REQUIRED - 9100B

09810-75601 PIPE SIZING FOR INCOMPRESSIBLE FLUID FLOW

LAST REVISION 06/10/71 W. A. CUMMINGS

UNPUBLISHED

THIS PROGRAM DETERMINES THE NOMINAL AND ACTUAL PIPE I. D. FOR
INCOMPRESSIBLE FLUID FLOW. THE USER CAN SPECIFY SCHEDULE 40,
SCHEDULE 80, 16 BWG TUBING, OR ALUMINUM TUBING. A USER COULD
ALSO STORE A SPECIAL PIPE SCHEDULE IF HE DESIRED.

EQUIPMENT REQUIRED - 9810A OPT 3 11219A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

CATEGORY - BUSINESS

09100-73XXX

REFER TO THE LAST ENTRY IN THIS PROGRAM CATEGORY FOR ORDERING INFORMATION ON SETS OF PRERECORDED MAGNETIC CARDS FOR THIS PACKET. IF CARDS ARE NOT AVAILABLE, AS INDICATED BY NO ORDERING ENTRY, CONSULT YOUR LOCAL HP CALCULATOR SALESMAN FOR FURTHER INFORMATION.

PART NUMBER

PROGRAM TITLE

09100-73001 ANNUAL INTEREST

LAST REVISION 09/01/69 9100A/B LIBRARY
PUBLISHED

CALCULATES INTEREST THAT SATISFIES THE EQUATION
 $R = PI(1+I)N / ((1+I)N - 1)$.

EQUIPMENT REQUIRED - 9100A 9100B

09100-73002 DEPRECIATION SCHEDULE - DECLINING BALANCE

LAST REVISION 12/01/68 9100A LIBRARY
PUBLISHED

USES THE DECLINING BALANCE TECHNIQUE FOR DERIVING THE
DEPRECIATION SCHEDULE FOR AN ASSET.

EQUIPMENT REQUIRED - 9100A 9100B

09100-73003 DEPRECIATION SCHEDULE - SUM OF THE YEARS' - DIGITS

LAST REVISION 12/01/68 9100A LIBRARY
PUBLISHED

USES THE SUM-OF-YEARS' DIGITS TECHNIQUE FOR DERIVING THE
DEPRECIATION SCHEDULE FOR AN ASSET.

EQUIPMENT REQUIRED - 9100A 9100B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-73004 COMPOUND INTEREST

LAST REVISION 12/01/68 9100A LIBRARY
PUBLISHED

USES COMPOUND INTEREST FACTORS TO COMPUTE PRESENT AND FUTURE
WORTH OF A UNIFORM SERIES OF PAYMENTS.

EQUIPMENT REQUIRED - 9100A 9100B

09100-73005 PRESENT VALUE OF A SERIES OF CASH FLOWS

LAST REVISION 12/01/68 9100A LIBRARY
PUBLISHED

CALCULATES THE PRESENT VALUE OF A SERIES OF CASH FLOWS FOR
ANY NUMBER OF PERIODS WITH A CONSTANT INTEREST RATE PER
PERIOD.

EQUIPMENT REQUIRED - 9100A 9100B

09100-73009 RETURN ON INVESTMENT FOR UP TO 16 VARYING CASH FLOWS

LAST REVISION 02/20/69 W. A. CUMMINGS
UNPUBLISHED

PRICE 10.00

THIS PROGRAM SOLVES FOR THE VALUE OF INTEREST PER PERIOD FOR
UP TO 16 VARYING CASH FLOWS.

EQUIPMENT REQUIRED - 9100A 9100B

09100-73010 PAYROLL PROGRAM

LAST REVISION 02/18/69 I. W. LARSON
UNPUBLISHED

PRICE 10.00

THIS PROGRAM IS DESIGNED TO CALCULATE THE GROSS WAGE, VARIOUS
DEDUCTIONS, AND THE NET WAGE FOR INDIVIDUAL EMPLOYEES.

EQUIPMENT REQUIRED - 9100A 9100B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-73011 RETURN ON INVESTMENT PLOT

LAST REVISION 12/01/69 M. J. WINGERT

UNPUBLISHED

PRICE 10.00

THIS PROGRAM WILL PLOT A FAMILY OF CURVES CORRESPONDING TO
DIFFERENT INTEREST RATES, ACTING UPON AN INITIAL INVESTMENT
LINKED WITH SUCCESSIVE MONTHLY INVESTMENTS.

EQUIPMENT REQUIRED - 9100A 9100B 9125A/B

09100-73020 SMOOTHING AND DIFFERENTIATION OF NOISY DIGITAL DATA

LAST REVISION 11/30/70 C. KORBELIK

CUSTOMER SUBMITTED

PRICE 10.00

THIS PROGRAM SINGLE- AND DOUBLE-SMOOTHS NOISY DIGITAL DATA,
AND CAN PROVIDE THE DIFFERENTIAL OF THE DOUBLE-SMOOTHED DATA.
IT CAN ALSO BE USED TO CALCULATE QUADRUPLE-SMOOTHED INTEGRAL
DATA AND ITS DIFFERENTIAL.

THIS PROGRAM COURTESY EG&G, INC., GOLETA, CALIF.

EQUIPMENT REQUIRED - 9100A

09100-73101 RETURN ON INVESTMENT FOR UP TO 16 VARYING CASH FLOWS.

LAST REVISION 09/01/69 9100B LIBRARY

PUBLISHED

THIS PROGRAM SOLVES FOR THE VALUE OF INTEREST PER PERIOD FOR
UP TO SIXTEEN VARYING CASH FLOWS.

EQUIPMENT REQUIRED - 9100B

09100-73102 PAYROLL

LAST REVISION 12/01/69 W. A. CUMMINGS

UNPUBLISHED

PRICE 10.00

THIS PROGRAM COMPUTES VARIOUS PARAMETERS OF A PAYROLL.

EQUIPMENT REQUIRED - 9100B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09810-73008 LOAN AMORTIZATION

LAST REVISION 07/01/71 A. HOCKLEY
UNPUBLISHED

THIS PROGRAM, USING SIMPLE INTEREST AS IN A TYPICAL HOME
LOAN, CALCULATES MONTHLY PAYMENT TO PAY OFF THE LOAN IN A
GIVEN TIME. AFTER EACH MONTHLY PAYMENT IS CALCULATED, AMOUNT
OF PRINCIPAL AND INTEREST IN EACH PAYMENT AND RUNNING TOTALS
ARE PRINTED OUT.

EQUIPMENT REQUIRED - 9810A OPT 2 11219A 11211A 11210A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

CATEGORY - BANKING

09100-73XXX

REFER TO THE LAST ENTRY IN THIS PROGRAM CATEGORY FOR ORDERING INFORMATION ON SETS OF PRERECORDED MAGNETIC CARDS FOR THIS PACKET. IF CARDS ARE NOT AVAILABLE, AS INDICATED BY NO ORDERING ENTRY, CONSULT YOUR LOCAL HP CALCULATOR SALESMAN FOR FURTHER INFORMATION.

PART NUMBER

PROGRAM TITLE

09100-73008 AMORTIZED LOAN

LAST REVISION 09/01/69 9100A/B LIBRARY
PUBLISHED

CALC. MO. PAYMENTS ON PRINCIPAL OF LOAN FOR SPECIFIED TERM,
AMOUNT OF PAYMENTS TO PRINCIPAL AND INTEREST, AND RUNNING
TOTAL OF PAYMENTS TO PRINCIPAL AND INTEREST TO DATE.

EQUIPMENT REQUIRED - 9100A 9100B

09100-76002 POUNDS - DOLLARS CONVERSION

LAST REVISION 12/01/68 9100A LIBRARY
PUBLISHED

CONVERTS BRITISH POUNDS AND SUBDIVISIONS THEREOF TO AMERICAN
DOLLARS AND VICE VERSA.

EQUIPMENT REQUIRED - 9100A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

CATEGORY - BUSINESS FORECASTING

09100-73XXX

REFER TO THE LAST ENTRY IN THIS PROGRAM CATEGORY FOR ORDERING INFORMATION ON SETS OF PRERECORDED MAGNETIC CARDS FOR THIS PACKET. IF CARDS ARE NOT AVAILABLE, AS INDICATED BY NO ORDERING ENTRY, CONSULT YOUR LOCAL HP CALCULATOR SALESMAN FOR FURTHER INFORMATION.

PART NUMBER

PROGRAM TITLE

09100-73006 SINGLE AND DOUBLE EXPONENTIAL SMOOTHING AND FORECASTING
LAST REVISION 12/01/68 9100A LIBRARY
PUBLISHED
USES SINGLE AND DOUBLE EXPONENTIAL TECHNIQUES TO SMOOTH INPUT DATA AND SUBSEQUENTLY PREDICT FUTURE DATA ON THE BASIS OF THE PAST INPUT DATA.
EQUIPMENT REQUIRED - 9100A 9100B

09100-73007 TRIPLE EXPONENTIAL SMOOTHING AND FORECASTING
LAST REVISION 12/01/68 9100A LIBRARY
PUBLISHED
USES TRIPLE EXPONENTIAL TECHNIQUES TO SMOOTH INPUT DATA AND SUBSEQUENTLY PREDICT FUTURE DATA ON THE BASIS OF THE PAST INPUT DATA.
EQUIPMENT REQUIRED - 9100A 9100B

09100-73014 SINGLE & DOUBLE EXPONENTIAL SMOOTHING & FORECASTING WITH PLOT
LAST REVISION 12/01/69 W. A. CUMMINGS
UNPUBLISHED PRICE 10.00
THIS PROGRAM EXPONENTIALLY SMOOTHS AND PLOTS INPUT DATA (NUMBER OF ORDERS, ETC.), AND OBTAINS ESTIMATES AND A PLOT OF FUTURE ORDERS.
EQUIPMENT REQUIRED - 9100A 9100B 9120A 9125A/B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-73015 TRIPLE EXPONENTIAL SMOOTHING AND FORECASTING WITH PLOT
LAST REVISION 12/01/69 W. A. CUMMINGS
UNPUBLISHED PRICE 10.00
THIS PROGRAM EXPONENTIALLY SMOOTHS AND PLOTS INPUT DATA SUCH
AS A TIME SERIES.
EQUIPMENT REQUIRED - 9100B 9125A/B

09100-73020 SMOOTHING AND DIFFERENTIATION OF NOISY DIGITAL DATA
LAST REVISION 11/30/70 C. KORBELIK
CUSTOMER SUBMITTED PRICE 10.00
THIS PROGRAM SINGLE-AND DOUBLE-SMOOTHS NOISY DIGITAL DATA,
AND CAN PROVIDE THE DIFFERENTIAL OF THE DOUBLE-SMOOTHED DATA.
IT CAN ALSO BE USED TO CALCULATE QUADRUPLE-SMOOTHED INTEGRAL
DATA AND ITS DIFFERENTIAL.
THIS PROGRAM COURTESY EG&G, INC., GOLETA, CALIF.
EQUIPMENT REQUIRED - 9100A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

CATEGORY - STOCK ANALYSIS

09100-73XXX

REFER TO THE LAST ENTRY IN THIS PROGRAM CATEGORY FOR ORDERING INFORMATION ON SETS OF PRERECORDED MAGNETIC CARDS FOR THIS PACKET. IF CARDS ARE NOT AVAILABLE, AS INDICATED BY NO ORDERING ENTRY, CONSULT YOUR LOCAL HP CALCULATOR SALESMAN FOR FURTHER INFORMATION.

PART NUMBER

PROGRAM TITLE

09100-73012 STOCK TRANSACTION 100-SHARE LOT
LAST REVISION 12/01/69 W. A. CUMMINGS
UNPUBLISHED PRICE 10.00
THIS PROGRAM CALCULATES NET COST, NET SELLING PRICE, AND NET
PROFIT OR LOSS FOR A 100-SHARE LOT OF STOCK.
EQUIPMENT REQUIRED - 9100A 9100B

09100-73016 STOCK MARKET PLOT ROUTINE
LAST REVISION 12/01/69 W. A. CUMMINGS
UNPUBLISHED PRICE 10.00
THE PROGRAM PLOTS THE HIGH, LOW AND CLOSE, AS WELL AS ON A
LOGARITHMIC 'EQUAL PERCENTAGE' CHART.
EQUIPMENT REQUIRED - 9100A 9100B 9125A/B

09100-76009 STOCK MARKET PLOT
LAST REVISION 12/01/69 T. OSBORNE
UNPUBLISHED PRICE 10.00
THE PROGRAM PLOTS THE HIGH, LOW AND CLOSE, AS WELL AS ON A
LOGARITHMIC (EQUAL PERCENTAGE) CHART.
EQUIPMENT REQUIRED - 9100A 9100B 9125A/B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

CATEGORY - SECONDARY EDUCATION

09100-758XX

REFER TO THE LAST ENTRY IN THIS PROGRAM CATEGORY FOR ORDERING INFORMATION ON SETS OF PRERECORDED MAGNETIC CARDS FOR THIS PACKET. IF CARDS ARE NOT AVAILABLE, AS INDICATED BY NO ORDERING ENTRY, CONSULT YOUR LOCAL HP CALCULATOR SALESMAN FOR FURTHER INFORMATION.

PART NUMBER

PROGRAM TITLE

09100-75801 TIMEKEEPER

LAST REVISION 01/10/70 9100 LIBRARY
PUBLISHED

CREATES DIGITAL CLOCK. DISPLAYS HOUR, MINUTES, AND SECONDS.
EQUIPMENT REQUIRED - 9100A 9100B

09100-75802 PRIME NUMBER GENERATOR

LAST REVISION 01/10/70 9100A LIBRARY
PUBLISHED

DISPLAYS THE PRIME NUMBERS BETWEEN AN UPPER LIMIT AND A LOWER LIMIT.
EQUIPMENT REQUIRED - 9100A 9120A

09100-75803 SIN (X) MACLAURIN SERIES PLOT

LAST REVISION 01/10/70 T. L. GILDEA
UNPUBLISHED

PRICE 10.00

PLOTS THE TERM BY TERM EXPANSION FOR THE MACLAURIN SERIES OF THE SIN (X).
EQUIPMENT REQUIRED - 9100A 9100B 9125A/B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-75804 INTEGRATION-MIDDLE SUMS (PLOT)
LAST REVISION 01/10/70 KEYBOARD VOL. 2 NO. 1
PUBLISHED PRICE 10.00
PLOTS A FUNCTION AND PLOTS THE AREA UNDER THE CURVE USING
MIDDLE SUMS RECTANGLES, FUNCTION IS INPUTTED.
EQUIPMENT REQUIRED - 9100B 9120A 9125A/B

09100-75805 CHARLES' LAW PLOT (VOLUME VS. TEMPERATURE)
LAST REVISION 01/10/70 H. J. WEISSMAN
PUBLISHED PRICE 10.00
PLOTS CHARLES' LAW RELATIONSHIP.
EQUIPMENT REQUIRED - 9100A 9100B 9125A/B

09100-75806 BOYLE'S LAW PLOT (VOLUME VS. PRESSURE)
LAST REVISION 01/10/70 H. J. WEISSMAN
PUBLISHED PRICE 10.00
PLOTS BOYLE'S LAW SHOWING RELATIONSHIP BETWEEN VOLUME AND
PRESSURE.
EQUIPMENT REQUIRED - 9100A 9100B 9120A 9125A/B

09100-75807 PLOT OF ADDITION OF DIRECTED NUMBERS
LAST REVISION 01/10/70 H. J. WEISSMAN
PUBLISHED PRICE 10.00
PLOTS REAL NUMBERS AS VECTORS AND SHOWS SUM ON DISPLAY.
EQUIPMENT REQUIRED - 9100A 9100B 9125A/B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER	PROGRAM TITLE
09100-75808	DRILL AND PRACTICE FOR ADDITION OF DIRECTED NUMBERS (PLOT)
	LAST REVISION 01/10/70 H. J. WEISSMAN
	PUBLISHED PRICE 10.00
	PLOTS SUM OF DIRECTED NUMBERS AS VECTORS AND THEN ASKS USER
	TO ENTER SUM ON DISPLAY. COMPUTER DETERMINES IF ENTRY IS
	CORRECT.
EQUIPMENT REQUIRED -	9100A 9100B 9125A/B

09100-75809	ELECTRON MOTION IN AN ELECTRO MAGNETIC FIELD (PLOT)
	LAST REVISION 01/10/70 J. MERRILL
	UNPUBLISHED PRICE 10.00
	PLOTS THE PATH OF AN ELECTRON IN AN ELECTRO MAGNETIC FIELD
	INPUT INITIAL VELOCITY OF ELECTRON, FIELD STRENGTHS, DELTA-
	TIME AND INITIAL DIRECTION.
EQUIPMENT REQUIRED -	9100A 9100B 9125A/B

09100-75810	PLOT OF PROJECTILE MOTION WITH DRAG
	LAST REVISION 01/10/70 EDUC. DEMO
	PUBLISHED PRICE 10.00
	PLOTS THE PATH OF A PROJECTILE IN A RESISTIVE MEDIUM, SUCH AS
	AIR. INPUT INITIAL DIRECTION AND VELOCITY, AND RESISTANCE.
EQUIPMENT REQUIRED -	9100A 9100B 9125A/B

09100-75811	PLOT OF FRAUNHOFER DIFFRACTION
	LAST REVISION 01/10/70 T. L. GILDEA
	UNPUBLISHED PRICE 10.00
	PLOT THE INTERFERENCE PATTERNS PRODUCED BY A FRAUNHOFER
	DIFFRACTION OF MONOCHROMATIC LIGHT THRU MULTIPLE SLIT GRATING
EQUIPMENT REQUIRED -	9100A 9100B 9125A/B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-75812 PLOT OF SIMPLE PENDULUM

LAST REVISION 01/10/70 T. L. GILDEA

UNPUBLISHED

PRICE 10.00

PLOTS DISPLACEMENT VS. TIME FOR A SIMPLE PENDULUM.

EQUIPMENT REQUIRED - 9100A 9100B 9120A 9125A/B

09100-75814 CONIC SECTION PLOT (ANALYTIC) GENERAL QUADRATIC EQUATION

LAST REVISION 10/02/70 T. L. GILDEA

UNPUBLISHED

PRICE 20.00

IDENTIFIES THE CONIC SECTION AND ITS EQUATION FROM THE

GENERAL QUADRATIC EQUATION AND THEN PLOTS THE CURVE.

EQUIPMENT REQUIRED - 9100B 9120A 9125A/B

09100-75815 CONIC SECTION PLOT - ANGLE DEVELOPMENT METHOD

LAST REVISION 01/10/70 H. J. WEISSMAN

UNPUBLISHED

PRICE 10.00

PLOTS CONIC SECTION AND DISPLAYS EQUATION FOR CONIC SECTION

BY INPUTTING DESCRIPTION OF A CONE AND INTERSECTING PLANE.

EQUIPMENT REQUIRED - 9100A 9100B 9120A 9125A/B

09100-75816 INTEGRATION PLOT - UPPER AND LOWER SUMS.

LAST REVISION 02/13/70 T. L. GILDEA

UNPUBLISHED

PRICE 10.00

PLOTS AN INPUTTED FUNCTION AND PLOTS THE APPROXIMATION OF THE

AREA UNDER THE FUNCTION USING UPPER OR LOWER SUMS RECTANGLES.

EQUIPMENT REQUIRED - 9100B 9120A 9125A/B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-75817 FALLING BODY TRAJECTORY PLOT

LAST REVISION 10/02/70 H. J. WEISSMAN

UNPUBLISHED

PRICE 10.00

PLOTS THE PATH OF A FALLING BODY USING A STROBE EFFECT TO
STOP THE ACTION AT A SPECIFIED TIME INCREMENT.

EQUIPMENT REQUIRED - 9100A 9100B 9120A 9125A/B

09100-75818 DERIVATIVE PLOT

LAST REVISION 10/02/70 T. L. GILDEA

UNPUBLISHED

PRICE 10.00

PLOTS INPUTTED FUNCTION AND ITS DERIVATIVE AT POINTS ON THE
CURVE AT A SPECIFIED INCREMENT.

EQUIPMENT REQUIRED - 9100B 9120A 9125A/B

09100-75819 MULTIPLICATION OF DIRECTED NUMBERS (PLOT)

LAST REVISION 10/02/70 H. J. WEISSMAN

UNPUBLISHED

PRICE 10.00

PLOTS THE MULTIPLICATION OF REAL NUMBERS USING VECTORS AND
DISPLAYS THE PRODUCT.

EQUIPMENT REQUIRED - 9100A 9100B

09100-75820 PATH LENGTH OF A FALLING BODY

LAST REVISION 10/02/70 T. L. GILDEA

UNPUBLISHED

PRICE 10.00

CALCULATES THE PATH LENGTH OF A FALLING BODY BY APPROXIMATING
THE LENGTH OF THE CURVE USING STRAIGHT LINE SEGMENTS BETWEEN
POINTS ON CURVE.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-75821 RATIONAL APPROXIMATION FOR SQUARE ROOT
LAST REVISION 10/03/70 H. J. WEISSMAN
UNPUBLISHED PRICE 10.00
APPROXIMATES THE SQUARE ROOT OF A FUNCTION BY THE DIVIDE AND
AVERAGE METHOD.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-75822 LIM X TO NTH POWER AS N APPROACHES ZERO
LAST REVISION 10/03/70 H. J. WEISSMAN
UNPUBLISHED PRICE 10.00
CALCULATES X TO NTH POWER AS N APPROACHES 0. PROGRAM FLASHES
EACH TERM IN SERIES.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-75823 TEST SCORING PROGRAM - 24 QUESTION TEST
LAST REVISION 10/03/70 KEYBOARD VOL. 3 NO. 1
PUBLISHED PRICE 10.00
SCORES 24 QUESTION, MULTIPLE CHOICE TEST (4 POSSIBILITIES)
USING MARK SENSE CARDS. PRINTS OUT QUESTIONS MISSED, CORRECT
CHOICE, STUDENT CHOICE AND AVERAGE. ALSO PRINTS CLASS AVERAGE
EQUIPMENT REQUIRED - 9100A 9100B 9125A/B 9160A

09100-75824 NEWTON'S METHOD
LAST REVISION 10/03/70 H. J. WEISSMAN
PUBLISHED PRICE 10.00
CALCULATES REAL ROOTS OF A FUNCTION USING NEWTON'S METHOD.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-75825 SIMPLEX METHOD FOR LINEAR PROGRAMMING

LAST REVISION 03/01/71 KEYBOARD VOL. 2 NO. 1

PUBLISHED

PRICE 50.00

ACCEPTS UP TO EIGHT CONSTRAINTS IN EIGHT VARIABLES AND SOLVES
FOR VALUES WHICH MAXIMIZE OR MINIMIZE AN ASSOCIATED
OBJECTIVE FUNCTION.

EQUIPMENT REQUIRED - 9100A 9100B 9120A 9160A 9101A

09100-75831 SIMPLE PENDULUM MOTION

LAST REVISION 05/07/70 T. L. GILDEA

UNPUBLISHED

PRICE 10.00

PLOTS ANGULAR DISPLACEMENT VS. TIME FOR SIMPLE PENDULUM
GIVEN LENGTH AND INITIAL ANGLE.

EQUIPMENT REQUIRED - 9100A 9100B 9125A/B

09100-75851 (0001) DIVISION BY ZERO

LAST REVISION 01/10/70 H. J. WEISSMAN

UNPUBLISHED

PRICE 10.00

DEMONSTRATES WHAT HAPPENS WHEN THE DENOMINATOR OF A FRACTION
APPROACHES ZERO.

EQUIPMENT REQUIRED - 9100A 9100B

09100-75853 GREATEST COMMON FACTOR - TEST METHOD

PGM 0001 LAST REVISION 01/10/70 H. J. WEISSMAN

UNPUBLISHED

PRICE 10.00

FINDS THE GREATEST COMMON FACTOR BY TESTING ALL POSSIBLE
VALUES.

EQUIPMENT REQUIRED - 9100A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-75853 GREATEST COMMON FACTOR - EUCLIDEAN ALGORITHM
PGM 0002 LAST REVISION 01/10/70 H. J. WEISSMAN
UNPUBLISHED PRICE 10.00
FINDS THE GREATEST COMMON FACTOR BY USING THE EUCLIDEAN
ALGORITHM.
EQUIPMENT REQUIRED - 9100A

09100-75853 MULTIPLICATION BY ADDITION
PGM 0003 LAST REVISION 01/10/70 J. H. WEISSMAN
UNPUBLISHED PRICE 10.00
MULTIPLIES RATIONAL NUMBERS BY REPEATED ADDITIONS.
EQUIPMENT REQUIRED - 9100A 9100B

09100-75853 SOLUTION OF A LINEAR EQUATION BY TRIAL AND ERROR
PGM 0004 LAST REVISION 01/10/70 J. H. WEISSMAN
UNPUBLISHED PRICE 10.00
DETERMINES IF A GUESS FOR THE SOLUTION OF A LINEAR EQUATION
IS A ROOT OR WHETHER IT IS TOO LARGE OR TOO SMALL.
EQUIPMENT REQUIRED - 9100A 9100B 9125A/B

09100-75853 FACTORS OF A NUMBER
PGM 0005 LAST REVISION 01/10/70 H. J. WEISSMAN
UNPUBLISHED PRICE 10.00
FINDS THE FACTORS OF A NUMBER BY TESTING EACH NUMBER LESS
THE INPUTTED NUMBER.
EQUIPMENT REQUIRED - 9100A 9100B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-75853 IMPROVED METHOD-FACTORS OF A NUMBER.

PGM 0006 LAST REVISION 01/09/70 H. J. WEISSMAN
UNPUBLISHED

PRICE 10.00

FINDS THE FACTORS OF AN INPUTTED NUMBER BY CHECKING TO SEE IF
IT IS EVEN AND TESTING ALL POSSIBLE FACTORS UP THROUGH $N/2$.

EQUIPMENT REQUIRED - 9100A 9100B

09100-75855 POWER APPROX. USING SQUARE ROOT-X AND MULTIPLICATION

PGM 0001 LAST REVISION 10/13/70 H. J. WEISSMAN
UNPUBLISHED

PRICE 10.00

RAISES ANY NON-NEGATIVE REAL NUMBER TO ANY REAL POWER BY
USING SQUARE ROOTS AND MULTIPLICATION ONLY.

EQUIPMENT REQUIRED - 9100A 9100B

09100-75859 EDUCATION POLAR PLOT

PGM 0001 LAST REVISION 01/10/70 H. J. WEISSMAN
UNPUBLISHED

PRICE 10.00

PLOTS AN INPUTTED FUNCTION IN POLAR COORDINATES.

EQUIPMENT REQUIRED - 9100A 9100B 9125A/B

09100-75863 SATELLITE ORBIT PLOT (HARVARD PROJECT PHYSICS)

PGM 0001 LAST REVISION 05/03/71 H. J. WEISSMAN
UNPUBLISHED

PRICE 10.00

PLOTS THE PATH OF A SATELLITE UNDER THE INFLUENCE OF CENTRAL
GRAVITATIONAL FORCE. PLOT USES STROBE TECHNIQUE.

EQUIPMENT REQUIRED - 9100A 9100B 9125A/B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-75879 FORECASTING STUDENT ENROLLMENTS
PGM 0001 LAST REVISION 01/10/70 H. J. WEISSMAN
UNPUBLISHED PRICE 10.00
FORECASTS FUTURE STUDENT ENROLLMENTS AND SMOOTHES EXISTING
ENROLLMENTS USING DOUBLE EXPONENTIAL CURVE SMOOTHING.
EQUIPMENT REQUIRED - 9100A 9100B

09100-75879 120-QUESTION TEST SCORING PROGRAM.
PGM 0002 LAST REVISION 01/06/70 J. MOORE
UNPUBLISHED PRICE 10.00
GRADES TESTS WITH UP TO 120 QUESTIONS. USES 5 MARK SENSE
CARDS, DISPLAYS NUMBER STUDENT MISSED, INCORRECT GUESS AND
CORRECT GUESS.
EQUIPMENT REQUIRED - 9100B 9120A 9160A

09100-75879 QUIZ GRADING WITH STUDENT ID NUMBER.
PGM 0003 LAST REVISION 10/28/70 T. L. GILDEA
PUBLISHED PRICE 10.00
GRADES 20 QUESTION MULTIPLE CHOICE QUIZ, PRINTS STUDENT
NUMBER, QUESTION NUMBERS MISSED, AND GRADE.
EQUIPMENT REQUIRED - 9100A 9100B 9120A 9160A

09100-75879 QUIZ ITEM ANALYSIS
PGM 0004 LAST REVISION 04/10/70 T. L. GILDEA
UNPUBLISHED PRICE 10.00
ACCEPTS 9160A QUIZ CARDS AND PRINTS NUMBER OF STUDENTS GIVING
EACH POSSIBLE ANSWER.
EQUIPMENT REQUIRED - 9100B 9120A 9160A

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HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

CATEGORY - HIGHER EDUCATION

09100-759XX

REFER TO THE LAST ENTRY IN THIS PROGRAM CATEGORY FOR ORDERING INFORMATION ON SETS OF PRERECORDED MAGNETIC CARDS FOR THIS PACKET. IF CARDS ARE NOT AVAILABLE, AS INDICATED BY NO ORDERING ENTRY, CONSULT YOUR LOCAL HP CALCULATOR SALESMAN FOR FURTHER INFORMATION.

PART NUMBER	PROGRAM TITLE
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09100-75901	CONIC SECTION DETERMINATION WITH PLOT
	LAST REVISION 09/01/69 9100B LIBRARY
	PUBLISHED

GIVEN THE GENERATING ANGLE OF A CONE, B, AND THE INTERSECTION ANGLE WITH A PLANE, A, THIS PROGRAM DETERMINES AND PLOTS THE CONIC SECTION.

EQUIPMENT REQUIRED - 9100B 9120A

09100-75903	COLLISION ON AN AIR TABLE
	LAST REVISION 04/24/71
	CUSTOMER SUBMITTED

PRICE 10.00

THIS PROGRAM ACCEPTS DATA FROM A MARKED CARD AND CALCULATES THE MOMENTUM OF TWO PUCKS BEFORE AND AFTER COLLISION ON AN AIR TABLE.

CONTACT DR. JOHN WHITSON, E. TENNESSEE STATE UNIV., JOHNSON CITY, TENN.
EQUIPMENT REQUIRED - 9100A 9100B 9120A 9125A/B 9160A

09100-75904	STUDENT RECORDS PROGRAM
	LAST REVISION 07/05/71 KEYBOARD VOL. 3 NO. 3
	PUBLISHED

PRICE 10.00

USING MARKED CARDS TO INPUT DATA, THIS PROGRAM CALCULATES THE SEMESTER AVERAGE FOR EACH STUDENT, THE CLASS AVERAGE AND STANDARD DEVIATION. FOR EACH STUDENT THE PROGRAM ACCEPTS UP TO FOUR TWO-DIGIT GRADES AND TWO THREE-DIGIT GRADES.

K. R. LINDFORS, PH.D.

EQUIPMENT REQUIRED - 9100B 9120A 9160A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

CATEGORY - BAUTECHNISCHE 1 (GERMAN STRUCTURES VOL.1) 09100-77000

REFER TO THE LAST ENTRY IN THIS PROGRAM CATEGORY FOR ORDERING INFORMATION ON SETS OF PRERECORDED MAGNETIC CARDS FOR THIS PACKET. IF CARDS ARE NOT AVAILABLE, AS INDICATED BY NO ORDERING ENTRY, CONSULT YOUR LOCAL HP CALCULATOR SALESMAN FOR FURTHER INFORMATION.

PROGRAM PRICE 7.50

PART NUMBER	PROGRAM TITLE
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09100-77001	ZWEIFELDTAEGER
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LAST REVISION 01/15/70	BAUTECHNISCHE PROGRAMME 1
PUBLISHED	

DIESES PROGRAMM BERECHNET FUER FELDWEISE VERAENDERLICHE EIGENGEWICHTS- UND VERKEHRSLASTEN.. MAXIMALE UND MINIMALE AUFLAGEKRAEFTE UND QUERKRAEFTE, MAXIMALE FELDMOMENTE UND DIE ZUGEHUERIGEN VERGLEICHSFELDMOMENTE FUER VOLLEINSPANNUNG, MINIMALES STUETZMOMENT UND DAS ABGEMINDERTE STUETZMOMENT FUER FREI DREHBARE LAGERUNG.

EQUIPMENT REQUIRED - 9100A 9100B

09100-77002	DREIFELDTAEGER
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LAST REVISION 01/15/70	BAUTECHNISCHE PROGRAMME 1
PUBLISHED	

DIESES PROGRAMM BERECHNET FUER FELDWEISE VERAENDERLICHE EIGENGEWICHTS- UND VERKEHRSLASTEN.. MAXIMALE UND MINIMALE AUFLAGEKRAEFTE UND QUERKRAEFTE, MAXIMALE FELDMOMENTE UND DIE ZUGEHUERIGEN VERGLEICHSFELDMOMENTE FUER VOLLEINSPANNUNG, MINIMALE STUETZMOMENTE UND DIE ABGEMINDERTEN STUETZMOMENTE FUER FREI DREHBARE LAGERUNG.

EQUIPMENT REQUIRED - 9100A 9100B

09100-77003	ZWEIFELDTAEGER MIT KRAGARMEN
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LAST REVISION 01/15/70	BAUTECHNISCHE PROGRAMME 1
PUBLISHED	

DIESES PROGRAMM BERECHNET IN VERBINDUNG MIT DEN PROGRAMMEN FUER BELASTUNGSGLIEDER DAS STUETZMOMENT DES ZWEIFELDTAEGERS BEI BELIEBIGER BELASTUNG. FELDWEISE VERAENDERLICHES TRAEGERHEITSMOMENT.

EQUIPMENT REQUIRED - 9100A 9100B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-77004 DREIFELDTRAEGER MIT KRAGARMEN

LAST REVISION 01/15/70 BAUTECHNISCHE PROGRAMME 1
PUBLISHED

DIESES PROGRAMM BERECHNET IN VERBINDUNG MIT DEN PROGRAMMEN
FUER BELASTUNGSGLIEDER DIE STUETZMOMENTE DES DREIFELDTRAEGER
BEI BELIEBIGER BELASTUNG. FELDWEISE VERAENDERLICHES
TRAEGHEITSMOMENT.

EQUIPMENT REQUIRED - 9100A 9100B

09100-77005 VIERFELDTRAEGER MIT KRAGARM

LAST REVISION 01/15/70 BAUTECHNISCHE PROGRAMME 1
PUBLISHED

DIESES PROGRAMM BERECHNET IN VERBINDUNG MIT DEN PROGRAMMEN
FUER BELASTUNGSGLIEDER DIE STUETZMOMENTE DES VIERFELDTRAEGER
BEI BELIEBIGER BELASTUNG. NUR EINMALIGE EINGABE DER
STUETZWEITEN BEI BELIEBIGER ANZAHL DER LASTFAELLE. FELDWEISE
VERAENDERLICHES TRAEGHEITSMOMENT.

EQUIPMENT REQUIRED - 9100A 9100B

09100-77006 FUENFFELDTRAEGER MIT KRAGARM

LAST REVISION 01/15/70 BAUTECHNISCHE PROGRAMME 1
PUBLISHED

DIESES PROGRAMM BERECHNET IN VERGINDUNG MIT DEN PROGRAMMEN
FUER BELASTUNGSGLIEDER DIE STUETZMOMENTE DES
FUENFFELDTRAEGER BEI BELIEBIGER BELASTUNG. FELDWEISE
VERAENDERLICHES TRAEGHEITSMOMENT.

EQUIPMENT REQUIRED - 9100A 9100B

09100-77007 BELASTUNGSGLIEDER

LAST REVISION 01/15/70 BAUTECHNISCHE PROGRAMME 1
PUBLISHED

DIESE PROGRAMME BERECHNEN DIE BELASTUNGSGLIEDER FUEER JEDES
BELIEBIGE LASTBILD AUS AUFLAST UND FUEER DIE LASTFAELLE
UNTERSCHIEDLICHE TEMPERATUR UND STUETZSENSUNKUNG. ES KOENNEN
BELIEBIG VIELE LASTFAELLE UEBERLAGERT WERDEN.

EQUIPMENT REQUIRED - 9100A 9100B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-77008 EINFELDTRAEGER

LAST REVISION 01/15/70 BAUTECHNISCHE PROGRAMME 1
PUBLISHED

DIESES PROGRAMM BERECHNET DIE AUFLAGERKRAEFTE, DEN
QUERKRAFTNULLPUNKT UND DAS MAXIMALE FELDMOMENT DES
EINFELDTRAEGER MIT RANDMOMENTEN UND UNTER JEDER BELIEBIGEN
BELASTUNG (AUCH EINZELLASTEN).

EQUIPMENT REQUIRED - 9100A 9100B

09100-77009 STAHLBETONRECHTECKQUERSCHNITT UNTER REINER BIEG. (N-VERFAHREN)

LAST REVISION 01/15/70 BAUTECHNISCHE PROGRAMME 1
PUBLISHED

DIESES PROGRAMM BERECHNET BEI GEGEBENEM QUERSCHNITT DIE
BETONDRUCKSPANNUNGEN UND DIE ERFORDERLICHE BEWEHRUNG FUER DAS
BEMESSUNGSMOMENT.

EQUIPMENT REQUIRED - 9100A 9100B

09100-77010 STAHLBETONRECHTECKQUERSCHNITT, BIEGUNG MIT LAENGSKRAFT

LAST REVISION 01/15/70 BAUTECHNISCHE PROGRAMME 1
PUBLISHED

DIESES PROGRAMM ERMITTELT BEI GEGEBENEN QUERSCHNITTEN (KLEINE
AUSSERMITTIGKEIT) DIE VORHANDENEN BETONDRUCKUND
ZUGSPANNUNGEN.

EQUIPMENT REQUIRED - 9100A 9100B

09100-77011 STAHLBETONRECHTECKQUERSCHNITT, BIEGUNG MIT LAENGSKRAFT

LAST REVISION 01/15/70 BAUTECHNISCHE PROGRAMME 1
PUBLISHED

DIESES PROGRAMM ERMITTELT BEI GEGEBENEM BETONQUERSCHNITT
(GROSSE AUSSERMITTIGKEIT) FUER JEDES SPANNUNGSPAAR SIGMA B /
SIGMA E DIE ZUGEHÖRIGEN BEWEHRUNGEN FE UND FE'.

EQUIPMENT REQUIRED - 9100A 9100B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-77012 WINKELSTUETZMAUER IM EBENEN GELAENDE
LAST REVISION 01/15/70 BAUTECHNISCHE PROGRAMME 1
PUBLISHED
DIESES PROGRAMM BERECHNET WAHLWEISE FUER AKTIVEN ERDDRUCK DIE
KIPPSICHERHEIT, GLEITSICHERHEIT UND DIE BODENPRESSUNG FUER
VOLLAST SOWIE DAS WANDMOMENT AN JEDER BELIEBIGEN STELLE.
EQUIPMENT REQUIRED - 9100A 9100B

09100-77013 WINKELSTUETZMAUER IN GENEIGTEM GELAENDE
LAST REVISION 01/15/70 BAUTECHNISCHE PROGRAMME 1
PUBLISHED
DIESES PROGRAMM BERECHNET DIE KIPPSICHERHEIT,
GLEICHSICHERHEIT UND DIE MAXIMALE BODENPRESSUNG SOWIE DAS
WANDMOMENT AN JEDER STELLE.
EQUIPMENT REQUIRED - 9100A 9100B

09100-77014 QUADRATISCHES EINZELFUNDAMENT UNTER MITTIGER BELASTUNG
LAST REVISION 01/15/70 BAUTECHNISCHE PROGRAMME 1
PUBLISHED
DIESES PROGRAMM BERECHNET BEI GEGEBENER ZULAESSIGER
BODENPRESSUNG DIE FUNDAMENTABMESSUNGEN, DIE ERFORDERLICHE
BEWEHRUNG FUER ZWEI GESTAFFELTE BEREICHE (MITTLERE HAELFTE,
AEUSSERE VIERTEL) UND DIE SCHUBSPANNUNG.
EQUIPMENT REQUIRED - 9100A 9100B

09100-77015 GRENZMAUERFUNDAMENT
LAST REVISION 01/15/70 BAUTECHNISCHE PROGRAMME 1
PUBLISHED
DIESES PROGRAMM BERECHNET DIE BODENPRESSUNGEN UND DAS
WANDMOMENT MO FUER EIN EINSEITIGES, IN EINE WAND
EINGESPANNTES FUNDAMENT (STIEFELFUNDAMENT).
EQUIPMENT REQUIRED - 9100A 9100B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-77016 VERSCHIEBLICHES KEHLBALKENDACH

LAST REVISION 01/15/70 BAUTECHNISCHE PROGRAMME 1
PUBLISHED

DIESES PROGRAMM BERECHNET DIE AUFLAGERKRAEFTE H, V UND DIE
KEHLBALKENLAENGSKRAFT NDE SOWIE DAS SPARRENMENT AM
KEHLBALKENANSCHNITT MIT ZUGHOERIGER NORMALKRAFT.

EQUIPMENT REQUIRED - 9100A 9100B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

CATEGORY - BAUTECHNISCHE 11 (GERMAN STRUCT. VOL. 2) 09100-77017

REFER TO THE LAST ENTRY IN THIS PROGRAM CATEGORY FOR ORDERING INFORMATION ON SETS OF PRERECORDED MAGNETIC CARDS FOR THIS PACKET. IF CARDS ARE NOT AVAILABLE, AS INDICATED BY NO ORDERING ENTRY, CONSULT YOUR LOCAL HP CALCULATOR SALESMAN FOR FURTHER INFORMATION.

PROGRAM PRICE 12.50

PART NUMBER	PROGRAM TITLE
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09100-77018	TRAEGER UEBER N FELDER, GLEICHSTRECKENLAST LAST REVISION 01/15/71 BAUTECHNISCHE PROGRAMME 11 PUBLISHED DIESES PROGRAMM BERECHNET DIE FOLGENDEN SCHNITTGROESSEN DES TRAEGER UEBER N - FELDER BEI FELDWEISE VERAENDERLICHER GLEICHLAST.. STUETZMOMENTE, FELDMOMENTE, QUERKRAEFTE UND AUFLAGERKRAEFTE. EQUIPMENT REQUIRED - 9100B 9120A
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09100-77019	TRAEGER UEBER N FELDER, BELIEBIGE LAST LAST REVISION 01/15/71 BAUTECHNISCHE PROGRAMME 11 PUBLISHED DIESES PROGRAMM BERECHNET DIE STUETZMOMENTE VON DURCHLAUFTRAEGERN FUER ALLE PRAKTISCH WICHTIGEN FAELE (ANZAHL DER FELDER IST BELIEBIG, JEDES BELIEBIGE BELASTUNGSBILD MOEGlich ETC.) EQUIPMENT REQUIRED - 9100B 9120A
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09100-77020	BELASTUNGSGLIEDER LAST REVISION 01/15/71 BAUTECHNISCHE PROGRAMME 11 PUBLISHED DIESES PROGRAMM FASST ALLE LASTFAELLE DES PROGRAMMS 09100-77007 AUF EINER KARTE ZUSAMMEN. ABSCHNITTWEISE GERADLINIG VERAENDERLICHE STRECKENLASTEN KOENNEN EINGEGEBEN WERDEN, SO DASS EINE ADDITION UND SUBTRAKTION VON TEILLASTFLAECHEEN ENTFAEHLT. EQUIPMENT REQUIRED - 9100B 9120A
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HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-77021 ZWEIFELDTRAEGER MIT KRAGARM

LAST REVISION 01/15/71 BAUTECHNISCHE PROGRAMME 11
PUBLISHED

BERECHNET FUER BELIEBIGE STUETZWEITEN UND FELDWEISE
VERAENDERLICHE EIGENGEWICHTS- UND VERKEHRSLASTEN SOWIE FUER
KRAGMOMENTE AUS EIGENGEWICHT UND VERKEHRSLAST DIE FOLGENDEN
SCHNITTGROESSEN.. AUFLAGERKRAEFTE UND QUERKRAEFTE, MAXIMALE
FELDMOMENTE UND VERGLEICHSFELDMOMENTE NACH DIN 1045 FUER
EINSEITIGE EINSpanNUNG, STUETZMOMENTE MB UND DIE ABMINDERUNG
VON MIN MB.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-77022 FACHWERKE

LAST REVISION 01/15/71 BAUTECHNISCHE PROGRAMME 11
PUBLISHED

DIESES PROGRAMM BERECHNET DIE STABKRAEFTE EBENER FACHWERKE
BEI BELIEBIGER LAGE UND ANZAHL DER KNOTEN UND BEI BELIEBIGEN
KNOTENLASTEN, WENN DIE FOLGENDE VORAUSSETZUNG ERFUELLT IST..
EINE AUFL0ESUNG DES SYSTEMS NACH CREMONA MUSS MOEGLICH SEIN.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-77023 BERECHNUNG VON QUERSCHNITTSWERTEN

LAST REVISION 01/15/71 BAUTECHNISCHE PROGRAMME 11
PUBLISHED

DIESES PROGRAMM BERECHNET FUER JEDE BELIEBIGE, DURCH EINEN
POLYGONZUG UMSCHLOSSENE FLAECHE DIE FOLGENDEN
QUERSCHNITTSWERTE.. FLAECHEINHALT, SCHWERPUNKTABSTAENDE,
STATISCHE MOMENTE, TRAEGHEITSMOMENTE, ZENTRIFUGALMOMENTE.

EQUIPMENT REQUIRED - 9100B 9120A

09100-77024 STAHLBETONRECHTECKQUERSCHNITT, SPANNUNGSNACHWEIS, REINE BIEG.

LAST REVISION 01/15/71 BAUTECHNISCHE PROGRAMME 11
PUBLISHED

DIESES PROGRAMM BERECHNET BEI GEGEBENEN QUERSCHNITTEN UND
BEI GEGEBENEM MOMENT DIE FOLGENDEN WERTE NACH DEM
N - VERFAHREN.. NULLINIENHOEHE, BETONDRUCKSPANNUNG,
STAHLZUGSPANNUNG, STAHLDRUCKSPANNUNG.

EQUIPMENT REQUIRED - 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-77025 STAHLBETONPLATTENBALKEN, SPANNUNGSNACHWEIS
LAST REVISION 01/15/71 BAUTECHNISCHE PROGRAMME 11
PUBLISHED

DIESES PROGRAMM BERECHNET BEI GEGEBENEN QUERSCHNITTEN UND BEI
GEGEBENEM MOMENT UNTER BERUECKSICHTIGUNG DER
BETONDRUCKSPANNUNGE IM STEG DIE FOLGENDEN WERTE NACH DEM
N - VERFAHREN.. NULLINIENHOEHE, BETONDRUCKSPANNUNG,
STAHLZUGSPANNUNG, STAHLDRUCKSPANNUNG.

EQUIPMENT REQUIRED - 9100B 9120A

09100-77026 FELDMOMENTE DURCHLAUFENDER PLATTEN
LAST REVISION 01/15/71 BAUTECHNISCHE PROGRAMME 11
PUBLISHED

DIESES PROGRAMM BERECHNET DIE FELDMOMENTE DURCHLAUFENDER
PLATTEN NACH DEM BELASTUNGS - UMORDNUNGS - VERFAHREN IN
VERBINDUNG MIT DEM VERFAHREN VON MARCUS.

EQUIPMENT REQUIRED - 9100B 9120A

09100-77027 KREUZWEISE BEWEHRTE PLATTEN
LAST REVISION 01/15/71 BAUTECHNISCHE PROGRAMME 11
PUBLISHED

DIESES PROGRAMM BERECHNET NACH DEM VERFAHREN VON MARCUS FUER
ALLE 6 LAGERUNGSARTEN DIE LASTENANZEILZAHLEN VON 'G' UND 'Q',
DIE ABMINDERUNGSZAHLEN UND DIE FELD- UND EINSPANNMOMENTE.

EQUIPMENT REQUIRED - 9100B 9120A

09100-77028 DECKENPLATTEN, RECHTECKQUERSCHNITT N - VERFAHREN
LAST REVISION 01/15/71 BAUTECHNISCHE PROGRAMME 11
PUBLISHED

DIESES PROGRAMM BERECHNET BEI GEGEBENEM QUERSCHNITT UND
MOMENT DIE BETONDRUCKSPANNUNG UND DIE BEWEHRUNG.

EQUIPMENT REQUIRED - 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-77029 EINZELFUNDAMENT UNTER RANDSTUETZE, ELASTISCHE
LAST REVISION 01/15/71 BAUTECHNISCHE PROGRAMME 11
PUBLISHED
DIESES PROGRAMM BERECHNET DIE BODENPRESSUNGEN UND DAS MOMENT
AM STUETZENFUSS UNTER BERUECKSICHTIGUNG EINER ELASTISCHEN
BETTUNG.
EQUIPMENT REQUIRED - 9100B 9120A

09100-77030 WINDSCHEIBEN
LAST REVISION 01/15/71 BAUTECHNISCHE PROGRAMME 11
PUBLISHED
DIESES PROGRAMM ERMITTELT DIE AUFTEILUNG DE WINDLASTEN AUF
EINE BELIEBIGE ANZAHL PARALLELER SCHEIBEN BZW. AUF BELIEBIGE
QUERSCHNITTE MIT VORGEgebenEM TRAEgHEITSMOMENT SOWIE DIE
VERTEILUNG DES EXZENTRIZITAETSMOMENTES AUS WIND AUF GIEBEL.
EQUIPMENT REQUIRED - 9100B 9120A

09100-77031 STAHLBETONRECHTECKQUERSCHNITT, REINE BIEGUNG, N - FREI
LAST REVISION 01/15/71 BAUTECHNISCHE PROGRAMME 11
PUBLISHED
DIESES PROGRAMM BERECHNET DIE ERFORDERLICHE BEWEHRUNG BEI
GEGEBENEM QUERSCHNITT UND MOMENT. DIE BEWEHRUNG ENTSPRICHT
DEN NEUFASSUNGEN VON DIN 1045 UND DIN 4224. DAS PROGRAMM GILT
FUER ALLE BETONSTAEHLE UND JEDE BELIEBIGE BETON-
NENNFESTIGKEIT.
EQUIPMENT REQUIRED - 9100B 9120A

09100-77032 STAHLBETONPLATTENSTREIFEN, REINE BIEGUNG, N - FREI
LAST REVISION 01/15/71 BAUTECHNISCHE PROGRAMME 11
PUBLISHED
DIESES PROGRAMM BERECHNET DIE ERFORDERLICHE BEWEHRUNG DES 1 M
BREITEN PLATTENSTREIFENS. DIE BERECHNUNG ENTSPRICHT DEN
NEUFASSUNGEN VON DIN 1045 UND DIN 4224. DAS PROGRAMM GILT
FUER ALLE BETONSTAEHLE UND JEDE BELIEBIGE
BETON-NENNFESTIGKEIT.
EQUIPMENT REQUIRED - 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-77033 STAHLBETONSTUETZE, BIEGUNG UND LAENGSKRAFT N - FREI
LAST REVISION 01/15/71 BAUTECHNISCHE PROGRAMME 11
PUBLISHED

STAHLBETONSTUETZE BEI BIEGUNG UND LAENGSKRAFT, BEMESSUNG NACH
DEM VERFAHREN DER ZULAESSIGEN SCHNITTGROESSEN (N - FREIE
BEMESSUNG), BST 22/34. DIESES PROGRAMM BERECHNET BEI
GEGEBENEM BETONQUERSCHNITT UND BEI GEGEBENER BELASTUNG FUER
JEDES DEHNUNGSPAAR EPSILON E, EPSILON 1 DIE ERFORDERLICHE
BEWEHRUNG.

EQUIPMENT REQUIRED - 9100B 9120A

09100-77034 STAHLBETONSTUETZE, BIEGUNG UND LAENGSKRAFT N - FREI
LAST REVISION 01/15/71 BAUTECHNISCHE PROGRAMME 11
PUBLISHED

STAHLBETONSTUETZE BEI BIEGUNG UND LAENGSKRAFT, BEMESSUNG NACH
DEM VERFAHREN DER ZULAESSIGEN SCHNITTGROESSEN (N - FREIE
BEMESSUNG), BST 42/50. DIESES PROGRAMM BERECHNET BEI
GEGEBENEM BETONQUERSCHNITT UND BEI GEGEBENER BELASTUNG FUER
JEDES DEHNUNGSPAAR EPSILON E, EPSILON 1 DIE ERFORDERLICHE
BEWEHRUNG.

EQUIPMENT REQUIRED - 9100B 9120A

09100-77035 STAHLBETONSTUETZE, BIEGUNG UND LAENGSKRAFT N - FREI
LAST REVISION 01/15/71 BAUTECHNISCHE PROGRAMME 11
PUBLISHED

STAHLBETONSTUETZE BEI BIEGUNG UND LAENGSKRAFT, BEMESSUNG NACH
DEM VERFAHREN DER ZULAESSIGEN SCHNITTGROESSEN (N - FREIE
BEMESSUNG), BST 50/55. DIESES PROGRAMM BERECHNET BEI
GEGEBENEM BETONQUERSCHNITT UND BEI GEGEBENER BELASTUNG FUER
JEDES DEHNUNGSPAAR EPSILON E, EPSILON 1 DIE ERFORDERLICHE
BEWEHRUNG.

EQUIPMENT REQUIRED - 9100B 9120A

09100-77036 RUNDSTAHLLISTE
LAST REVISION 01/15/71 BAUTECHNISCHE PROGRAMME 11
PUBLISHED

DIESES PROGRAMM SUMMIERT DIE EINZELNEN POSITIONEN EINER
STAHLLISTE GETRENNT NACH DURCHMESSERN VON 6 - 26MM. DIE
SUMMIERTEN LAENGEN UND GEWICHTE WERDEN (GETRENNT NACH
DURCHMESSERN) AUTOMATISCH AUSGEDRUCKT. FERNER WIRD DAS
GESAMTGEWICHT ALLER STAEBE AUSGEDRUCKT.

EQUIPMENT REQUIRED - 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-77037 STAHL - HOLZ - PFETTEN

LAST REVISION 01/15/71 BAUTECHNISCHE PROGRAMME 11
PUBLISHED

DIESES PROGRAMM BERECHNET BEI GEGEBENER STUETZWEITE UND
BELASTUNG FUER DEN DURCH BOLZEN VERBUNDENEN STAHL - HOLZ -
QUERSCHNITT DIE FOLGENDEN WERTE.. QUERSCHNITTE STAHL - HOLZ,
MOMENTENANTEILE UND MAXIMALE SPANNUNGEN, MAXIMALE
BOLZENKRAEFTE, BOLZENDURCHMESSER, MAXIMALE DURCHBIEGUNG.
EQUIPMENT REQUIRED - 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

CATEGORY - CALC. DI STRUTTURE CIVILI(ITAL. STRUCT.) 09100-77100

REFER TO THE LAST ENTRY IN THIS PROGRAM CATEGORY FOR ORDERING INFORMATION ON SETS OF PRERECORDED MAGNETIC CARDS FOR THIS PACKET. IF CARDS ARE NOT AVAILABLE, AS INDICATED BY NO ORDERING ENTRY, CONSULT YOUR LOCAL HP CALCULATOR SALESMAN FOR FURTHER INFORMATION.

PROGRAM PRICE 18.00

PART NUMBER	PROGRAM TITLE
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09100-77101	TRAVE CONTINUA SU 3 APPOGGI
	LAST REVISION 09/15/70 CALCOLI DI STRUTTURE CIVILI
	PUBLISHED
	QUESTO PROGRAMMA DETERMINA PER PESO PROPRIO E SOVRACCARICHI
	VARIABILI I SEGUENTI VALORI.. REAZIONE E SFORZO DI TAGLIO
	MASSIMO E MINIMO. MOMENTI DI CAMPATA MASSIMA MAX M1 E MAX M2
	DI SEMPLICE APPOGGIO.
	CONDIZIONE DI CARICO TOTALE. MOMENTO NEGATIVO MINIMO
	ALL'APPOGGIO MIN MB E MOMENTO RIDOTTO M'B NEL CASO DI VINCOLO
	EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-77102	TRAVE CONTINUA SU H APPOGGI
	LAST REVISION 09/15/70 CALCOLI DI STRUTTURE CIVILI
	PUBLISHED
	IL PROGRAMMA DETERMINA PER PESO PROPRIO E SOVRACCARICO
	VARIABILI LE SEGUENTI CARATTERISTICHE.. REAZIONI E TAGLIO MAX
	E MIN. MOMENTO DI CAMPATA MAX. E CORRISPONDENTI MOMENTI DI
	CONFRONTO NELLA CONDIZIONE DI CARICO TOTALE. MINIMO MOMENTI
	NEGATIVO E MOMENTO RIDOTTO NEL CASO DI VINCOLO DI SEMPLICE
	APPOGGIO. MOMENTO D'INERZIA COSTANTE. LE SINGOLE CONDIZIONI
	DI CARICO POSSONO ESSERE INTRODOTTE NELLA SEQUENZA VOLUTA.
	EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-77103	TRAVE CONTINUA SU 3 APPOGGI CON MENSOLE
	LAST REVISION 09/15/70 CALCOLO DI STRUTTURE CIVILI
	PUBLISHED
	IL PROGRAMMA UNITAMENTE A QUELLO RELATIVO ALLE REAZIONI
	FITTIZIE CALCOLA I MOMENTI ALL'APPOGGIO DI UNA TRAVE CONTINUA
	A 3 APPOGGI PER UNA CONDIZIONE DI CARICHI VOLUTA. MOMENTI DI
	INERZIA DIFFERENTI.
	EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-77104 TRAVE CONTINUA SU 4 APPOGGI CON MENSOLE
LAST REVISION 09/15/70 CALCOLI DI STRUTTURE CIVILI
PUBLISHED
IL PROGRAMMA UNITAMENTE A QUELLO RELATIVO ALLE REAZIONI
FITTIZIE CALCOLA I MOMENTI ALL'APPOGGIO DI UNA TRAVE CONTINUA
A 4 APPOGGI PER UNA CONDIZIONE DI CARICHI VOLUTA. MOMENTI DI
INERZIA DIFFERENTI.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-77105 TRAVE CONTINUA SU 5 APPOGGI CON MENSOLA
LAST REVISION 09/15/70 CALCOLI DI STRUTTURE CIVILI
PUBLISHED
IL PROGRAMMA UNITAMENTE A QUELLO RELATIVO ALLE REAZIONI
FITTIZIE CALCOLA I MOMENTI DI APPOGGIO DI UNA TRAVE CONTINUA
A 5 APPOGGI PER UNA CONDIZIONE DI CARICO VOLUTA. MOMENTI DI
INERZIA DIFFERENTI.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-77106 TRAVE CONTINUA SU 6 APPOGGI CON MENSOLA
LAST REVISION 09/15/70 CALCOLI DI STRUTTURE CIVILI
PUBLISHED
IL PROGRAMMA CALCOLA UNITAMENTE AI PROGRAMMI PER LE REAZIONI
FITTIZIE I MOMENTI ALL'APPOGGIO DELLA TRAVE SU 6 APPOGGI PER
UNA CONDIZIONE DI CARICO VOLUTA.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-77107 CALCOLO DELLE REAZIONI FITTIZIE
LAST REVISION 09/15/70 CALCOLI DI STRUTTURE CIVILI
PUBLISHED
IL PROGRAMMA CALCOLA LE REAZIONE FITTIZIE DI UNA TRAVE
SOTTOPOSTA ALLA CONDIZIONE DI CARICO ESTERNA VOLUTA E ALTRESI
LE REAZIONI FITTIZIE INDOTTE DA UNA VARIAZIONE DIFFERENZIALE
DI TEMPERATURA E DAL CEDIMENTO DEGLI APPOGGI. SI POSSONA
SOVRAPPORRE DIVERSE CONDIZIONI DI CARICO.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-77108 TRAVE SU 2 APPOGGI

LAST REVISION 09/15/70 CALCOLI DI STRUTTURE CIVILI
PUBLISHED

QUESTO PROGRAMMA CALCOLA LE REAZIONI E IL PUNTO DI VARIAZIONE
DI SEGNO DELLO SFORZO DI TAGLIO E IL MOMENTO MASSIMO DI UNA
TRAVE SEMPLICEMENTE APPOGGIATA CON MOMENTI AGLI ESTREMI E
CARICHI VOLUTI, ANCHE CONCENTRATI.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-77109 TRAVE CONTINUA A 6 CAMPATE

LAST REVISION 09/15/70 CALCOLI DI STRUTTURE CIVILI
PUBLISHED

QUESTO PROGRAMMA CALCOLA I MOMENTI FLETTENTI SUGLI APPOGGI MI
CON LUCI DI CAMPATA E CARICHI DISTRIBUITI DIFFERENTI.

EQUIPMENT REQUIRED - 9100B 9120A

09100-77110 PROGETTO SEZIONE RETTANGOLARE CON ARMATURA SEMPLICE

LAST REVISION 09/15/70 CALCOLI DI STRUTTURE CIVILI
PUBLISHED

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-77111 VERIFICA SEZIONE RETTANGOLARE CON ARMATURA SEMPLICE

LAST REVISION 09/15/70 CALCOLI DI STRUTTURE CIVILI
PUBLISHED

L'EQUAZIONE DETERMINATRICE DELL'ASSE NEUTRO SI OTTIENE
ANNULLANDO IL MOMENTO STATICO DELLA SEZIONE REAGENTE RISPETTO
A TALE ASSE.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-77112 PROGETTO SEZIONE RETTANGOLARE CON ARMATURA DOPPIA
LAST REVISION 09/15/70 CALCOLI DI STRUTTURE CIVILI
PUBLISHED
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-77113 PROGETTO SEZIONE RETTANGOLARE CON ARMATURA DOPPIA
LAST REVISION 09/15/70 CALCOLI DI STRUTTURE CIVILI
PUBLISHED
LE CONSIDERAZIONI TEORICHE E LE FORMULE USATE SONO LE STESSE
RICAVATE PER IL PROGRAMMA PRECEDENTE.
EQUIPMENT REQUIRED - 9100B 9120A

09100-77114 VERIFICA SEZIONE RETTANGOLARE CON ARMATURA DOPPIA
LAST REVISION 09/15/70 CALCOLI DI STRUTTURE CIVILI
PUBLISHED
L'ASSE NEUTRO E BARICENTRICO RISPETTO ALLA SEZIONE REAGENTE
TRASFORMATA IN CALCESTRUZZO, PER CUI IL MOMENTO STATICO DI
QUESTA RISPETTO A TALE ASSE DEVE ESSERE Nullo.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-77115 PROGETTO SEZIONE RETTANGOLARE PRESSOINFLESSA
LAST REVISION 09/15/70 CALCOLI DI STRUTTURE CIVILI
PUBLISHED
SI POSSONO SCRIVERE LE EQUAZIONI DI EQUILIBRIO ALLA
TRASLAZIONE SECONDO L'ASSE DELLA TRAVE ED ALLA ROTAZIONE
INTORNO ALLA RETTA PASSANTE PER IL PUNTO DI APPLICAZIONE DI
N.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-77116 VERIFICA SEZIONE RETTANGOLARE PRESSOINFLESSA
LAST REVISION 09/15/70 CALCOLI DI STRUTTURE CIVILI
PUBLISHED
SCRIVENDO L'EQUAZIONE DEI MOMENTI RISPETTO ALLA RETTA
PASSANTE PER IL PUNTO DI APPLICAZIONE DI N.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-77117 PROGETTO TRAVE CON SOLETTA A SEMPLICE ARMATURA
LAST REVISION 09/15/70 CALCOLI DI STRUTTURE CIVILI
PUBLISHED
SI POSSONO VERIFICARE I DUE CASI SCHEMATIZZATI IN FIGURA, SE
L'ASSE NEUTRO TAGLIA LA SOLETTA, IL COMPORTAMENTO E LO STESSO
CHE SI AVREBBE SE LA SEZIONE FOSSE RETTANGOLARE DI BASE B E
DI ALTEZZA H, SE INVECE L'ASSE NEUTRO TAGLIA LA NERVATURA
OCCORRE UNA NUOVA FORMULAZIONE.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-77118 PROGETTO TRAVE CON SOLETTA A SEMPLICE ARMATURA
LAST REVISION 09/15/70 CALCOLI DI STRUTTURE CIVILI
PUBLISHED
VALGONA LE CONSIDERAZIONI TEORICHE E LE FORMULAZIONI RICAVATE
PER IL PROGRAMMA PRECEDENTE.
EQUIPMENT REQUIRED - 9100B 9120A

09100-77119 VERIFICA TRAVE CON SOLETTA A SEMPLICE ARMATURA
LAST REVISION 09/15/70 CALCOLI DI STRUTTURE CIVILI
PUBLISHED
SUSSISTONO NATURALMENTE I DUE CASI SCHEMATIZZATI IN
PRECEDENZA, ED IL CALCOLO VIENE SVOLTO CON LE STESSE IPOTESI
SEMPLIFICATIVE GIA ENUNCIATE, VALGONO I SIMBOLI DELLE FIGURE
DEL N DEG. 09100-77117.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-77120 PROGETTO TRAVE CON SOLETTA CON DOPPIA ARMATURA
LAST REVISION 09/15/70 CALCOLI DI STRUTTURE CIVILI
PUBLISHED
SI POSSONO VERIFICARE I DUE CASI SCHEMATIZZATI IN FIGURA, SE
L'ASSE NEUTRO TAGLIA LA SOLETTA IL COMPORTAMENTO E LO STESSO
CHE SI AVREBBE SE LA SEZIONE FOSSE RETTANGOLARE DI BASE B E
DI ALTEZZA H, SE INVECE L'ASSE NEUTRO TAGLIA LA NERVATURA
OCCORE UNA NUOVA FORMULAZIONE, CHE QUI RICAVIAMO CON LE
IPOTESI SEMPLIFICATIVE ELENcate AL N DEG. 09100-77117.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-77121 PROGETTO TRAVE CON SOLETTA CON DOPPIA ARMATURA
LAST REVISION 09/15/70 CALCOLI DI STRUTTURE CIVILI
PUBLISHED
SI UTILIZZANO LE STESSIE FORMULAZIONI E LO STESSO PROCEDIMENTO
DEL N DEG. 09100-77120 COL VANTAGGIO CHE IL PROGRAMMA E
CONTENUTO IN UNA UNICA SCHEDA.
EQUIPMENT REQUIRED - 9100B 9120A

09100-77122 VERIFICA TRAVE CON SOLETTA A DOPPIA ARMATURA
LAST REVISION 09/15/70 CALCOLI DI STRUTTURE CIVILI
PUBLISHED
SUSSISTONO NATURALMENTE I DUE CASI SCHEMATIZZATI IN
PRECEDENZA, ED IL CALCOLO VIENE SVOLTO CON LE STESSIE IPOTESI
SEMPLIFICATIVE GIA ENUNCIATE.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-77123 VERIFICA TRAVE CON SOLETTA CON ARMATURA SEMPLICE O DOPPIA
LAST REVISION 09/15/70 CALCOLI DI STRUTTURE CIVILI
PUBLISHED
DATE LE DIMENSIONI - CON O SENZA LA SEZIONE DEI FERRI
COMPRESSI A'F - ED IL MOMENTO, IL PROGRAMMA CALCOLA..DISTANZA
DELL'ASSE NEUTRO DAL LEMBO COMPRESSO, SOLLECITAZIONE NEL
CALCESTRUZZO, SOLLECITAZIONE NEL FERRO TESO, SOLLECITAZIONE
NEL FERRO COMPRESSO.
EQUIPMENT REQUIRED - 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-77124 PROGETTO TUBO IN C.A. SOLLECITATO A FLESSIONE
LAST REVISION 09/15/70 CALCOLI DI STRUTTURE CIVILI
PUBLISHED

SI PROCEDE ALLA RICERCA DELL'ASSE NEUTRO PONENDO UGUALE A
ZERO IL MOMENTO STATICO RISPETTO AD ESSO DELLA SEZIONE
RESISTENTE.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-77125 VERIFICA TUBO IN C.A. SOLLECITATO A FLESSIONE
LAST REVISION 09/15/70 CALCOLI DI STRUTTURE CIVILI
PUBLISHED

VALGONO I SIMBOLI INDICATI NELLO SCHEMA DEL N DEG. 09100-
77124.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-77126 ANDAMENTO DEI CAVI IN C.A.P.
LAST REVISION 09/15/70 CALCOLI DI STRUTTURE CIVILI
PUBLISHED

CONOSCENDO LE CARATTERISTICHE FISICHE DEL CAVO DI
PRECOMPRESSIONE, SI ASSIMILA IL SUO ANDAMENTO ESSERE UGUALE
AD UNA PARABOLA DI CUI SI VOGLIONO CONOSCERE I PARAMETRI.

EQUIPMENT REQUIRED - 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

CATEGORY - SHIPBUILDING PROGRAMMES I

09100-79400

REFER TO THE LAST ENTRY IN THIS PROGRAM CATEGORY FOR ORDERING INFORMATION ON SETS OF PRERECORDED MAGNETIC CARDS FOR THIS PACKET. IF CARDS ARE NOT AVAILABLE, AS INDICATED BY NO ORDERING ENTRY, CONSULT YOUR LOCAL HP CALCULATOR SALESMAN FOR FURTHER INFORMATION.

PROGRAM PRICE 35.00

PART NUMBER	PROGRAM TITLE
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09100-79401	CALCULATION OF ADMIRALTY COEFFICIENTS LAST REVISION 03/15/71 SHIPBUILDING PROGRAMMES I PUBLISHED
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THIS PROGRAMME CALCULATES THE DAILY ADMIRALTY COEFFICIENT, BASED ON VALUES OF POWER DELIVERED ON THE COUPLING OF THE PRIME MOVER AND SPEED OF VESSEL. PROVISION IS MADE FOR CHANGE OF DISPLACEMENT. PROGRAM MAY ALSO BE USED TO CALCULATE DAILY FUEL COEFFICIENT.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-79402	CALCULATION OF AVERAGE ADMIRALTY COEFFICIENTS LAST REVISION 03/15/71 SHIPBUILDING PROGRAMMES I PUBLISHED
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CALCULATES THE RUNNING AVERAGE ADMIRALTY COEFFICIENT, DAILY UPDATED, ENABLES FOLLOWING THE VESSEL'S PERFORMANCE.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-79403	COMBINED CALC. OF DAILY AND AVERAGE ADMIRALTY COEFFICIENTS LAST REVISION 03/15/71 SHIPBUILDING PROGRAMMES I PUBLISHED
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FROM DAILY VALUES OF POWER AND SPEED, THIS PROGRAMME CALCULATES THE DAILY ADMIRALTY COEFFICIENT AND THE RESULTING NEW AVERAGE ADMIRALTY COEFFICIENT. MAY ALSO BE USED TO CALCULATE FUEL COEFFICIENTS.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-79404 AREA CALCULATION USING SIMPSON'S ONE-THIRD RULE
LAST REVISION 03/15/71 SHIPBUILDING PROGRAMMES I
PUBLISHED
USES SIMPSON'S ONE-THIRD RULE TO CALCULATE AREA BETWEEN A
PARABOLIC CURVE AND THE AXIS, EXCLUDING THE END SECTIONS.
EQUIPMENT REQUIRED - 9100B 9120A

09100-79405 AREA CALCULATION WITH INTERMEDIATE RESULTS DISPLAYED
LAST REVISION 03/15/71 SHIPBUILDING PROGRAMMES I
PUBLISHED
USES SIMPSON'S ONE-THIRD RULE TO ACHIEVE SAME FINAL RESULT AS
PROGRAMME 79404, BUT ALSO ALLOWS DISPLAYING INTERMEDIATE
RESULTS.
EQUIPMENT REQUIRED - 9100B 9120A

09100-79406 AREA CALCULATION OF SHIP'S CROSS-SECTIONS
LAST REVISION 03/15/71 SHIPBUILDING PROGRAMMES I
PUBLISHED
CALCULATES THE CROSS-SECTIONAL AREA USING SIMPSON'S ONE-THIRD
RULE. ALSO CALCULATES HEIGHT OF CENTRE OF GRAVITY OF THE
AREA. THE RESULTS OBTAINED ARE REQUIRED FOR TRACING OF
BONJEAN CURVES.
EQUIPMENT REQUIRED - 9100B 9120A

09100-79407 CALC.CHARACTERISTIC DATA OF SHIP'S CROSS-SECT.(SIMPSON'S)
LAST REVISION 03/15/71 SHIPBUILDING PROGRAMMES I
PUBLISHED
FROM THE BEAM, DRAUGHT AND OTHER DATA, THIS PROGRAMME CALCU-
LATES AREA OF THE CROSS-SECTION, ITS CENTRE OF GRAVITY, AND
THE COEFFICIENT BETA, USING SIMPSON'S ONE-THIRD RULE.
EQUIPMENT REQUIRED - 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-79408 CALC.OF CHARACT.DATA OF SHIP'S CROSS-SECTIONS (TRAPEZIUM RULE)
LAST REVISION 03/15/71 SHIPBUILDING PROGRAMMES I
PUBLISHED

THIS PROGRAMME CALCULATES THE SAME CHARACTERISTICS AS PROGRAMME 79407 BUT USES THE TRAPEZIUM RULE, AS IS THE COMMON PRACTICE IN FRENCH YARDS.

EQUIPMENT REQUIRED - 9100B 9120A

09100-79409 CALC.OF CHARACT.DATA OF WATERLINES (TRAPEZIUM RULE)
LAST REVISION 03/15/71 SHIPBUILDING PROGRAMMES I
PUBLISHED

USES THE TRAPEZIUM RULE TO CALCULATE AREA, POSITION OF CENTRE OF GRAVITY, TRANSVERSE MOMENT OF INERTIA AND LONGITUDINAL MOMENT OF INERTIA OF THE WATERLINE. THE COEFFICIENT ALPHA AND DISPLACEMENT IN TONNES/CM ARE ALSO OBTAINED.

EQUIPMENT REQUIRED - 9100B 9120A

09100-79410 CALC. OF CHARACT. DATA OF WATERLINES (SIMPSON'S RULE)
LAST REVISION 03/15/71 SHIPBUILDING PROGRAMMES I
PUBLISHED

CALCULATES THE SAME CHARACTERISTICS AS PROGRAMME 79409, BUT USES SIMPSON'S ONE-THIRD RULE, WHICH IS PREFERRED IN SOME YARDS.

EQUIPMENT REQUIRED - 9100B 9120A

09100-79411 CALC. OF CORRECTED CHARACT. DATA OF WATERLINES
LAST REVISION 03/15/71 SHIPBUILDING PROGRAMMES I
PUBLISHED

THIS PROGRAMME USES THE DATA OBTAINED FROM PROGRAMMES 79409 AND 79410 AND MODIFIES THE RESULTS TO ALLOW FOR THE EXTREME ENDS OF THE WATERLINE.

EQUIPMENT REQUIRED - 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-79412 CALC. OF CORRECTED CHARACT. DATA OF WATERLINES (ALT. METHOD)
LAST REVISION 03/15/71 SHIPBUILDING PROGRAMMES I
PUBLISHED

THIS PROGRAMME GIVES AN ALTERNATIVE METHOD OF ALLOWING FOR
THE EXTREME ENDS OF THE WATERLINE.

EQUIPMENT REQUIRED - 9100B 9120A

09100-79413 CALC. OF DISPLACEMENT & OTHER CHARACT. DATA (SIMPSON'S RULE)
LAST REVISION 03/15/71 SHIPBUILDING PROGRAMMES I
PUBLISHED

DATA FROM PREVIOUS PROGRAMMES ARE USED TO CALCULATE THE
DISPLACEMENT AND OTHER CHARACTERISTIC DATA SUCH AS THE COEF-
FICIENT OF FINENESS FOR THE WHOLE SHIP. USES SIMPSON'S ONE-
THIRD RULE.

EQUIPMENT REQUIRED - 9100B 9120A

09100-79414 CALC. OF DISPLACEMENT & OTHER CHARACT. DATA (TRAPEZIUM RULE)
LAST REVISION 03/15/71 SHIPBUILDING PROGRAMMES I
PUBLISHED

THIS PROGRAMME CORRESPONDS TO PROGRAMME 79413 BUT USES THE
TRAPEZIUM RULE.

EQUIPMENT REQUIRED - 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

CATEGORY - MEDICAL

09100-752XX

REFER TO THE LAST ENTRY IN THIS PROGRAM CATEGORY FOR ORDERING INFORMATION ON SETS OF PRERECORDED MAGNETIC CARDS FOR THIS PACKET. IF CARDS ARE NOT AVAILABLE, AS INDICATED BY NO ORDERING ENTRY, CONSULT YOUR LOCAL HP CALCULATOR SALESMAN FOR FURTHER INFORMATION.

PART NUMBER

PROGRAM TITLE

09810-75251 PULMONARY FUNCTION (SPIROMETER CALCULATIONS)

LAST REVISION 07/01/71

UNPUBLISHED

THIS PROGRAM CALCULATES RESPIRATORY QUOTIENT, DEADSPACE AND GRADIENTS FROM SPIROMETER DATA

EQUIPMENT REQUIRED - 9810A OPT 2 11219A 11211A

09810-75252 CARDIAC CATHETERIZATION DATA

LAST REVISION 07/01/71 CARDIO-PULMONARY PAC

UNPUBLISHED

CALCULATES CARDIAC CATHETERIZATION DATA FROM MEASUREMENTS MADE DURING A CATHETERIZATION PROCEDURE.

EQUIPMENT REQUIRED - 9810A OPT 2 11219A 11211A

09810-75253 ELECTROPHORESIS CALCULATIONS

LAST REVISION 07/01/71 CLINICAL PATHOLOGY PAC

UNPUBLISHED

CALCULATES PERCENT AND ACTUAL GRAM WEIGHTS OF THE VARIOUS SERUM PROTEIN FRACTIONS.

EQUIPMENT REQUIRED - 9810A 11219A 11211A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

CATEGORY - CLINICAL PATHOLOGY PAC

09100-75350

REFER TO THE LAST ENTRY IN THIS PROGRAM CATEGORY FOR ORDERING INFORMATION ON SETS OF PRERECORDED MAGNETIC CARDS FOR THIS PACKET. IF CARDS ARE NOT AVAILABLE, AS INDICATED BY NO ORDERING ENTRY, CONSULT YOUR LOCAL HP CALCULATOR SALESMAN FOR FURTHER INFORMATION.

PROGRAM PRICE 7.50 MAGNETIC CARD PRICE 15.00

PART NUMBER PROGRAM TITLE

09100-75350 ACID BASE FORM

PGM 1-1 LAST REVISION 10/01/70 CLINICAL PATHOLOGY
PUBLISHED

THIS PROGRAM CALCULATES ACTUAL BICARBONATE, ACTUAL PCO₂, PLASMA BICARBONATE, BASE EXCESS, TOTAL CO₂ AND THE AMOUNT OF NAHCO₃ REQUIRED TO CORRECT METABOLIC ACIDOSIS.

EQUIPMENT REQUIRED - 9100B 9120A

09100-75350 ELECTROPHORESIS CALCULATIONS

PGM 1-2 LAST REVISION 10/01/70 CLINICAL PATHOLOGY
PUBLISHED

THIS PROGRAM CALCULATES THE PERCENT AND ACTUAL GRAM WEIGHTS OF ALBUMIN ALPHA 1, ALPHA 2, BETA AND GAMMA FRACTIONS OF SERUM PROTEIN.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-75350 LIPOPROTEIN ELECTROPHORESIS

PGM 1-3 LAST REVISION 10/01/70 CLINICAL PATHOLOGY
PUBLISHED

THIS PROGRAM IS SIMILAR TO THE SERUM ELECTROPHORESIS CALCULATIONS. THE LIPOPROTEIN FRACTIONS ARE STAINED WITH FAT STAINS AND THEIR PERCENTAGES CALCULATED.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-75350 LDH ISOENZYMES CALCULATION

PGM 1-4 LAST REVISION 10/01/70 CLINICAL PATHOLOGY
PUBLISHED

THIS CLINICAL DETERMINATION USES TECHNIQUES SIMILAR TO THOSE
USED IN ELECTROPHORESIS WITH EXCEPTION THAT DIFFERENT
STAINING PROCEDURES ARE USED.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-75350 SCHILLING TEST

PGM 1-5 LAST REVISION 10/01/70 CLINICAL PATHOLOGY
PUBLISHED

THIS TEST IS USED IN DIFFERENTIATING PERNICIOUS ANEMIA FROM
OTHER DEFICIENCIES AND MALABSORPTION SYNDROME.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-75350 RED CELLS INDICES

PGM 1-6 LAST REVISION 10/01/70 CLINICAL PATHOLOGY
PUBLISHED

THE MEAN RED CELL VOLUME, MEAN RED CELL HEMOGLOBIN, AND MEAN
RED CELL HEMOGLOBIN CONCENTRATION ARE CALCULATED IN THIS
PROGRAM.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-75350 CARBON DIOXIDE CONTENT OF HUMAN BLOOD

PGM 1-7 LAST REVISION 10/01/70 CLINICAL PATHOLOGY
PUBLISHED

THIS PROGRAM CALCULATES THE CARBON DIOXIDE CONTENT OF HUMAN
BLOOD FROM THE CARBON DIOXIDE TENSION, PH, OXYGEN SATURATION
HEMATOCRIT, AND TEMPERATURE.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-75350 HEMOGLOBIN OXYGEN SATURATION

PGM 1-8 LAST REVISION 10/01/70 CLINICAL PATHOLOGY
PUBLISHED

THIS PROGRAM CALCULATES THE OXYGEN SATURATION OF NORMAL HUMAN
HEMOGLOBIN FROM THE OXYGEN TENSION AFTER IT HAS BEEN
CORRECTED FOR PH, CARBON DIOXIDE TENSION AND TEMPERATURE.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-75350 CARBON DIOXIDE TENSION IN HUMAN BLOOD

PGM 1-9 LAST REVISION 10/01/70 CLINICAL PATHOLOGY
PUBLISHED

THIS PROGRAM CALCULATES CARBON DIOXIDE TENSION (PCO2) IN
HUMAN BLOOD FROM THE CARBON DIOXIDE CONTENT OF WHOLE BLOOD,
TEMPERATURE, OXYGEN SATURATION AND HEMATOCRIT.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09119-75350 SET OF PRERECORDED MAGNETIC CARDS FOR CLINICAL PATHOLOGY PA

LAST REVISION 10/01/70 CLINICAL PATHOLOGY PAC

PUBLISHED

PRICE 15.00

SEND ALL ORDERS FOR PUBLICATIONS AND MAGNETIC CARDS TO THE
LOCAL HP SALES OFFICE.

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

CATEGORY - CARDIOLOGY PAC

09100-75300

REFER TO THE LAST ENTRY IN THIS PROGRAM CATEGORY FOR ORDERING INFORMATION ON SETS OF PRERECORDED MAGNETIC CARDS FOR THIS PACKET. IF CARDS ARE NOT AVAILABLE, AS INDICATED BY NO ORDERING ENTRY, CONSULT YOUR LOCAL HP CALCULATOR SALESMAN FOR FURTHER INFORMATION.

PROGRAM PRICE 7.50 MAGNETIC CARD PRICE 15.00

PART NUMBER	PROGRAM TITLE
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09100-75300	CARDIAC CATHETERIZATION DATA
PGM 1-1	LAST REVISION 10/01/70 CARDIOLOGY PAC
	PUBLISHED

THIS PROGRAM CALCULATES CARDIAC CATHETERIZATION DATA FROM MEASUREMENTS MADE DURING A CATHETERIZATION PROCEDURE.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-75300	VALVE AREA (AORTIC AND PULMONARY)
PGM 1-2	LAST REVISION 10/01/70 CARDIOLOGY PAC
	PUBLISHED

THIS PROGRAM CALCULATES THE FLOW AND AREA OF EITHER THE AORTIC OR PULMONARY VALVES.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-75300	VALVE AREA (MITRAL AND TRICUSPID)
PGM 1-3	LAST REVISION 10/01/70 CARDIOLOGY PAC
	PUBLISHED

THIS PROGRAM CALCULATES THE FLOW AND AREA OF EITHER THE MITRAL OR TRICUSPID VALVE.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-75300 TOTAL PERIPHERAL RESISTANCE AND CENTRAL VENOUS PRESSURE
PGM 1-4 LAST REVISION 10/01/70 CARDIOLOGY PAC
 PUBLISHED
 THIS PROGRAM TAKES VARIOUS CARDIOVASCULAC MEASUREMENTS AND
 CALCULATES PERIPHERAL AND CENTRAL VENOUS PRESSURE.
EQUIPMENT REQUIRED - 9100B 9120A

09100-75300 EFFECTIVE OXYGEN TRANSPORT AND PERCENT SHUNT
PGM 1-5 LAST REVISION 10/01/70 CARDIOLOGY PAC
 PUBLISHED
 THIS PROGRAM UTILIZES CLINICAL LABORATORY AND CARDIOVASCULAR
 MEASUREMENTS FOR SHOCK DIAGNOSIS AND TREATMENT.
EQUIPMENT REQUIRED - 9100B 9120A

09119-75300 SET OF PRERECORDED MAGNETIC CARDS FOR CARDIOLOGY PAC
 LAST REVISION 10/01/70 CARDIOLOGY PAC
 PUBLISHED PRICE 15.00
SEND ALL ORDERS FOR PUBLICATIONS AND MAGNETIC CARDS TO THE
LOCAL HP SALES OFFICE.

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

CATEGORY - NUCLEAR MEDICINE & RADIOLOGY

09100-754XX

REFER TO THE LAST ENTRY IN THIS PROGRAM CATEGORY FOR ORDERING INFORMATION ON SETS OF PRERECORDED MAGNETIC CARDS FOR THIS PACKET. IF CARDS ARE NOT AVAILABLE, AS INDICATED BY NO ORDERING ENTRY, CONSULT YOUR LOCAL HP CALCULATOR SALESMAN FOR FURTHER INFORMATION.

PART NUMBER

PROGRAM TITLE

09100-75201 RADIOACTIVE DECAY

LAST REVISION 10/10/69 9100A/B LIBRARY
PUBLISHED

CALCULATES THE MASS LOSS BETWEEN ANY TWO TIMES GIVEN THE HALF-LIFE, INITIAL MASS AND PRESENT MASS, DISPLAYS THE DECAY CURVE, OR CALCULATES THE AGE OF THE MASS BASED UPON THE PRESENT MASS.

EQUIPMENT REQUIRED - 9100A 9100B

09100-75204 RADIOACTIVE DECAY CORRECTION

LAST REVISION 08/27/70 E. BECK
UNPUBLISHED

PRICE 40.00

CORRECTS MEASURED LINE FOR BACKGROUND AND DECAY DURING THE MEASUREMENT. ENERGY CALIBRATION CAN BE DONE AS WELL. THE CORRECTED PEAK INTENSITIES ARE STATED AS RELATIVE INTENSITIES.

EQUIPMENT REQUIRED - 9100A 9100B 9120A 9101A 9106A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

CATEGORY - ANIMAL ECOLOGY PAC

09100-75203

REFER TO THE LAST ENTRY IN THIS PROGRAM CATEGORY FOR ORDERING INFORMATION ON SETS OF PRERECORDED MAGNETIC CARDS FOR THIS PACKET. IF CARDS ARE NOT AVAILABLE, AS INDICATED BY NO ORDERING ENTRY, CONSULT YOUR LOCAL HP CALCULATOR SALESMAN FOR FURTHER INFORMATION.

PROGRAM PRICE 7.50 MAGNETIC CARD PRICE 15.00

PART NUMBER

PROGRAM TITLE

09100-75203 VALUE OF THE NEGATIVE BINOMIAL
PGM 1-1 LAST REVISION 09/15/70 ANIMAL ECOLOGY
PUBLISHED

THIS IS A MODEL FOR AGGREGATION AND IS USED TO ESTIMATE
POPULATIONS IN A GIVEN AREA.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-75203 EXPECTED VALUES FOR NEGATIVE BINOMIAL DISTRIBUTION
PGM 1-2 LAST REVISION 09/15/70 ANIMAL ECOLOGY
PUBLISHED

ESTIMATES POPULATION DISTRIBUTIONS IN SPECIFIC AREAS USING AN
ESTIMATED K VALUE.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-75203 LOGISTIC VERSUS EXPONENTIAL CURVES FOR POPULATION GROWTH
PGM 1-3 LAST REVISION 09/15/70 ANIMAL ECOLOGY
PUBLISHED

COMPARES THE LOGISTIC AND EXPONENTIAL CURVES OF POPULATION
GROWTH.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-75203 SPECIES DIVERSITY INDEX BASED ON INFORMATION THEORY
PGM 1-4 LAST REVISION 09/15/70 ANIMAL ECOLOGY
PUBLISHED
DETERMINES THE NUMBER OF SPECIES IN A GIVEN AREA.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-75203 EXPECTED NUMBER FROM A POISSON SERIES
PGM 1-5 LAST REVISION 09/15/70 ANIMAL ECOLOGY
PUBLISHED
MONITORS RANDOMNESS OF A DISTRIBUTION OF ANIMALS IN SPACE OR
TIME.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-75203 MANN WHITNEY RANKING STATISTIC
PGM 1-6 LAST REVISION 09/15/70 ANIMAL ECOLOGY
PUBLISHED
SIGNIFICANCE TEST FOR MEDIANES OF TWO SAMPLES.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-75203 POPULATION ESTIMATE OF A SIMPLE CAPTURE-RECAPTURE INDEX
PGM 1-7 LAST REVISION 09/15/70 ANIMAL ECOLOGY
PUBLISHED
POPULATION OF VARIOUS SPECIES ARE ESTIMATED BY MARKING
CAPTURED ANIMALS, RELEASING THEM AND THEN COUNTING THE NUMBER
MARKED WHEN THEY ARE RECAPTURED.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-75203 POPULATION ESTIMATES OF REMOVAL TRAPPING
PGM 1-8 LAST REVISION 09/15/70 ANIMAL ECOLOGY
PUBLISHED

POPULATION ESTIMATED BY REMOVAL TRAPPING ON SEVERAL OCCASIONS
AND OBSERVING THE POPULATION DECREASE IN AN AREA.
EQUIPMENT REQUIRED - 9100A 9100B 9120A

09119-75203 SET OF PRERECORDED MAGNETIC CARDS FOR ANIMAL ECOLOGY PAC
LAST REVISION 09/15/70 ANIMAL ECOLOGY PAC
PUBLISHED PRICE 15.00
SEND ALL ORDERS FOR PUBLICATIONS AND MAGNETIC CARDS TO THE
LOCAL HP SALES OFFICE.

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

CATEGORY - GENERAL BIOLOGY PROGRAMS

09100-75450

REFER TO THE LAST ENTRY IN THIS PROGRAM CATEGORY FOR ORDERING INFORMATION ON SETS OF PRERECORDED MAGNETIC CARDS FOR THIS PACKET. IF CARDS ARE NOT AVAILABLE, AS INDICATED BY NO ORDERING ENTRY, CONSULT YOUR LOCAL HP CALCULATOR SALESMAN FOR FURTHER INFORMATION.

PROGRAM PRICE 7.50

PART NUMBER	PROGRAM TITLE
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09100-75450	HISTOGRAM COUNTER PROGRAM
PGM 1-1	LAST REVISION 05/15/71 GENERAL BIOLOGY PROGRAMS PUBLISHED

THIS PROGRAM ALLOWS THE MICROSCOPIST TO TALLY ON THE CALCULATOR THE NUMBER OF CELLS WITHIN A TISSUE SAMPLE OR GRAINS WITHIN A CELL, UP TO 35 SAMPLE AREAS AND 35 COUNTS PER AREA. PROGRAM B THEN PROVIDES A PRINTED LISTING OF COUNTS PER AREA FOR LATER HISTOGRAM PLOTTING.

EQUIPMENT REQUIRED - 9100A 9120A

09100-75450	ELAPSED TIME PROGRAM
PGM 1-2	LAST REVISION 05/15/71 GENERAL BIOLOGY PROGRAMS PUBLISHED

THIS PROGRAM CALCULATES THE ELAPSED TIME BETWEEN TWO DATES. IT IS ESPECIALLY USEFUL IN BIOLOGICAL APPLICATIONS TO DETERMINE INCUBATION PERIODS OR DAYS FROM LAST TREATMENT.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

09100-75450	SINGLE CHANNEL SCINTILLATION ANALYSIS
PGM 1-3	LAST REVISION 05/15/71 GENERAL BIOLOGY PROGRAMS PUBLISHED

THIS PROGRAM CONVERTS GROSS SAMPLE COUNTS TO SAMPLE DPM (DISINTEGRATIONS PER MINUTE) WITH STANDARD ERROR OF THE DPM AND PERCENT OF INITIAL SAMPLE DPM (FOR BIOLOGICAL HALF-LIVES) OR SAMPLE DPM PER GRAM.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-75450 CONV.OF DUAL TAG SAMPLE COUNTS TO SAMPLE DPM FOR TWO ISOTOPES
PGM 1-4 LAST REVISION 05/15/71 GENERAL BIOLOGY PROGRAMS
PUBLISHED

THIS PROGRAM WILL ANALYZE DATA FROM DUAL CHANNEL AND MULTI-
CHANNEL INSTRUMENTS FOR TWO ISOTOPES. WHEN MULTICHANNEL
INSTRUMENTS ARE USED, THE APPROPRIATE CHANNELS ARE SUMMED AND
ANALYZED AS A DUAL CHANNEL UNIT.

EQUIPMENT REQUIRED - 9100A 9100B 9120A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

CATEGORY - 9100A PROGRAM LIBRARY

09100-90002

REFER TO THE LAST ENTRY IN THIS PROGRAM CATEGORY FOR ORDERING INFORMATION ON SETS OF PRERECORDED MAGNETIC CARDS FOR THIS PACKET. IF CARDS ARE NOT AVAILABLE, AS INDICATED BY NO ORDERING ENTRY, CONSULT YOUR LOCAL HP CALCULATOR SALESMAN FOR FURTHER INFORMATION.

PROGRAM PRICE 30.00 MAGNETIC CARD PRICE 130.00

PART NUMBER

PROGRAM TITLE

09119-90002 SET OF PRERECORDED MAGNETIC CARDS FOR 9100A PROGRAM LIBRARY
LAST REVISION 12/01/68 9100A PROGRAM LIBRARY

PUBLISHED

PRICE 130.00

SEND ALL ORDERS FOR PUBLICATIONS AND MAGNETIC CARDS TO THE
LOCAL HP SALES OFFICE.

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

CATEGORY - 9100B PROGRAM LIBRARY

09100-90022

REFER TO THE LAST ENTRY IN THIS PROGRAM CATEGORY FOR ORDERING INFORMATION ON SETS OF PRERECORDED MAGNETIC CARDS FOR THIS PACKET. IF CARDS ARE NOT AVAILABLE, AS INDICATED BY NO ORDERING ENTRY, CONSULT YOUR LOCAL HP CALCULATOR SALESMAN FOR FURTHER INFORMATION.

PROGRAM PRICE 30.00 MAGNETIC CARD PRICE 150.00

PART NUMBER

PROGRAM TITLE

09119-90022 SET OF PRERECORDED MAGNETIC CARDS FOR 9100B LIBRARY
LAST REVISION 09/01/69 9100B PROGRAM LIBRARY
PUBLISHED

PRICE 150.00

SEND ALL ORDERS FOR PUBLICATIONS AND MAGNETIC CARDS TO THE
LOCAL HP SALES OFFICE.

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

CATEGORY - 9101A EXTENDED MEMORY LIBRARY

09101-90002

REFER TO THE LAST ENTRY IN THIS PROGRAM CATEGORY FOR ORDERING INFORMATION ON SETS OF PRERECORDED MAGNETIC CARDS FOR THIS PACKET. IF CARDS ARE NOT AVAILABLE, AS INDICATED BY NO ORDERING ENTRY, CONSULT YOUR LOCAL HP CALCULATOR SALESMAN FOR FURTHER INFORMATION.

PROGRAM PRICE 7.50 MAGNETIC CARD PRICE 90.00

PART NUMBER PROGRAM TITLE

09101-90002 CHARACTER PLOT PROGRAM
PGM 1-1 LAST REVISION 07/01/70 EXTENDED MEMORY LIBRARY
PUBLISHED

THIS PROGRAM FORMS THE CHARACTER CODES DRAWN ON THE 9125 PLOTTER, SIMPLY BY TYPING THE SHAPE OF THE CHARACTER ON THE DIGIT KEYS.

EQUIPMENT REQUIRED - 9100A 9100B 9120A 9101A

09101-90002 MATRIX INVERSION
PGM 1-2 LAST REVISION 12/15/70 EXTENDED MEMORY LIBRARY
PUBLISHED

THIS PROGRAM WILL DETERMINE THE INVERSE OF A SQUARE MATRIX WHERE THE MAXIMUM VALUE OF N IS 14 USING A MODIFIED GAUSS-JORDAN ELIMINATION TECHNIQUE.

EQUIPMENT REQUIRED - 9100A 9100B 9120A 9125A/B 9101A

09101-90002 TRAVERSE WITH COMPASS RULE ADJUST. OPTION W/ENCLOSED AREA
PGM 1-3 LAST REVISION 07/01/70 EXTENDED MEMORY LIBRARY
PUBLISHED

THIS PROGRAM WILL ADJUST A 99 LEG TRAVERSE WITH ONE ENTRY OF TRAVERSES BY BEARING AND DISTANCE, CALCULATES COORDINATES, CLOSURE ERROR, TOTAL TRAVERSE DISTANCE PRECISION RATIO AND ENCLOSED AREA.

EQUIPMENT REQUIRED - 9100A 9100B 9120A 9101A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09101-90002 CURVE THROUGH POINTS

PGM 1-4 LAST REVISION 07/01/70 EXTENDED MEMORY LIBRARY
PUBLISHED

THIS PROGRAM WILL CONSTRUCT A CONTINUOUS CURVE WHICH PASSES
THROUGH UP TO 72 SET OF COORDINATES.

EQUIPMENT REQUIRED - 9100A 9100B 9120A 9125A/B 9101A

09101-90002 HISTOGRAM

PGM 1-5 LAST REVISION 07/01/70 EXTENDED MEMORY LIBRARY
PUBLISHED

THIS PROGRAM PROVIDES SELECTION OF UP TO 65 VARIABLE/132
FIXED WIDTH WINDOWS, REL. FREQ. PRINTOUT & PLOT, NORM. PROB.
PAPER PLOT.

EQUIPMENT REQUIRED - 9100A 9100B 9120A 9125A/B 9101A

09101-90002 N LINEAR EQUATIONS IN N UNKNOWNNS.

PGM 1-6 LAST REVISION 07/01/70 EXTENDED MEMORY LIBRARY
PUBLISHED

THIS PROGRAM WILL FIND THE SOLUTION OF A SYSTEM OF UP TO 14
LINEAR EQUATIONS IN 14 UNKNOWNNS WITH REAL COEFFICIENTS.

EQUIPMENT REQUIRED - 9100A 9100B 9120A 9101A

09101-90002 NTH ORDER POLYNOMIAL REGR. WITH PLOT (N IS LESS THAN 12)

PGM 1-7 LAST REVISION 07/01/70 EXTENDED MEMORY LIBRARY
PUBLISHED

THIS PROGRAM DETERMINES THE COEFFICIENTS FOR A POLYNOMIAL
EQUATION GIVING THE BEST NTH ORDER LEAST-SQUARES FIT TO A SET
OF DATA POINTS SPECIFIED BY THE USER.

EQUIPMENT REQUIRED - 9100A 9100B 9120A 9125A/B 9101A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09101-90002 DETERMINANT PROGRAM

PGM 1-8 LAST REVISION 07/01/70 EXTENDED MEMORY LIBRARY
PUBLISHED

GIVEN AN $N \times N$ MATRIX, THIS PROGRAM WILL FIND THE DETERMINANT
USING GAUSS'S ELIMINATION METHOD.

EQUIPMENT REQUIRED - 9100A 9100B 9120A 9101A

09101-90002 ROOTS OF NTH ORDER POLY. W/COMPLEX (REAL) COEFF.

PGM 1-9 LAST REVISION 07/01/70 EXTENDED MEMORY LIBRARY
PUBLISHED

THIS PROGRAM USES THE NEWTON-RAPHSON METHOD TO FIND ALL THE
ROOTS OF A POLYNOMIAL, UP TO 24TH ORDER FOR COMPLEX (OR REAL)
COEFFICIENTS.

EQUIPMENT REQUIRED - 9100A 9100B 9120A 9101A

09101-90002 DIAGNOSTIC PROGRAM

PGM 1-10 LAST REVISION 07/01/70 EXTENDED MEMORY LIBRARY
PUBLISHED

THE DIAGNOSTIC PROGRAM EXERCISES THE REGISTERS AND EVERY
FUNCTION OF THE EXTENDED MEMORY.

EQUIPMENT REQUIRED - 9100A 9100B 9120A 9101A

09118-90002 SET OF PRERECORDED MAGNETIC CARDS FOR EXTENDED MEMORY LIB.

LAST REVISION 07/01/70 EXTENDED MEMORY LIBRARY

PUBLISHED

PRICE 90.00

SEND ALL ORDERS FOR PUBLICATIONS AND MAGNETIC CARDS TO THE
LOCAL HP SALES OFFICE.

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

CATEGORY - 9125A/B PLOTTER PROGRAM PACKET

09100-76999

REFER TO THE LAST ENTRY IN THIS PROGRAM CATEGORY FOR ORDERING INFORMATION ON SETS OF PRERECORDED MAGNETIC CARDS FOR THIS PACKET. IF CARDS ARE NOT AVAILABLE, AS INDICATED BY NO ORDERING ENTRY, CONSULT YOUR LOCAL HP CALCULATOR SALESMAN FOR FURTHER INFORMATION.

PROGRAM PRICE 5.00 MAGNETIC CARD PRICE 25.00

PART NUMBER	PROGRAM TITLE
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09100-70026	MAXIMUM AND MINIMUM OF $Y=F(X)$ LAST REVISION 06/01/70 PLOTTER PROGRAM PAC PUBLISHED
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THIS PROGRAM WILL COMPUTE THE APPROXIMATE MAXIMUM AND MINIMUM OF THE FUNCTION $F(X)$ OVER SPECIFIED RANGE OF INDEPENDENT VARIABLE X .

EQUIPMENT REQUIRED - 9100A 9100B

09100-70027	PLOT OF $Y=F(X)$ LAST REVISION 06/01/70 PLOTTER PROGRAM PAC PUBLISHED
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THIS PROGRAM WILL PLOT THE FUNCTION $Y=F(X)$ IN RECTANGULAR COORDINATES. THE NUMBER OF PLOT POINTS PER INCH, N , IS SPECIFIED BY THE USER, AS ALSO ARE THE PLOTTING CONSTANTS.

EQUIPMENT REQUIRED - 9100A 9100B 9125A/B

09100-70028	FIRST ORDER DIFFERENTIAL EQUATION PLOT LAST REVISION 06/01/71 PLOTTER PROGRAM PAC PUBLISHED
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NUMERICALLY SOLVES FIRST ORDER DIFFERENTIAL EQUATIONS USING A RUNGE-KUTTA METHOD AND PLOTS SOLUTION FOR INCREMENTED VALUES OF THE INDEPENDENT VARIABLE.

EQUIPMENT REQUIRED - 9100A 9100B 9125A/B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-70029 MAXIMUM AND MINIMUM OF $R=F(\theta)$

LAST REVISION 06/01/70 PLOTTER PROGRAM PAC
PUBLISHED

WITH POLAR COORDINATE VALUES, THIS PROGRAM WILL COMPUTE THE
APPROXIMATE MAXIMUM AND MINIMUM OF THE FUNCTION IN
RECTANGULAR COORDINATES OVER A SPECIFIED RANGE OF THE
INDEPENDENT VARIABLE.

EQUIPMENT REQUIRED - 9100A 9100B

09100-70030 PLOT OF $R=F(\theta)$ IN POLAR COORDINATES

LAST REVISION 06/01/70 PLOTTER PROGRAM PAC
PUBLISHED

THIS PROGRAM WILL PLOT THE FUNCTION $R=F(\theta)$ IN POLAR
COORDINATES. THE NUMBER OF PLOT POINTS, N , IS SPECIFIED BY
THE USER AS WELL AS THE PLOTTING CONSTANTS.

EQUIPMENT REQUIRED - 9100A 9100B 9125A/B

09100-70818 LINEAR REGRESSION AND PLOT

LAST REVISION 06/01/70 PLOTTER PROGRAM PAC
PUBLISHED

THIS PROGRAM CALCULATES THE EQUATION OF THE STRAIGHT LINE OF
BEST FIT FOR A SET OF DATA POINTS. IT PLOTS EACH DATA POINT
AND THE STRAIGHT LINE DETERMINED BY THE CALCULATED EQUATION.
(SEE STAT-PAC PROGRAM 10-12 FOR COMBINED LEAST SQUARES
LINEAR, PARABOLIC, POWER AND EXPONENTIAL REGRESSION).

EQUIPMENT REQUIRED - 9100A 9100B 9125A/B

09100-70819 PARABOLIC REGRESSION AND PLOT

LAST REVISION 06/01/70 PLOTTER PROGRAM PAC
PUBLISHED

THIS PROGRAM FINDS THE COEFFICIENTS OF A SECOND DEGREE
EQUATION. IT PLOTS THE DATA POINTS AND THE BEST FIT LEAST
SQUARES PARABOLA DETERMINED BY THE CALCULATED EQUATION. (SEE
STAT-PAC PROGRAM 10-12 FOR COMBINED LEAST SQUARES LINEAR,
PARABOLIC, POWER AND EXPONENTIAL REGRESSION).

EQUIPMENT REQUIRED - 9100A 9100B 9125A/B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-70820 EXPONENTIAL REGRESSION AND PLOT

LAST REVISION 06/01/70 PLOTTER PROGRAM PAC
PUBLISHED

THIS PROGRAM COMPUTES THE LEAST SQUARES FIT AND A CORRELATION COEFFICIENT OF N PAIRS OF DATA POINTS FOR AN EXPONENTIAL FUNCTION. IT PLOTS EACH POINT AND THE LEAST SQUARES CURVE AFTER COMPUTING THE UNKNOWNNS. (SEE STAT-PAC PROGRAM 10-12 FOR COMBINED LEAST SQUARES LINEAR, PARABOLIC, POWER AND EXPONENTIAL REGRESSION).

EQUIPMENT REQUIRED - 9100A 9100B 9125A/B

09100-70821 POWER CURVE REGRESSION AND PLOT

LAST REVISION 06/01/70 PLOTTER PROGRAM PAC
PUBLISHED

THIS PROGRAM COMPUTES THE LEAST SQUARES FIT AND CORRELATION COEFFICIENT OF N PAIRS OF DATA POINTS FOR A POWER CURVE. IT PLOTS EACH DATA POINT AND THE CURVE AFTER CALCULATING THE UNKNOWNNS. (SEE STAT-PAC PROGRAM 10-12 FOR COMBINED LEAST SQUARES LINEAR, PARABOLIC, POWER AND EXPONENTIAL REGRESSION).

EQUIPMENT REQUIRED - 9100A 9100B 9125A/B

09100-76006 PLOTTER DIAGNOSTIC

LAST REVISION 06/01/70 PLOTTER PROGRAM PAC
PUBLISHED

THIS PROGRAM TESTS EVERY PROGRAMMABLE OPERATION OF THE 9125A OR 9125B FOR PROPER OPERATION. (FOR PLOTTER DIAGNOSTIC MAGNETIC CARD ONLY WITH USER INSTRUCTIONS, ORDER PART NUMBER 09125-90014).

EQUIPMENT REQUIRED - 9100A 9100B 9125A/B

09119-76999 SET OF PRERECORDED MAGNETIC CARDS FOR PLOTTER PACKET

LAST REVISION 04/15/69 PLOTTER PROGRAM PACKET
PUBLISHED

PRICE 25.00

SEND ALL ORDERS FOR PUBLICATIONS AND MAGNETIC CARDS TO THE LOCAL HP SALES OFFICE.

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

CATEGORY - MISCELLANEOUS

09100-76XXX

REFER TO THE LAST ENTRY IN THIS PROGRAM CATEGORY FOR ORDERING INFORMATION ON SETS OF PRERECORDED MAGNETIC CARDS FOR THIS PACKET. IF CARDS ARE NOT AVAILABLE, AS INDICATED BY NO ORDERING ENTRY, CONSULT YOUR LOCAL HP CALCULATOR SALESMAN FOR FURTHER INFORMATION.

PART NUMBER

PROGRAM TITLE

09100-76001 DIAGNOSTIC PROGRAM

LAST REVISION 12/01/68 9100A LIBRARY
PUBLISHED

CHECKS ALL FUNCTIONS AND OPERATIONS OF THE CALCULATOR (9100A) AND INDICATES BY DISPLAY WHETHER OR NOT THE CALCULATOR IS FUNCTIONING PROPERLY.

EQUIPMENT REQUIRED - 9100A 9100B

09100-76002 POUNDS - DOLLARS CONVERSION

LAST REVISION 12/01/68 9100A LIBRARY
PUBLISHED

CONVERTS BRITISH POUNDS AND SUBDIVISIONS THEREOF TO AMERICAN DOLLARS AND VICE VERSA.

EQUIPMENT REQUIRED - 9100A

09100-76003 NAVIGATIONAL COURSE CALCULATION

LAST REVISION 09/01/69 9100A/B LIBRARY
PUBLISHED

CALCULATED COURSE SETTINGS FOR ONE OR MORE ADJOINING LEGS OF A PROPOSED JOURNEY, THE LENGTH OF EACH LEG, AND THE TOTAL DISTANCE COVERED ON COMPLETION OF THE JOURNEY.

EQUIPMENT REQUIRED - 9100A 9100B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-76004 CIRCLE DETERMINED BY THREE POINTS

LAST REVISION 09/01/69 9100A/B LIBRARY
PUBLISHED

CIRCULATES THE RADIUS AND CENTER POINT (IN RECTANGULAR
COORDINATES) OF THE CIRCLE DEFINED BY THREE GIVEN POINTS.
EQUIPMENT REQUIRED - 9100A 9100B

09100-76005 AREA OF A RECTILINEAR SURFACE POLYGON

LAST REVISION 09/01/69 9100A/B LIBRARY
PUBLISHED

CALCULATES THE AREA OF ANY RECTILINEAR POLYGON GIVEN THE
RECTANGULAR COORDINATES OF THE VERTICES.
EQUIPMENT REQUIRED - 9100A 9100B

09100-76006 PLOTTER DIAGNOSTIC

LAST REVISION 12/01/69 PLOTTER PAC
PUBLISHED

THE PURPOSE OF THE PLOTTER DIAGNOSTIC IS TO TEST EVERY
PROGRAMMABLE OPERATION OF THE 9125A FOR PROPER EXECUTION.
FOR PRERECORDED MAGNETIC CARD ONLY, ORDER P/N 09125-90002.
EQUIPMENT REQUIRED - 9100A 9100B 9125A/B

09100-76007 AXES PLOT

LAST REVISION 12/01/69 M. J. WINGERT
UNPUBLISHED

THIS PROGRAM WILL PLOT THE ABSCISSA AND ORDINATE AXES.
EQUIPMENT REQUIRED - 9100A 9100B 9125A/B

PRICE 10.00

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-76008 WAR GAME

LAST REVISION 12/01/69 M. J. WINGERT

UNPUBLISHED

PRICE 10.00

THE ANGLE AND INITIAL VELOCITY OF THE PROJECTILE ARE TO BE
ENTERED EACH TIME AS OPPOSING PLAYERS ATTEMPT TO STRIKE THE
OTHERS SQUARE. THE TRAJECTORY OF EACH ATTEMPT IS PLOTTED.

EQUIPMENT REQUIRED - 9100A 9100B 9125A/B

09100-76011 CHARACTER PLOT PROGRAM

LAST REVISION 12/01/69 KEYBOARD VOL. 2 NO. 2

PUBLISHED

PRICE 10.00

THE CHARACTER CODES ARE FORMED SIMPLY BY TYPING THE SHAPE OF
THE CHARACTER ON THE DIGIT KEYS.

RAYMOND J. SCHNEIDER, JR.

EQUIPMENT REQUIRED - 9100A 9100B 9125A/B

09100-76012 GENERAL POINT PLOT

LAST REVISION 12/01/69 STAT PAC (PROGRAM 10-18)

PUBLISHED

THE PROGRAM IS WRITTEN TO PLOT A SERIES OF POINTS, (X1, Y1).
IT PLOTS (X MAX - X MIN) AT 15 INCHES (38,1 CM.).

EQUIPMENT REQUIRED - 9100A 9100B 9125A/B

09100-76013 CHANGE OF (SUB-) PROGRAMS IN THE 9101A EXTENDED MEMORY

LAST REVISION 08/25/70 E. BECK

UNPUBLISHED

PRICE 10.00

THIS PROGRAM ENABLES THE USER TO MAKE DESIRED CHANGES IN
A PROGRAM STORED IN THE 9101A. THE PROTECT LINE POSITION AND
STORAGE LOCATION OF THE STORED PROGRAM MUST BE KNOWN. THE
PROGRAM FINDS THESE VALUES AND STORES THE CHANGED PROGRAM
WITH THE SAME ASSIGNMENT NUMBER.

EQUIPMENT REQUIRED - 9100A 9100B 9101A

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-76014 AIRPLANE TAKEOFF ANALYSIS AND REDUCTION

LAST REVISION 03/28/71 H. RUSSELL

UNPUBLISHED

PRICE 10.00

GIVEN THE BEARINGS (MEASURED FROM AN ARBITRARY POINT) OF THE
START, LIFTOFF AND 50-FOOT HEIGHT POINTS, THIS PROGRAM CALCU-
LATES THESE DISTANCES. BEARING AND DISTANCE OF THE NORMAL
MUST BE KNOWN FOR THIS CALCULATION. COMPUTED VALUES ARE THEN
CORRECTED SEPARATELY TO GIVE THE DISTANCES AT STANDARD
PRESSURE AND TEMPERATURE AND WITH ZERO WIND AND ZERO SLOPE.

EQUIPMENT REQUIRED - 9100A 9100B

09100-76015 AIRPLANE CLIMB ANALYSIS

LAST REVISION 03/28/71 H. RUSSELL

UNPUBLISHED

PRICE 10.00

GIVEN THE OBSERVED CLIMB DATA CONSISTING OF ALTITUDE READINGS
AT EQUAL TIME INTERVALS (TYPICALLY EVERY QUARTER-MINUTE),
THIS PROGRAM COMPUTES THE ALTITUDE (H) AND THE VARIANCE (VC)
OF THE ALTITUDE AT STANDARD WEIGHT AND IN STANDARD ATMOSPHERE

EQUIPMENT REQUIRED - 9100A 9100B

09100-76016 POLAR AXIS PLOT

LAST REVISION 03/28/71 W. A. CUMMINGS

UNPUBLISHED

PRICE 10.00

THIS PROGRAM PLOTS THE POLAR AXIS WITH INCREMENTS OF TEN
DEGREES BETWEEN THE ANGLE ZERO DEGREES AND 360 DEGREES.

EQUIPMENT REQUIRED - 9100A 9100B 9125A/B

09100-76501 DIAGNOSTIC (EXERCISER)

LAST REVISION 09/01/69 9100B LIBRARY

PUBLISHED

THE PROGRAM EXERCISES EACH CALCULATOR OPERATION AND MEMORY
LOCATION WITH THE EXCEPTION OF THE FMT, PRINT, AND ERROR
CONDITIONS.

EQUIPMENT REQUIRED - 9100B

HEWLETT-PACKARD COMPANY
CALCULATOR PROGRAM CATALOG

PART NUMBER

PROGRAM TITLE

09100-77038 STEEL LISTING

LAST REVISION 05/05/71 E. BECK

UNPUBLISHED

PRICE 30.00

GIVEN THE NUMBER OF PIECES OF STEEL, LENGTH OF A SINGLE
PIECE, AND THE DIAMETER, THIS PROGRAM CALCULATES AND TYPES
OUT THE AMOUNT OF STEEL (LENGTH, WEIGHT, AND TOTAL WEIGHT.

EQUIPMENT REQUIRED - 9100A 9100B 9101A 9106A

Program Submittal Instructions

Hewlett-Packard maintains a library of Calculator System programs available to HP users. New contributed programs are solicited to increase the number of programs available to you and other customers.

Entries in the Calculator Products Program Catalog are of two types -- supported programs from Hewlett-Packard and programs contributed by users. HP compiles but does not test or maintain contributed programs. Maintenance of these programs is the responsibility of the person submitting the program, since he is the most knowledgeable about his entry. Each program will bear either an original date or a revised date indicating a revision or correction.

Contributed programs should be typewritten and completely documented so that other users are able to easily understand and operate them. Completion of the Program Submittal Form and inclusion of the listed material and recorded mag cards will insure adequately documented, publishable programs. Submittal and USER INSTRUCTION forms are found at the back of this Pac. The magnetic cards will be returned.

Programs may be withdrawn from the Master Program List by writing to Hewlett-Packard, stating the reason for withdrawal, such as when the program is replaced with a redesigned version. Address all correspondence to:

Hewlett-Packard Company
Calculator Products Division
P.O. Box 301
Loveland, Colorado 80537

Attention: Applications Services

Program Submittal Form

Hewlett-Packard Company
Calculator Products Division

(Please print or type)

1. ☐ Initial Submission ☐ Revision

2. Program Title: _____

3. Program Description: _____

4. Contributor's Name: _____

Organization: _____

Address: _____

Telephone: _____

5. Do you want your name to appear in the catalog? _____ ☐ yes _____ ☐ no

Do you want your organization's name to appear in the catalog? _____ ☐ yes _____ ☐ no

6. May an HP customer contact you directly? _____ ☐ yes _____ ☐ no

7. Include the following materials:

- a. Program introduction, including equations solved and text reference.
- b. User instructions.
- c. Numeric input/output example, including sample plot or printer tape if applicable.
- d. Program steps and step codes (use Printer Alpha program listing if possible).
- e. Recorded magnetic cards. Shall we return original cards ☐

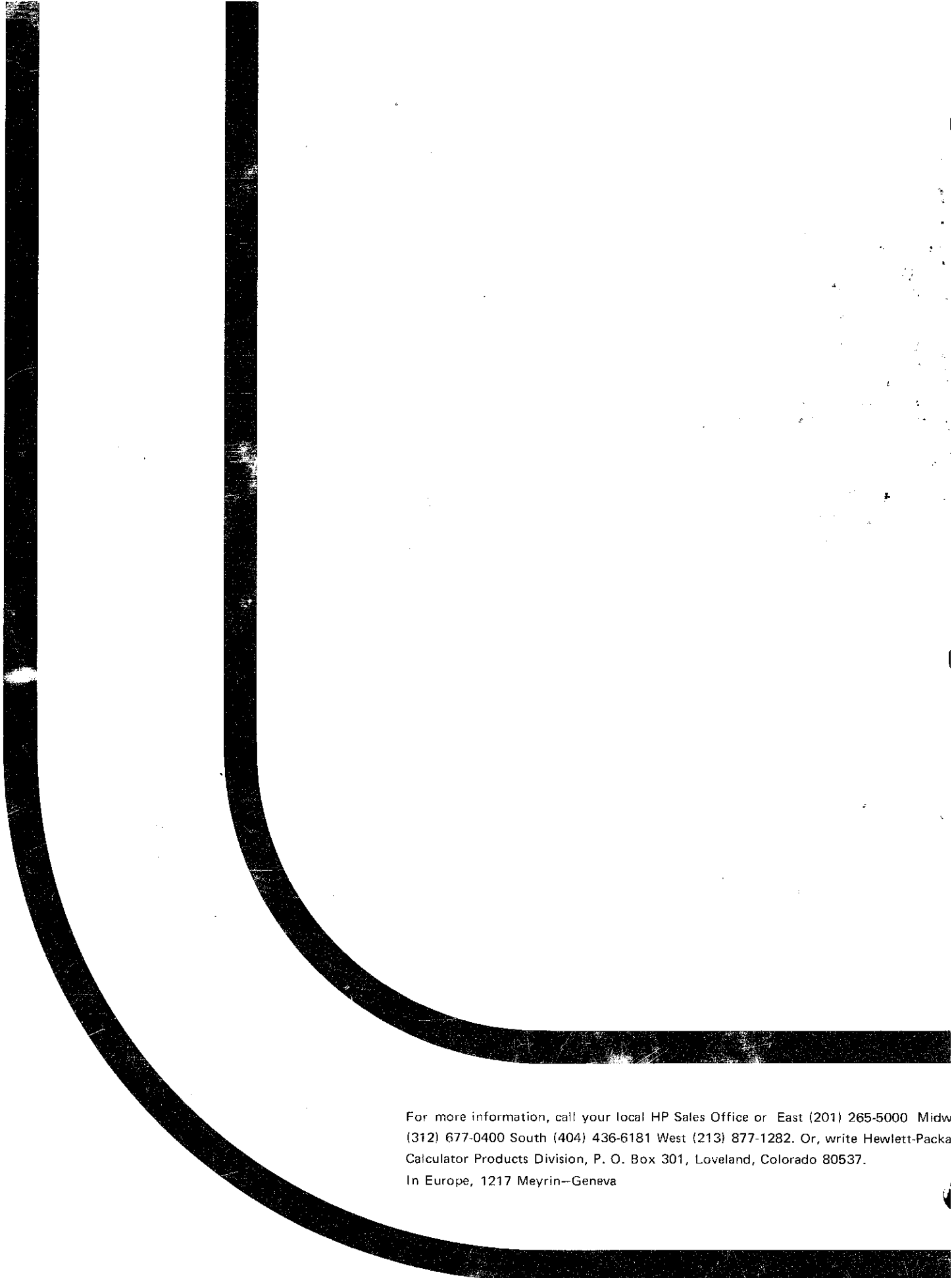
or blank cards ☐ ?

8. Acknowledgement and Agreement

To the best of my knowledge, this contributed program is free of any proprietary information belonging to any person or organization. I am making this program available to Hewlett-Packard, and I agree that HP may reproduce, publish, and use it, and authorize others to do so without obligation or liability of any kind.

(Signature)

(Date)



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(312) 677-0400 South (404) 436-6181 West (213) 877-1282. Or, write Hewlett-Packard
Calculator Products Division, P. O. Box 301, Loveland, Colorado 80537.
In Europe, 1217 Meyrin—Geneva

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