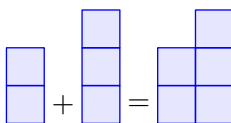


## 0.1 Addition

### Addition with amounts

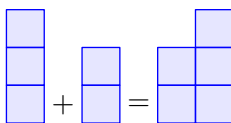
When we have an amount and wish to add more, we use the symbol  $+$ . If we have 2 and want to add 3, we write

$$2 + 3 = 5$$



The order in which we add have no impact on the results; starting off with 2 and adding 3 is the same as starting off with 3 and adding 2:

$$3 + 2 = 5$$



#### The language box

A calculation involving addition includes two or more *terms* and one *sum*. In the calculation

$$2 + 3 = 5$$

both 2 and 3 are terms while 5 is the sum.

Common ways of saying  $2 + 3$  include

- "2 plus 3"
- "2 added to 3"
- "2 and 3 added"

## 0.1 Addition is commutative

The order of the terms has no impact on the sum.

### Example

$$2 + 5 = 7 = 5 + 2$$

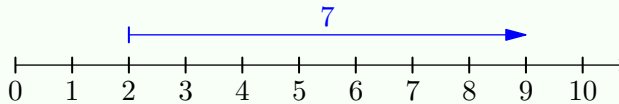
$$6 + 3 = 9 = 3 + 6$$

## Addition on the number line: moving to the right

On a number line, addition with positive numbers involves moving *to the right*:

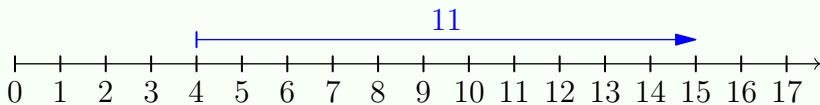
### Example 1

$$2 + 7 = 9$$



### Example 2

$$4 + 11 = 15$$



### Interpretation of =

+ brings the possibility of expressing numbers in different ways, for example is  $5 = 2 + 3$  and  $5 = 1 + 4$ . In this context, = means "has the same value as". This is also the case regarding subtraction, multiplication and division which we'll look at in the next three sections.