

T@TS1

"Young man, in mathematics you don't understand things. You just get used to them."¹

×		0	1	2	3	4	5	6	7	8	9
2	0	0	2	4	6	8	0	2	4	6	8
	1	1	3	5	7	9	1	3	5	7	9
3	0	0	3	6	9	2	5	8	1	4	7
	1	1	4	7	0	3	6	9	2	5	8
4	0	0	4	8	2	6	0	4	8	2	6
	1	1	5	9	3	7	1	5	9	3	7
5	0	0	5	0	5	0	5	0	5	0	5
	1	1	6	1	6	1	6	1	6	1	6
6	0	0	6	2	8	4	0	6	2	8	4
	1	1	7	3	9	5	1	7	3	9	5
7	0	0	7	4	1	8	5	2	9	6	3
	1	1	8	5	2	9	6	3	0	7	4
8	0	0	8	6	4	2	0	8	6	4	2
	1	1	9	7	5	3	1	9	7	5	3
9	0	0	9	8	7	6	5	4	3	2	1
	1	1	0	9	8	7	6	5	4	3	2

A special thanks to Arnaud Lefebvre (IREM Rouen) for providing the code for the Genaille–Lucas rulers² at the front (multiplication—page 1) and back (division—page 2370) of this document.

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¹John von Neumann's reply to his colleague's question about the mathematics of a very complex problem

²Genaille–Lucas rulers are an arithmetic tool invented by Henri Genaille, a French railway engineer, in 1891. The device is a variant of Napier's bones. By representing the carry graphically, the user can read off the results of simple multiplication problems directly, with no intermediate mental calculations.