



Multiplication tips

When multiplying numbers you'll start to notice lots of **patterns**. Here are some common patterns and other ways of multiplying that will help you become a multiplication wizard.

Multiplying by 2

Multiplying by 2 is the same as doubling a number. A quick method is to split the number into tens and units and double: 2×13 is double 10, which is 20 plus double 3 which is 6 = 26.

Tip: when you multiply by 2 you always end up with an even number.

Multiplying by 4

Remember that $2 \times 2 = 4$. Multiplying by 4 is the same as **doubling** and **doubling again**: 4×15 is double 15 which is 30 and double 30 = 60.

Multiplying by 10

To multiply by 10 move all the numbers one place value to the left: $10 \times 8 = 80$

Tens	units	move the number one place value to the left	tens	units
	8		8	0

Tip: when you multiply a whole number by 10 it always ends in 0.

Multiplying by 5

To multiply by 5, multiply by 10 and then halve: 5×62 is half of 10×62 which is half of 620 = 310

Tip: when you multiply a number by 5 it always ends in 0 or 5.

Adjusting numbers

You can **round** numbers up or down and then **adjust** to make them easier to multiply:

$$4 \times 29 = (4 \times 30) - 4 = 120 - 4 = 116$$

$$3 \times 22 = (3 \times 20) + 6 = 60 + 6 = 66$$

Splitting into factors

You can **split** numbers into **factors** to make them easier to multiply:

$$17 \times 6 = 17 \times 2 \times 3 = 34 \times 3 = 102$$

Splitting into the numbers added together

You can **split** numbers into **addition facts** and then multiply:

$$7 \times 52 = 7 \times (50 + 2) = (7 \times 50) + (7 \times 2) = 350 + 14 = 364$$

Checking your calculations

Multiplication and division are linked. They are the **opposite** action of each other:

$10 \times 5 = 50$	$50 \div 5 = 10$	or	$50 \div 10 = 5$
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After multiplying you can check your answer using division.