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Take an unhurried look at the  
uncompromising calculators  
from Hewlett-Packard.

"The success and prosperity of our company will be assured only if we offer our customers superior products that fill real needs and provide lasting value, and that are supported by a wide variety of useful services, both before and after sale."

Statement of Corporate Objectives,  
Hewlett-Packard  
July, 1971

Erratum: First paragraph on page 15, is out of context please disregard.

When Messrs. Hewlett and Packard founded our company in 1939, we offered one superior product, an audio oscillator. Today, we offer more than 3,000 quality products, designed and built for some of the world's most discerning customers.

Since we introduced our first pocket calculator in 1971, we've sold over 700,000 world-wide. Their owners include Nobel laureates, astronauts, mountain-climbers, businessmen, doctors, students. Hewlett-Packard calculators are the professional calculators for today's professional. They fill real needs. And they provide lasting value.

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All Hewlett-Packard pocket calculators offer uncompromising quality.



- Every key on every HP calculator is checked at least twice.
- Every key is double injection molded, so the symbol it carries won't wear off.
- Every lettered key has a positive click action, so you know for sure the function has registered when you press one.
- It's no accident that the OFF-ON switch operates as smoothly as it does. We greased it with silicon when we installed it. It's also no accident that it moves in a horizontal plane. That's to prevent it from moving when you put the calculator into its carrying case or your shirt pocket.
- The numbers in the display are tipped forward, so you can view them clearly and without distortion at wide angles.<sup>1</sup>
- There's a moisture barrier under the keyboard to protect the calculator's innards from spills coffee, tea, milk, what-have-you.
- The rechargeable battery pack (included with all HP calculators) is a single unit, easy to replace.

- There are no exposed wires, seams or electronic components in the battery compartment, just two contacts. This compartment is also sealed to protect the calculator's vital parts.
- The battery compartment door opens easily, without a prying coin or key.
- The recharger plug is recessed to ensure a positive connection; it's also designed so there's no way you can enter the wrong plug by mistake.
- Critical internal connections are gold-plated.
- The heavy gauge plastic case is designed to withstand a long tumble to a hard floor.

All HP calculators are designed from scratch to meet the particular needs, present and anticipated, of particular professions.

**Hewlett-Packard pocket calculators also offer uncompromising problem solving power, using the most efficient logic system ever devised.**

- Our unique RPN logic system lets you evaluate any expression without copying and remembering parentheses or re-structuring. The calculator remembers what's where, so you don't have to.
- RPN lets you solve problems your way—the way you first learned in beginning algebra, the way you now use when you use pencil and paper or slide rule.
- RPN lets you solve problems one step at a time. You never work with more than two numbers at once.
- RPN gives you continuous and immediate feedback. You see all intermediate answers because the calculator executes each function immediately after you press the function key.
- RPN makes it easy to recover from errors. You can backtrack when you goad because the calculator performs operations sequentially.
- RPN lets you re-use numbers without re-entering them. Your calculator becomes your scratch pad. This is a real time-saver when you're working with large numbers or making long chain calculations.

Each of the calculators you'll read about on the following pages offers RPN. It's one reason so many scientists, engineers, businessmen and students of science, engineering and business rely on them for fast, accurate answers to their problems.

<sup>1</sup> Because of the nature of its size the HP-21 has a recessed display.

Our newest scientific calculator, the uncompromising HP-21, packs more power into a smaller case.

Pick up our new HP-21 scientific calculator, and the first thing you notice is its size. It weighs only 4 oz., vs. 9 oz. for our other pre-programmed scientific calculators.

The second thing you note, after a few minutes' calculating, is its power. The HP-21 performs all trig and log calculations, in radians or degrees, and is the only calculator in its price range that lets you

- convert polar to rectangular coordinates and back again ( $\rightarrow R$ ,  $\rightarrow P$ );
- calculate a common antilog ( $10^x$ ) with a single keystroke;
- do register arithmetic ( $M+$ ,  $M-$ ,  $M\%$ ,  $M\div$ ).

The HP-21 also performs all basic manipulations ( $\div$ ,  $\times$ ,  $\sqrt{\phantom{x}}$ ,  $\sqrt[n]{\phantom{x}}$ ,  $\pi$ ) and executes all pre-programmed functions in one second or less.

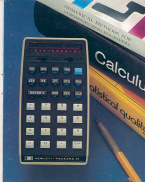
**Full display formatting.** The Display key (DSF) allows you to choose between fixed decimal and notation and lets you control the number of places displayed. With the fixed decimal format you select as many digits as you wish to see displayed (up to 10).

In scientific notation you can select up to 8 digits. Although the HP-21 provides you with automatic roundoff to your selected digit, a full 10 digits are retained internally for accuracy.

Whenever a number is too large or small for fixed decimal display, the HP-21 switches automatically to scientific, so you never have to worry that it will confuse a smaller number with zero.

The HP-21 is ideal for vector arithmetic problems. Once the sums of the x and y coordinates of all vectors are accumulated, they can be converted back to the equivalent polar form using the rectangular to polar function. (Below is an example vector problem. Vector one ( $\vec{V}_1$ ) is to be added to vector two ( $\vec{V}_2$ ) yielding  $\vec{V}_1 + \vec{V}_2$ .

1. Set calculator to degrees mode  $\rightarrow (D) \rightarrow$
2. Keystrokes which convert  $\vec{V}_1$  to rectangular coordinates and store x:  $140 (R) 12 (x) (M) (x) \rightarrow 0.00$



3. Keystrokes which convert  $\vec{V}_1$  to rectangular coordinates  $48 (R) 25 (x) \rightarrow 15.39$
4. Sum x components  $(M) (x) \rightarrow 15.39$
5. Sum y components  $44 (R) 25 (x) \rightarrow 34.31$
6. Recall sum of x-components  $(M) (x) \rightarrow 5.81$
7. Convert x and y components of the resulting sum to polar coordinates  $(R) (x) \rightarrow 35.00$  (mag)  
 $(R) (y) \rightarrow 76.57^\circ$  (angle)

Finally, whenever you give the HP-21 an impossible instruction, its Display spells E-r-r-o-r. Combine the HP-21's capability with its \$125.00\* cost, and you have a price-performance ratio that's simply unbeatable.

\*Suggested retail price excluding applicable state and local taxes—Continental U.S.A., Alaska & Hawaii.

Our uncompromising HP-45 advanced scientific calculator has become the new industry standard.

Our HP-45 advanced scientific calculator has become the standard of comparison in scientific calculators.

The key to its exceptional capability is its gold "shift" key (top row, far right) that doubles the functions of 24 other keys without increasing the size or weight of the machine.

The HP-45 performs trig functions in decimal degrees, radians or grads and converts answers to degrees/minutes/seconds and back again. It also converts polar coordinates to rectangular coordinates, and vice versa.

It handles complex chain calculations, squares, square roots, vector arithmetic, metric conversions and automatically calculates means, standard deviations and factorials.

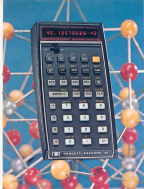
It displays up to 10 digits in either fixed-decimal or scientific notation and automatically positions the decimal point throughout its 200-decade range. It has nine Addressable Memory Registers and a special "last X" register that automatically stores the last number you key in for easy error correction and multiple operations on the same number.

All of these functions and features combine to give you maximum calculating power. For example, let's say you want to find the mean standard deviation on the 10 wealthiest people in the United States using the following age data:

62 84 47 58 68 60 62 59 71 73

Of the ages given, what is the mean; the standard deviation?

| Key                                                                                                                                                                                                                                                | Display                    |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|
| 1. $\text{f} \rightarrow \text{f}$                                                                                                                                                                                                                 | → 0.00                     |
| 2. 62 $\text{f} \rightarrow$ 84 $\text{f} \rightarrow$ 47 $\text{f} \rightarrow$ 58 $\text{f} \rightarrow$<br>68 $\text{f} \rightarrow$ 60 $\text{f} \rightarrow$ 59 $\text{f} \rightarrow$ 71 $\text{f} \rightarrow$<br>73 $\text{f} \rightarrow$ | 10.00 number of entries    |
| 3. $\text{f} \rightarrow \text{f}$                                                                                                                                                                                                                 | → 64.40 mean               |
| 4. $\text{f} \rightarrow \text{f}$                                                                                                                                                                                                                 | → 10.10 standard deviation |



Add two more ages (87 and 49) after the initial calculation. What is the new mean and standard deviation?

| Key                                                    | Display                        |
|--------------------------------------------------------|--------------------------------|
| 5. 87 $\text{f} \rightarrow$ 49 $\text{f} \rightarrow$ | → 12.00 number of entries      |
| 6. $\text{f} \rightarrow \text{f}$                     | → 65.00 new mean               |
| 7. $\text{f} \rightarrow \text{f}$                     | → 12.29 new standard deviation |

What could be simpler?

The \$249.00\* HP-45 can help scientists in their labs, engineers at their drawing boards, surveyors in the field, navigators at sea, students in the classroom, astronauts in space.

\*Suggested retail price including applicable state and local taxes—Continental U.S.A., Alaska & Hawaii.



**Our uncompromising HP-35 electronic slide rule has performed on Mt. Everest.**

When America's first successful Everest expedition in 1971 needed a compact, lightweight calculator that could solve a variety of problems under conditions that were adverse, to say the least, our HP-35 was chosen.

We've pre-programmed the HP-35 to perform all basic arithmetic, trigonometric, logarithmic and exponential functions automatically.

The HP-35 also offers an Addressable Memory Register for storing constants and intermediate results. It displays up to 10 digits in either fixed-decimal or scientific notation and automatically positions the decimal point throughout its 200-decade range. It handles negatives with the press of the CHS (change sign) key.

The \$199.00\* HP-35 was our first and most popular pocket calculator. It offers reliable answers fast, in a laboratory, a classroom or on a mountain in Nepal.

\*Suggested retail price excluding applicable state and local taxes—Continental U.S.A., Alaska & Hawaii.

**Our applications handbooks help provide HP-21, HP-33 and HP-43 owners with even more power and versatility from their calculators.**

So many owners have asked us for the "most efficient way" to solve particular math problems that we've published two handbooks that spell out the best solutions to scores of complex but commonly encountered problems.

The books, "HP-33 Math Pac" and "HP-43 Math Pac", give fully documented routines that enable you to step through tough problems quickly and easily. While they were originally designed for the HP-33 and HP-43, the HP-33 routines are also applicable to the HP-21.

With one of these handbooks, you don't have to spend a lot of time figuring out how to attack a difficult problem, and you don't have to remember a keystroke sequence once you've formulated your approach.

You just look up the problem in your handbook, and, presto, you have the most efficient solution. These application handbooks, priced at just \$14.00\*, offer you an economical way to add to the calculating power of either the HP-21, HP-43 or HP-33.



\*Suggested retail price excluding applicable state and local taxes—Continental U.S.A., Alaska & Hawaii.

Our uncompromising new HP-55 programmable scientific calculator takes most of the repetition out of your repetitive problems.

A 49-Step User Memory lets you program this calculator yourself to solve automatically repetitive problems you now step through manually.

It's marvelously simple. You key in your formula only once. From then on, you just enter the new variables for each computation and press one button (M5) for an answer that's accurate to 30 digits. You don't need software or a "computer" language.

It's equally easy to edit your programs, simply by overwriting the part you wish to change. The HP-55's SST (Single Step) key lets you walk through the User Memory one step at a time.

The HP-55 also performs automatically all sorts of trig, log, stat and conversion functions automatically. We've pre-programmed it to handle 86 different calculations and data manipulations. Naturally, you can incorporate them into your programs whenever you wish.

The HP-55 offers another, most unusual feature: a 100-hour digital timer. It's accurate to  $\pm 0.01\%$  and measures time in hours, minutes, seconds, tenths and hundredths. You can store up to 30 different points in time in the first 10 (of 30) Addressable Memory Registers.

The HP-55 is easy to use on a variety of problems, regardless of complexity, such as finding the area of a circle.

The HP-55 is easy to use on a variety of problems, regardless of complexity, such as finding the area of a circle. To program the HP-55 to calculate the areas of circles simply:

| Key                       |   | Display |
|---------------------------|---|---------|
| 1. Turn on machine        | → | 0.00    |
| 2. Switch to PROGRAM mode | → | 00.     |
| 3. Press (M999)           | → | 00. 48  |
| 4. Key in (R)             | → | 02. 71  |
| 5. Press (M)              | → | 03. 34  |
| 6. Press (A)              | → | 04. 83  |
| 7. Press (R)              | → | 05. 71  |

Now to run the program, switch back to RUN. Press (M5). Key in Radius and press Run/Stop Key (M5) for each circle.



If cost has kept you from this kind of calculating power, you've lost your last excuse. The HP-55 sells for just \$99.00\*. That's its essential beauty, what it does relative to what it costs.

Incidentally, one thing it doesn't do is to permanently record programs. The HP-55 is for people who either run their programs directly after they write them or don't mind re-entering previously written programs when they want to re-use them. If you require a program recording capability, look to our fully programmable HP-65. It's described on pages 20 through 23 of this catalog.

\*Suggested retail price including applicable state and local taxes—Continental U.S.A., Alaska & Hawaii

Two applications handbooks help mathematicians and statisticians get the most from their HP-35a.



Two optional handbooks, the "HP-35 Math Pac" and the "HP-35 Stat Pac", document the most efficient routines for solving hundreds of common but complicated math and stat problems.

With one of these Pacs, you just look up the problem and key in the published routine. After that, it's just a matter of adding the variables. You eliminate completely the time and energy you'd otherwise spend creating your own program, and you reduce the time you spend solving the problem—because the handbook gives you the shortest routine.

A \$18.00\* each, they're a sensible investment if the problems they document are problems you contend with.

\*Suggested retail price excluding applicable state and local taxes—Continental U.S.A., Alaska & Hawaii.

If you're a businessman, an HP business calculator offers you two important capabilities you won't find on conventional machines.

- The ability to solve everyday accounting problems (markups, discounts, extensions) quickly and easily—without stopping after each calculation to note sub-totals on scratch paper.
- Plus the ability to analyze rapidly time-consuming financial management questions (investments, pricing, profit planning) that can give you a leg up on your competition.

These latter kinds of calculations can help you no matter what your particular business, and you can learn to use them in minutes no matter what your math training. All you need to know is when to use which calculations, and our plain language owner's manuals make that perfectly clear.

**A word about our unique logic system. Or, how a calculator is like a car.**

When you buy a car, you pay attention to its steering, brakes, suspension and power train, because they determine how effectively you'll be able to control it.

When you buy a calculator, you should pay attention to its logic system for the same reason. We believe our RPN logic system (described in detail in the Introductory Section of this catalog) is the most effective yet devised because HP calculators give you total control over your calculations. **Total control that saves you time.** RPN eliminates the need for a scratch pad, even when you're calculating the final discount on an invoice with 15 separate items.

**Total control that reduces errors.** RPN minimizes the number of entries/problems and displays sub-totals and intermediate answers automatically.

**Total control that gives you confidence.** RPN lets you approach all problems the same way. Your way. As with a car, how well you control a calculator finally determines how well it performs for you. Our RPN logic system places you firmly in control of our calculators.



Our uncompromising HP-70 gives today's businessman the calculating power he needs at a price he can easily afford.

Perhaps the most impressive characteristic of our HP-70 is what it does relative to what it costs. It brings some advanced but very practical calculating capabilities within the reach of every businessman.

Also important, any businessman can take full advantage of all these capabilities. The HP-70 is exceptionally easy to operate. The know-how is in the calculator. You just press the keys, and the calculator takes it from there. It's pre-programmed to perform over 300 practical business calculations automatically.

A special feature of the HP-70 is its "random entry system" that lets you enter numbers in any order and change any one of them anytime. For example, say you're about to purchase a \$89,000 house. Your realtor says you could resell it in 4 years for \$82,000. To find the annual rate of appreciation, here's all you do:

1. Key in 89,000 and press the **STO** key.  
(**STO** = present value.)
2. Key in 4 and press the **STO** key.  
(**STO** = number of periods.)
3. Key in 82,000 and press the **STO** key.  
(**STO** = future value.)
4. Press the **INT** key for your answer, 7.46%.  
(**INT** = periodic interest rate.)

Thanks to "random entry", you could have entered the known factors in any order. Also thanks to random entry, you could quickly recalculate your rate-of-return if the house sold for \$60,000, press the **STO** key, then **INT**. In seconds you get your new answer, 11.30%, without doing the calculation over. Calculations like these are as easy as they are in part because of the HP-70's unique Financial Memory Bank. Each of the top row of keys has its own memory.

The HP-70 also gives you two separate Addressable Memories, one for running totals, the other for constants and intermediate answers. With an HP-70, you can actually keep two running totals at once.



Programming allows you to key in the program only once and complete the area of many circles without having to key in each and every step.

You can also do long accounting problems without pencil and paper. Say you wanted to calculate the total cost of 6 apples @ 11¢ each, 7 oranges @ 12¢ each, 8 pears @ 14¢ each, 9 tomatoes @ 5¢ each and 2 hot peppers @ \$12,000 each. With the HP-70, you could step through this problem as it's written, non-stop. The calculator would display answers for each individual segment (sub-totals) as well as the answer for all segments—automatically.

This dual capability—complex time/savings problems on the one hand, time-consuming accounting on the other—makes our HP-70 just right for all your business problems. At \$255.00\*, it can be a business man's ideal business partner.

\*Suggested retail price excluding applicable state and local taxes—Continental U.S.A., Alaska & Hawaii.

The uncompromising HP-80 may be the most revolutionary financial device of our time.

The HP-80 is the same size as the HP-70. It also weighs the same. Yet, it offers half again as much calculating power. The secret? A gold "shift" key (second row, far left) that disables the function of 21 other keys.

In short, the HP-80 is pre-programmed to perform automatically virtually all calculations involving the relationship between time and money. And it does them in seconds. All you do is press a few buttons.

In addition to all the HP-70's functions, the HP-80 gives you the ability to calculate bond yields, and prices, trend lines (linear regressions), sum-of-the-digits interest rebates and depreciation schedules, means, standard deviations. It even has a built-in 200-year calendar.

Suppose, for example, that you are working on your April sales forecast. You want to make a projection based on your first quarter sales which were as follows:

| Month    | Units  |
|----------|--------|
| January  | 15,000 |
| February | 17,500 |
| March    | 22,000 |

Here's all you do:

1. Key in your sales for the first three months, pressing the **T** (trend line) key after each entry.
2. Press **SHIFT** **END** to compute trend.
3. Since April is the fourth month, key in 4 and press the **M** key. [**M** = number of periods.]
4. Press **END** again for your answer: 28,366.67.



Want to carry this projection to the sixth month? Just press **6** **T** for your new answer: 39,366.67. The HP-80 is a time-and-money instrument, one that's been carefully designed to save today's businessman time and money by helping him to make a wider variety of important calculations very quickly, very precisely and very easily. Calculations like assessing investment opportunities, managing your financial assets.

It can handle numbers as large as 1 followed by 99 zeros. It displays up to 10 digits, and lets you decide where and when you want to round off. And it thinks of you when you give it an impossible problem.

There is no other financial pocket calculator like the \$395.00\* HP-80.

\*Suggested retail price excluding optional case and local taxes—Continental U.S.A., Atlanta & Hawaii.

Two investment handbooks simplify real estate, financial and investment decisions for owners of HP business pocket calculators.



With what's happening to land, construction and money costs these days, a real estate investor needs all the help he or she can get when it comes to analyzing investment opportunities.

That's why we've published two real estate guides for HP-70 and HP-80 owners. These books explain how to most efficiently use an HP-70 or HP-80 to calculate such essentials as appreciation, depreciation, balloon payments, annuities due, rent vs. buy, as well as many other general business, real estate and investment problems.

They'll help today's cost-conscious investor to make sounder, more profitable decisions, no matter whether he's interested in an apartment complex for his portfolio, a new plant site for his company or a home for his family.

At \$9.99\* each, they're an excellent example of how HP strives to help its customers to get the most from their calculators.

Now almost anyone can enjoy the speed, accuracy and computational power of full programmability, with the uncompromising HP-65.

The full programmability of our uncompromising HP-65 allows you the advantages of programming for repetitive problems, plus the ability to save your programs on magnetic cards for running at a later date or to use pre-recorded cards available from Hewlett-Packard. These are the major differences between full programmability of the HP-65 and the keystroke programming of the HP-55—outlined in the previous section.

Programming is simply the ability of a machine to learn, remember and execute automatically a series of steps necessary to solve a particular problem. Programming can be used to calculate relatively simple problems—like the area of a circle—or relatively complicated ones—like the great circle distance between two cities.

In either case, the value of programming is apparent. Once you've taught a machine the formula for your problem, all you do is supply the known variables and start the program running. The machine then automatically steps through the entire calculation—faster, more accurately, more consistently than humanly possible. In short, programming can make life easier for anyone who works with complex repetitive problems.

The drawbacks to programming—the reasons why all of us aren't using it to balance our checkbooks—have always been the size, cost and complexity of the machine. Until recently, a fully programmable machine cost thousands of dollars, weighed at least 30 pounds, and required the user to learn a special "computer" language like BASIC or FORTRAN.

Then we introduced our "small miracle," the HP-65. It's fully programmable machine that weighs 11 ounces, costs \$295.00\* and requires no special language to program. It also provides virtually all the functions of our HP-45 advanced scientific pocket calculator and even has a built-in magnetic card reader so that you can use it with pre-recorded programs prepared by experts.

It's literally a computer for your pocket. And, it's described in detail on the following pages.

\*Suggested retail price excluding applicable state and local taxes—Continental U.S.A., Alaska & Hawaii.

\*Suggested retail price excluding applicable state and local taxes—Continental U.S.A., Alaska & Hawaii.

Hewlett-Packard presents a small miracle: the unsurpassing HP-65 fully programmable pocket calculator.

The HP-65 is the closest thing yet to a personal, portable computer. Like a computer, it accepts and remembers programs (fed in via the keyboard or tiny, magnetic program cards), executes them at the touch of a button, and uses computer logic to solve even extremely complex problems in seconds.

Once the HP-65 is programmed to solve a problem, you can run the program any number of times with different data. And, since you can load in a new program card in only two seconds, you can rapidly customize the HP-65 to meet your specific needs of the moment. Yet, you don't have to know a thing about computers to operate it.

In fact, the HP-65 is really three machines in one. Second, you can write your own programs, incorporating the specific equations, constants and/or procedures you need for easy and rapid solution of all types of numeric problems. Simply make a list of the keystrokes needed to solve your problem using any of the pre-programmed arithmetic, log, trig and exponential functions on the keyboard. Then, set the HP-65 to "WRITE PROGRAM" and key in your program. Once your program is in the machine, you can record it on a tiny magnetic card for future use anytime, anywhere. You'll never have to rethink and verify that solution.

To run your program, turn the switch to "RUN," key in your known data and start the program running. The HP-65 will automatically execute your entire calculation in seconds—as often as you need it. Program memory is 100 steps long and there are logic tests, conditional branches—plus all the pre-programmed functions on the HP-65 keyboard. You can easily chain programs for these unusually long or complex problems that cannot be solved in 100 steps.

The first way to use the HP-65 is with the pre-recorded magnetic program cards supplied in HP-65 Application Pacs. Each Pac contains as many as 40 programs dedicated to a specific discipline (currently electrical engineering, finance, mathematics, statistics, medicine, marine navigation, aviation and surveying).



To use a pre-recorded program, you simply insert the appropriate card into the lower slot on the right side of the calculator. The instructions on the card will be automatically transferred to the HP-65's program memory in just 2 seconds.

Next, key in your known data and start the program running as described in the easy-to-follow instructions that come with each Application Pac. Finally, you can use the HP-65 as an advanced, pre-programmed scientific pocket calculator. Its 51 built-in functions and data manipulation operations let you solve almost any problem quickly, simply, confidently. Just press the keys.

No matter how you use it, the HP-65 gives you more than any other pocket calculator. At \$795.00\*, it's truly a "small miracle."

\*Suggested retail price including applicable state and local taxes—Continental U.S.A., Alaska & Hawaii.

**HP-65 Application Pacs** turn your complex, lengthy, or repetitive problems into a few simple steps that anyone can do quickly, confidently.

A major benefit of the HP-65 fully programmable pocket calculator is its ability to read programs from pre-recorded magnetic cards. To help you take full advantage of this feature, we have developed the following Application Pacs of up to 40 programs each. All are available through your HP dealer for \$49.00\* each. Any would make a welcome gift for an HP-65 owner.

There is also a Hewlett-Packard HP-65 Users' Library offering 150 programs and monthly newsletter.

**EE Pac I:** 35 programs selected from the following electrical engineering application areas: impedance matching, filter design, transmission line calculations, parameter conversion, power supply design, transistor biasing, control system and waveform analysis.

**Finance Pac I:** 38 programs address the frequently encountered problems in investment analysis, loans, savings annuities, leases, depreciation, business statistics, and other business applications.

**Math Pac I:** 40 programs from the areas of algebra, trigonometry, geometry and numerical analysis.

**Math Pac II:** 37 additional programs for number theory, complex analysis, numerical analysis and miscellaneous higher mathematical functions.

**Stat Pac I:** 37 programs for calculations involving general statistics, distribution functions, curve fitting and test statistics.



**Medical Pac I:** 27 programs applicable to these types of medical calculations and conversions: ventilator set-up and calibration; analysis of cardiopulmonary function, acid-base balance, blood gases and respiratory status.

**Navigation Pac I:** 36 programs to assist the marine navigator in piloting and dead reckoning, celestial navigation and relative motion problems.

**Aviation Pac I:** 29 programs devoted to pre-flight planning, flight management and in-flight navigation.

**Surveying Pac I:** 34 programs grouped into these common problem areas: traversing, curves, triangles and intersections, predetermined area and earthwork.

\*Suggested retail price excluding applicable state and local taxes—Continued at U.S.A., Alaska & Hawaii.



OPTIONAL ACCESSORIES

When you buy an HP calculator, you get more than just a calculator.

Every HP pocket calculator comes with these standard accessories:

- A rechargeable battery pack that provides up to 5 hours of continuous calculating power.
- An adapter-recharger that lets you charge the battery pack while you're using the calculator.
- A carrying case with belt loop.
- An illustrated owner's manual.

We also offer other standard accessories for certain calculators. Quick Reference Guides for the HP-65, HP-45, HP-80 and HP-95.

- A security cradle that locks the calculator in place.
- A hard leather field case that protects the calculator when you're on the road or in the field.\*
- Reserve power packs—for those rare instances when you'll need more than 3 to 5 hours of continuous calculating power.

All of these optional accessories are available through your HP dealer.

\*Not available for the HP-21.

You have to use a Hewlett-Packard calculator to believe it. This display lets you do just that.



Our new display offers a fascinating way to get acquainted with our calculators. It lets you challenge them with your problems. Look for it at leading department stores and college bookstores across the country.

Incidentally, when you buy an HP calculator from one of these stores, you can be confident of our full back-up support.

Call 800-556-7922 (in Calif., 800-662-9862) for the name of a Hewlett-Packard dealer near you. Then pay him a call.

# A buyers' guide to Hewlett-Packard pocket-sized computer calculators.

| Feature/Function                                          | Scientific Calculators |       |       |
|-----------------------------------------------------------|------------------------|-------|-------|
|                                                           | HP-21                  | HP-35 | HP-45 |
| <b>RPN Logic System</b>                                   |                        |       |       |
| <b>Memory</b>                                             |                        |       |       |
| 1 addressable registers                                   |                        |       |       |
| 4 working registers                                       |                        |       |       |
| 8 addressable registers                                   |                        |       |       |
| 8 addressable registers                                   |                        |       |       |
| 20 addressable registers                                  |                        |       |       |
| 40 steps of program                                       |                        |       |       |
| 100 steps of program memory                               |                        |       |       |
| Last x register                                           |                        |       |       |
| <b>Display</b>                                            |                        |       |       |
| 10 significant digits                                     |                        |       |       |
| 2 exponential digits                                      |                        |       |       |
| 200 decade range                                          |                        |       |       |
| Formatting, rounding                                      |                        |       |       |
| <b>Trigonometric Functions</b>                            |                        |       |       |
| Sine, cosine, tangent                                     |                        |       |       |
| SIN <sup>-1</sup> , COS <sup>-1</sup> , TAN <sup>-1</sup> |                        |       |       |
| Degrees/radians                                           |                        |       |       |
| <b>Trigonometric Modes</b>                                |                        |       |       |
| decimal degrees                                           |                        |       |       |
| radians                                                   |                        |       |       |
| grads                                                     |                        |       |       |
| <b>Trigonometric Constants</b>                            |                        |       |       |
| Extraneous/duplicate                                      |                        |       |       |
| decimal degrees/radian mode                               |                        |       |       |
| radians, grads/deg/radian                                 |                        |       |       |
| radians, grad/radian degrees                              |                        |       |       |
| <b>Logarithmic Functions</b>                              |                        |       |       |
| Natural log & antilog                                     |                        |       |       |
| Common log & antilog                                      |                        |       |       |
| <b>Exponential Functions</b>                              |                        |       |       |
| Squares, square roots                                     |                        |       |       |
| Raising numbers to a power                                |                        |       |       |
| <b>Constants</b>                                          |                        |       |       |
| $\pi$ (pi)                                                |                        |       |       |
| English (lb, in., gal.)                                   |                        |       |       |
| Metric (kg., cm., liter)                                  |                        |       |       |
| <b>Financial Functions</b>                                |                        |       |       |
| Number of periods (N)                                     |                        |       |       |
| Interest rate (i)                                         |                        |       |       |
| Payment/period (PMT)                                      |                        |       |       |
| Present value (PV)                                        |                        |       |       |
| Future value (FV)                                         |                        |       |       |
| Simple interest (SI)                                      |                        |       |       |
| Bond prices, yields                                       |                        |       |       |
| Accumulated interest                                      |                        |       |       |
| Rule of 72's calculations                                 |                        |       |       |
| Calendar                                                  |                        |       |       |
| <b>Percent Calculations</b>                               |                        |       |       |
| Percent amount (%)                                        |                        |       |       |
| Percent difference (L/N)                                  |                        |       |       |
| <b>Statistical Functions</b>                              |                        |       |       |
| Mean/std. dev. (1 variable)                               |                        |       |       |
| Mean/std. dev. (2 variables)                              |                        |       |       |
| Factorial                                                 |                        |       |       |
| Linear regression (trend line)                            |                        |       |       |
| <b>Other</b>                                              |                        |       |       |
| Absolute value                                            |                        |       |       |
| Integer/fractional extraction                             |                        |       |       |
| Decimal/fractional conversion                             |                        |       |       |
| Conversion table                                          |                        |       |       |
| ST                                                        |                        |       |       |
| 2 English metric conversions                              |                        |       |       |
| Timer-Digital timer                                       |                        |       |       |

HP-65

HP-70

Financial  
Calculators

HP-80

Fully Programmable  
Calculator  
HP-85

\* Not a pre-programmed function but can be performed easily with a few keystrokes.

\*\* Not a pre-programmed function but available on pre-programmed magnetic program cards.

\*\*\* Not a pre-programmed function but available in application books.



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