

 TEXAS INSTRUMENTS				
495				
(method 1)				(method 2)
Number				Number

=====

4 9 5

Kaprekar constant

=====

Enter a 3-digit number including at least one
differs from the others then

either [A] (method 1)

either [E] (method 2)

M E T H O D 1

The program

sort the 3 digits in descending order to get
a first number abc,

sort the 3 digits in ascending order to get a
second cba number,

subtracts the second number from the first,
use the result as a fresh start

... etc ...

up to 495!

M E T H O D 2

The program

sort the 3 digits in descending order to get
a first number abc,

calculate the next number = $99a - 99c$)

use this result as a fresh start

... etc ...

up to 495!

4 9 5



000	76	LBL	051	08	08	102	09	09	153	42	STO
001	11	A	052	98	ADV	103	22	INV	154	09	09
002	47	CMS	053	69	OP	104	67	EQ	155	22	INV
003	42	STO	054	26	26	105	16	A'	156	67	EQ
004	09	09	055	43	RCL	106	47	CMS	157	10	E'
005	76	LBL	056	06	06	107	91	R/S	158	47	CMS
006	16	A'	057	99	PRT	108	76	LBL	159	91	R/S
007	18	C'	058	02	2	109	15	E	160	76	LBL
008	53	(	059	00	0	110	47	CMS	161	18	C'
009	43	RCL	060	00	0	111	42	STO	162	03	3
010	01	01	061	00	0	112	09	09	163	22	INV
011	65	*	062	00	0	113	76	LBL	164	28	LOG
012	01	1	063	00	0	114	10	E'	165	22	INV
013	00	0	064	00	0	115	18	C'	166	49	PRD
014	00	0	065	00	0	116	43	RCL	167	09	09
015	54	)	066	69	OP	117	03	03	168	03	3
016	85	+	067	04	04	118	65	*	169	42	STO
017	53	(	068	43	RCL	119	09	9	170	00	00
018	43	RCL	069	08	08	120	09	9	171	76	LBL
019	02	02	070	69	OP	121	95	=	172	34	SQR
020	65	*	071	06	06	122	42	STO	173	43	RCL
021	01	1	072	06	6	123	07	07	174	09	09
022	00	0	073	04	4	124	43	RCL	175	22	INV
023	54	)	074	00	0	125	01	01	176	59	INT
024	85	+	075	00	0	126	65	*	177	65	*
025	43	RCL	076	00	0	127	09	9	178	01	1
026	03	03	077	00	0	128	09	9	179	00	0
027	95	=	078	00	0	129	95	=	180	95	=
028	42	STO	079	00	0	130	42	STO	181	42	STO
029	07	07	080	69	OP	131	08	08	182	09	09
030	53	(	081	04	04	132	98	ADV	183	59	INT
031	43	RCL	082	43	RCL	133	69	OP	184	72	ST*
032	03	03	083	07	07	134	26	26	185	00	00
033	65	*	084	69	OP	135	43	RCL	186	97	DSZ
034	01	1	085	06	06	136	06	06	187	00	00
035	00	0	086	69	OP	137	99	PRT	188	34	SQR
036	00	0	087	00	00	138	43	RCL	189	03	3
037	54	)	088	43	RCL	139	07	07	190	42	STO
038	85	+	089	08	08	140	75	-	191	00	00
039	53	(	090	75	-	141	43	RCL	192	76	LBL
040	43	RCL	091	43	RCL	142	08	08	193	39	COS
041	02	02	092	07	07	143	95	=	194	73	RC*
042	65	*	093	95	=	144	69	OP	195	00	00
043	01	1	094	69	OP	145	00	00	196	32	X/T
044	00	0	095	06	06	146	69	OP	197	03	3
045	54	)	096	32	X/T	147	06	06	198	42	STO
046	85	+	097	04	4	148	32	X/T	199	05	05
047	43	RCL	098	09	9	149	04	4	200	76	LBL
048	01	01	099	05	5	150	09	9	201	38	SIN
049	95	=	100	32	X/T	151	05	5	202	73	RC*
050	42	STO	101	42	STO	152	32	X/T	203	05	05



204	77	GE
205	30	TAN
206	63	EX*
207	00	00
208	72	ST*
209	05	05
210	73	RC*
211	00	00
212	32	X/T
213	76	LBL
214	30	TAN
215	97	DSZ
216	05	05
217	38	SIN
218	97	DSZ
219	00	00
220	39	COS
221	92	RTN



L A B E L S		
001	11	A
006	16	A'
109	15	E
114	10	E'
161	18	C'
172	34	SQR
193	39	COS
201	38	SIN
214	30	TAN

Adr	Branch.
A'	104 67 EQ
C'	007 18 C'
C'	115 18 C'
COS	218 97 DSZ
E'	156 67 EQ
SIN	215 97 DSZ
SQR	186 97 DSZ
TAN	204 77 GE

Reg.	Instr.
00	169 42 STO
	184 72 ST*
	190 42 STO
	194 73 RC*
	206 63 EX*
01	210 73 RC*
	009 43 RCL
	047 43 RCL
02	124 43 RCL
	018 43 RCL
	040 43 RCL
03	025 43 RCL
	031 43 RCL
	116 43 RCL
05	198 42 STO
	202 73 RC*
	208 72 ST*
06	055 43 RCL
	135 43 RCL
07	028 42 STO
	082 43 RCL
	091 43 RCL
	122 42 STO
	138 43 RCL
08	050 42 STO
	068 43 RCL
	088 43 RCL
	130 42 STO
	141 43 RCL
09	003 42 STO
	101 42 STO
	111 42 STO
	153 42 STO
	166 49 PRD
	173 43 RCL
	181 42 STO

