

MULTIPLICATION TEACHER

Multiplication Teacher

By: Lou Wiener

1593

STEP	INSTRUCTIONS	KEYS	OUTPUT DATA/UNITS
1	Load Side 1		
2	Start/Initialize	f a	0
3	Enter top number of multiplication problem (no max. but works better w/5 or less.	A	top number
4	Enter bottom number (5 digit max)	B	bottom number
5.	Enter your answer (worked on paper)	E	
	If Answer correct		same answer
	If incorrect program will generate each line as it should be written out on paper, then total will appear		
6.	Optional, Press C for direct display of line solutions.		

Note: Program was set up to help third grade students learn long multiplication. It saves me time to figure out their mistakes.

Registers

A	B	C	D	E	I
Top #	Bottom #	Solution	—	Answer	—

Labels

A - Top #	B - Bottom #	C - Solution	D - -	E - Answer
a - Init.	b - N/A	c - N/A	d - N/A	e - N/A
0 - Used	1 - Used	2 - Used	3 - Used	4 - N/A
5 - N/A	6 - N/A	7 - N/A	8 - N/A	9 - N/A

Flag Set Status

0	1	2	3
off	off	off	off

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001	ALBLA	21 11	037	GSB1	23 01	073	ALBLE	21 15
002	STOA	35 11	038	GSB3	23 03	074	STOE	35 15
003	RTN	24	039	EEX	-23	075	RCLA	36 11
004	ALBLB	21 12	040	3	03	076	RCLB	36 12
005	STOB	35 12	041	GSB0	23 06	077	x	-35
006	RTN	24	042	STO2	35 02	078	X=Y?	16-33
007	ALBLC	21 13	043	3	03	079	RTN	24
008	RCLL	36 11	044	GSB1	23 01	080	STOC	22 13
009	PRTX	-14	045	GSB3	23 03	081	ALBLA	21 16 11
010	RCLB	36 12	046	EEX	-23	082	CLRG	16-53
011	PRTX	-14	047	4	04	083	CLX	-51
012	SPC	16-11	048	GSB0	23 00	084	RTN	24
013	RCLL	36 15	049	STO3	35 03	085	ALBLB	21 00
014	PRTX	-14	050	4	04	086	x	-35
015	SPC	16-11	051	GSB1	23 01	087	RCLA	36 11
016	RCLB	36 12	052	GSB3	23 03	088	x	-35
017	EEX	-23	053	EEX	-23	089	RTN	24
018	1	01	054	5	05	090	ALBL1	21 01
019	+	-24	055	GSB0	23 00	091	PSE	16 51
020	FRC	16 44	056	STO4	35 04	092	R4	-31
021	LSTX	16-63	057	5	05	093	PRTX	-14
022	INT	16 24	058	GSB1	23 01	094	RTN	24
023	STOC	35 13	059	STO2	22 02	095	ALBL3	21 03
024	R4	-31	060	ALBL2	21 02	096	RCLC	36 13
025	EEX	-23	061	RCLB	36 06	097	X=0?	16-43
026	1	01	062	RCL1	36 01	098	STO2	22 02
027	GSB0	23 00	063	+	-55	099	EEX	-23
028	STO0	35 00	064	RCL2	36 02	100	1	01
029	1	01	065	+	-55	101	+	-24
030	GSB1	23 01	066	RCL3	36 03	102	FRC	16 44
031	GSB3	23 03	067	+	-55	103	LSTX	16-63
032	EEX	-23	068	RCL4	36 04	104	INT	16 34
033	2	02	069	+	-55	105	STOC	35 15
034	GSB0	23 00	070	SFC	16-11	106	R4	-31
035	STO1	35 01	071	PRTX	-14	107	RTN	24
036	2	02	072	R/S	51	108	R/S	51