

Concept of Multiplication



Multiplication as Repeated Addition

When we add the same number repeatedly, it is called **multiplication**.

Multiplication is a fast way to do repeated addition.

' \times ' is the symbol for multiplication and we read it as '**times**' or '**multiplied by**'.

Let us make it clear with an example.



Example: There are four motorcycles. Each motorcycle has two wheels.



2 wheels

+



2 wheels

+



2 wheels

+



2 wheels

= 8

Total number of wheels = $2 + 2 + 2 + 2 = 8$

We added the number 2 four times. It is the same as, 4 times 2 is equal to 8.

$$\begin{array}{ccccc} & 4 & \times & 2 & = & 8 \\ \text{Number of groups} \swarrow & & & & & \searrow \text{Total number of objects} \\ & & & \downarrow & & \\ & & & \text{Number of objects in each groups} & & \end{array}$$

We read $4 \times 2 = 8$, as four multiplied by two is equal to eight.



In the picture, the total number of wheels by adding 2 four times. we get 8. This is called **repeated addition**.