

Tabula *pythagorica*

MULTIPLICATION TABLE · PRODUCTS FROM 1 × 1 TO 12 × 12

The product $a \times b$ sits where row a meets column b .

×	1	2	3	4	5	6	7	8	9	10	11	12
1	1	2	3	4	5	6	7	8	9	10	11	12
2	2	4	6	8	10	12	14	16	18	20	22	24
3	3	6	9	12	15	18	21	24	27	30	33	36
4	4	8	12	16	20	24	28	32	36	40	44	48
5	5	10	15	20	25	30	35	40	45	50	55	60
6	6	12	18	24	30	36	42	48	54	60	66	72
7	7	14	21	28	35	42	49	56	63	70	77	84
8	8	16	24	32	40	48	56	64	72	80	88	96
9	9	18	27	36	45	54	63	72	81	90	99	108
10	10	20	30	40	50	60	70	80	90	100	110	120
11	11	22	33	44	55	66	77	88	99	110	121	132
12	12	24	36	48	60	72	84	96	108	120	132	144

Ochre diagonal: the squares $n \times n$.

Bold lines: markers after 5 and 10.

Symmetry

$a \times b = b \times a$
The table mirrors itself across
its diagonal: only **78** facts
to learn instead of 144.

Squares

$(n + 1)^2 = n^2 + 2n + 1$
Consecutive squares differ
by an odd number:
 $49 + 15 \rightarrow$ **64** · $64 + 17 \rightarrow$ **81**

Shortcuts

×5 half of ×10
×9 digits add up to 9 ($n \leq 10$)
×11 repeated digit ($n \leq 9$)
×12 ×10, then add ×2