

03130D Program Description I

Program Title	KENO "SPECIAL"		
	\$13.30 — "190 WAY — EIGHT-SPOT"		
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Program Description, Equations, Variables

This program is based on "KENO — NEVADA-STYLE" (#02556D), but is simpler and somewhat faster. It also uses only one card!

The special keno ticket costs \$13.30 and allows you to play eight-spot tickets 190 ways (AT ONCE!).

This special keno program was suggested by the HARVEY'S CASINO (LAKE TAHOE) KENO GUIDE.

For <u>each</u> CATCH of 5 SPOTS, you are "paid"	\$.70
6 SPOTS	6.00
7 SPOTS	115.50
8 SPOTS	1260.00

The Keno ticket — 80 numbers — is divided into twenty (vertical) groups of FOUR numbers each (see sketch):
1-11-21-31, 2-12-22-32, 3-13-23-33, etc.

Operating Limits and Warnings

The cycle time for obtaining the 20 numbers is about 2 1/2 minutes.

For a win, you must "catch" at least FIVE SPOTS:
3 in one group of 4 plus 2 in another OR
4 in one group of 4 plus 1 in another.

This program has been verified only with respect to the numerical example given in *Program Description II*. User accepts and uses this program material AT HIS OWN RISK, in reliance solely upon his own inspection of the program material and without reliance upon any representation or description concerning the program material.

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03130D Program Description II

Sketch(es)	1	2	3	4	5	6	7	8	9	10	
K	11	12	13	14	15	16	17	18	19	20	13 ³⁰
E	21	22	23	24	25	26	27	28	29	30	
	31	32	33	34	35	36	37	38	39	40	190
N	41	42	43	44	45	46	47	48	49	50	way
	51	52	53	54	55	56	57	58	59	60	
O	61	62	63	64	65	66	67	68	69	70	8
	71	72	73	74	75	76	77	78	79	80	

Sample Problem(s)

Play four games of KENO

Start with a SEED of .0935633673

Initialize. .0935633673 [F][A] → 0.0

Solution(s) GAME #1 [A] → 0.0 [E] → 32, 43, 67, 1, 5, 45, 39, 59, 10, 77, 34, 24, 66, 8, 46, 35, 68, 21, 7, 31, 0.0 Enter these on the game sheet (as shown by "/") and determine your catches. 4 catches of 5 spots (3+2, etc.) = $4 \times 70¢ = \$2.80$. Score your ticket. 2.80 [C] → -10.50 ($2.80 - 13.30$ cost of ticket = -10.50)

GAME #2 [A] → 0.0 [E] → 39, 32, 26, 23, 53, 30, 12, 37, 64, 19, 47, 80, 74, 72, 1, 16, 6, 43, 27, 35, 0.0 5 catches of 5 spots. $5 \times 70¢ = 3.50$ 3.50 [C] → -20.30 ($2.80 + 3.50 - [2 \times 13.30] = -20.30$)

GAME #3 [A] → 0.0 [E] → 67, 39, 1, 4, 33, 15, 34, 48, 29, 8, 41, 36, 31, 28, 32, 50, 12, 78, 55, 69, 0.0 No 5-spot catches. 0 [C] → -33.60 ($2.80 + 3.50 + 0 - [3 \times 13.30] = -33.60$) Oh well, it takes money to make money!!

GAME #4 [A] → 0.0 [E] → 63, 38, 28, 73, 45, 20, 58, 16, 8, 43, 56, 12, 9, 1, 7, 48, — [GTO] PAGE 3 —

Reference(s)

USERS' LIBRARY PROGRAM #02556D —

"KENO — NEVADA-STYLE" by RICHARD ALTMAN

(CONTINUATION SHEET)

This is a good time to stop and have dinner !!

[illegible]

GAME	1	2	3	4	5	6	7	8	9	10
#3 (//)	11	12	13	14	15	16	17	18	19	20
	21	22	23	24	25	26	27	28	29	30
	31	32	33	34	35	36	37	38	39	40
GAME	41	42	43	44	45	46	47	48	49	50
#4 (///)	51	52	53	54	55	56	57	58	59	60
	61	62	63	64	65	66	67	68	69	70
	71	72	73	74	75	76	77	78	79	80

GAME #3
 no catches of
 3 spots in any
 vertical group
 of 4. Therefore,
 NO 5-SPOT CATCHES.

CATCHES:
 "4" — 8-18-28-38
 "2" — 9-29
 "3" — 43-63-73
 "2" — 48-58
 "1:" — 1, 12, 16, 7
 20, 42, 45,
 56, 77

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Program Description

(CONTINUATION SHEET)

ADDITIONAL KENO SHEETS

1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20	11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30	21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40	31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50	41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60	51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70	61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80	71	72	73	74	75	76	77	78	79	80

1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20	11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30	21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40	31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50	41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60	51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70	61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80	71	72	73	74	75	76	77	78	79	80

031300 KEY ENTRY 3 KEY COM

REGISTERS									
0 5 NUMBERS	1 5 NUMBERS	2 5 NUMBERS	3 5 NUMBERS	4 ←	5 REGISTERS R4 THRU	6	7 R59	8 ARE	9
S0 USED	S1 FOR	S2 TEMPORARY	S3 NUMBER	S4 STORAGE	S5 AND	S6 SELECTION	S7	S8	S9 →
A COUNTER AMOUNT WON/LOST	B SEED	C COUNTER	D USED	E LAST #	F	G	H	I USED	J

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Program Listing II

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STEP	KEY ENTRY	KEY CODE	COMMENTS	STEP	KEY ENTRY	KEY CODE	COMMENTS
	5	05			3	03	
	÷	81		170	hSTO I	35 33	
	4	04			RCL (i)	34 24	
	+	61		7	FLBL 7	31 25 07	RCL "LOOP"
	hSTO I	35 33			EEX	43	
	g FRAC	32 83			2	02	
	1	01			X	71	
120	0	00			fINT	31 83	
	X	71			hPAUSE	35 72	
	g 10 ^x	32 53			hPAUSE	35 72	
	hRTN	35 22			hLSTX	35 82	
A	FLBLA	31 25 11	20 NUMBERS	180	g FRAC	32 83	
	hF? 2	35 71 02			f x ≠ 0	31 61	
	fGSB 0	31 22 00	ON FIRST LOOP, SET UP REGISTERS		GTO 7	22 07	
	STO 3	33 03			fDSZ	31 33	
	STO 2	33 02			fFIX	31 23	
	STO 1	33 01			hRCL I	35 34	
130	STO 0	33 00			f x < 0	31 71	
	2	02			GTO 6	22 06	
	0	00			RCL (i)	34 24	
	RCL A	34 11			GTO 7	22 07	
	g FRAC	32 83	← AMT WON/LOST	190 C	FLBLC	31 25 13	AMOUNT WON/LOST
	+	61			f x < 0	31 71	
	hSTO I	35 33			R/S	84	
2	FLBL 2	31 25 02	20 NUMBERS "LOOP"		RCL A	34 11	
	hRCL I	35 34			g FRAC	32 83	
	STO A	33 11			EEX	43	
140	gGSB fe	32 22 15			7	07	
	fGSB 3	31 22 03			X	71	
	RCL A	34 11			hF? 0	35 71 00	
	hSTO I	35 33			CHS	42	
	fDSZ	31 33		200	+	61	
	GTO 2	22 02			1	01	
	CLX	44			3	03	
	STO 8	33 08			-	83	
	STO 9	33 09			3	03	
3	FLBL 3	31 25 03	"I" DETERMINER		-	51	
150	RCL A	34 11			f x < 0	31 71	
	5	05			hSFO	35 51 00	
	÷	81			STO B	33 12	
	.	83			hABS	35 64	
	2	02		210	EEX	43	
	-	51			7	07	
	fINT	31 83			÷	81	
	hSTO I	35 33			STO A	33 11	
	RCL E	34 15			RCL B	34 12	
	RCL (i)	34 24			f x > 0	31 81	
160	+	61			hCFD	35 61 00	
	EEX	43			DSP 2	23 02	
	2	02			f - x -	31 84	
	÷	81			R/S	84	
	STO (i)	33 24		220			
	hRTN	35 22					
E	FLBLE	31 25 15	RCL 20 NUMBERS				
	hSF 2	35 51 02					
	DSP 0	23 00					

THESE STEPS MAY
BE CHANGED TO
"PRINT X"

(SPACE)

hRTN INSERT THIS STEP
AFTER STEP
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for R₀-R₃ STORAGE

DEDUCT \$13.30
for each TICKET

LABELS				FLAGS		SET STATUS		
A 20#	B	C AMOUNT WON/LOST	D	E RCL 20 #	0 USED for RCL IN LBLC	FLAGS		
a INITIALIZE	b	c	d	e NEXT NUMBER	1	ON OFF	TRIG	DISP
0 SET-UP REG	1 "I" DETERMINER	2 20 # LOOP	3 "I" DETERMINER	4	2 USED for REG. SET-UP	0 ☐ ☒	DEG ☒	FIX ☒
5	6 RE-SET R _C	7 RCL LOOP	8	9 SET-UP LOOP	3	1 ☐ ☒	GRAD ☐	SCI ☐
						2 ☒ ☐	RAD ☐	ENG ☐
						3 ☐ ☒		n 3