



## Introduction to multiplication

**Multiplication** is a way of **adding a number to itself a number of times**. For example:

$2 + 2 + 2 + 2 + 2 + 2 = 12$	is the same as	$6 \times 2 = 12$
$5 + 5 + 5 + 5 + 5 = 25$	is the same as	$5 \times 5 = 25$

Multiplication is the same as **repeated addition**. When you multiply numbers you use the **multiplication sign ( $\times$ )**

When you're multiplying numbers together it **doesn't matter** what **order** you use. For example:

$3 \times 4 = 12$	is the same as	$4 \times 3 = 12$
$2 \times 8 = 16$	is the same as	$8 \times 2 = 16$

Multiplication is a quicker method of repeated addition. With repeated addition it doesn't matter in what order you add up the numbers. For example:

$4 + 4 + 4 = 12$	is the same as	$4 + 4 + 4 = 12$
$8 + 8 = 16$	is the same as	$8 + 8 = 16$

We use different words to describe multiplication. For example,  $3 \times 7 = 21$  can also be described as: **3 times 7 = 21**    **3 lots of 7 = 21**    **3 sets of 7 = 21**    **3 multiplied by 7 = 21**

### 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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When you carry out a multiplication you can **check** your answer using **division**.

You'll recognise some of the calculations above from knowing your **times tables**. Knowing your times tables helps you to work out multiplication questions far more quickly.

There are many different ways of multiplying numbers, read about them in the factsheets in this topic. You can use some of these to help you do **mental maths** (ie working out the answers in your head). You can use other methods when you need to write down calculations to work answers out.

The important thing to remember is that everyone is different. Which multiplication method do you prefer?