



Multiplication

Grid method

A good way to visualise multiplying 2 numbers together, by splitting them into parts

Example: 23×37

X	20 (tens)	3 (units)	Total
30 (tens)	$20 \times 30 = 600$	$3 \times 30 = 90$	$600 + 90 = 690$
7 (units)	$20 \times 7 = 140$	$3 \times 7 = 21$	$140 + 21 = 161$
			$690 + 161 = 851$

Column method

A way of multiplying by putting one number on top of the other

Example: 23×37

$$\begin{array}{r}
 23 \\
 \times 37 \\
 \hline
 161 \\
 690 \\
 \hline
 851 \\
 \hline
 \end{array}$$

First, multiply 23 by 7 to give the first line, by finding 3×7 and then 2×7 .

Then a place holder (0) must be added into our second column because we are multiplying by 30, instead of 3.

Then proceed to multiply 23 by 3

Finally, add together the 2 rows found like a column addition problem