

What are Factors?



Factors are numbers that are multiplied together to get a *Product*

$$2 \times 2 = 4$$

$$\text{Factor} \times \text{Factor} = \text{Product}$$

So, when we say...

“What are the *Factors* of 12?”

We mean, what are all of the possible combinations of numbers that could be multiplied together to make 12?

“What is the *Product* of 3 and 4?”

We mean, 3 multiplied by 4...

$$3 \times 4 = ?$$

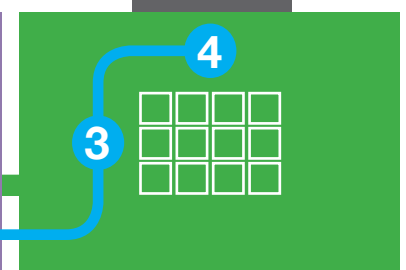
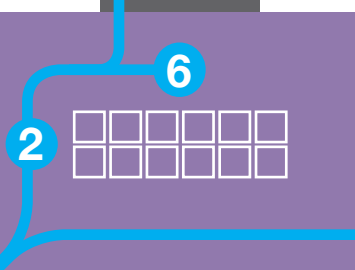
12 has 6 *Factors*...

$$1 \times 12 = 12$$

$$2 \times 6 = 12$$

$$3 \times 4 = 12$$

Let's visualise it...



The factors of 12 are 1, 2, 3, 4, 6 and 12.

Notice that the 12 total squares cannot be arranged any other ways.

Review

Some numbers have MANY more factors.
How many factors does 36 have?

