

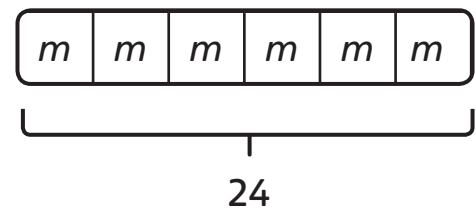
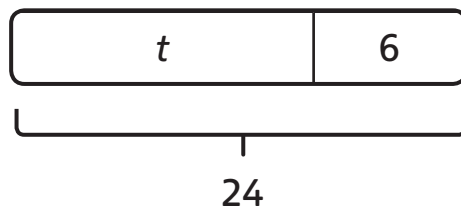
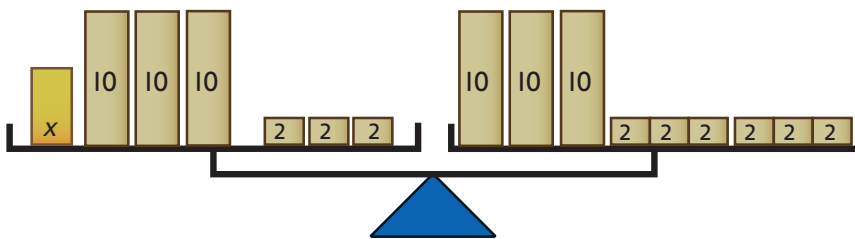
# equation

a statement showing that two amounts equal each other

An **equation** must always have an equals sign.

$$25 + 10 = 100 - 65$$

I can show an **equation** as a balance.  
This **equation** is  $x + 36 = 42$ .



I can show **equations** using bar models. These are  $24 = t + 6$ , and  $6m = 24$

# common factor

a number that is a factor of two  
given numbers

$$1 \times 24 = 24$$

$$2 \times 12 = 24$$

$$3 \times 8 = 24$$

$$4 \times 6 = 24$$

$$1 \times 30 = 30$$

$$2 \times 15 = 30$$

$$3 \times 10 = 30$$

$$5 \times 6 = 30$$

Factors of 24 are 1, 2,  
3, 4, 6, 8, 12 and 24.

Factors of 30 are 1, 2,  
3, 5, 6, 10, 15 and 30.



I know that 4 is not a  
**common factor** of 24  
and 30, because it is not  
a factor of both numbers.

# common multiple

a number that is a multiple of two or more given numbers

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30

multiples of 3

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30

multiples of 5

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30

multiples of 3 and 5



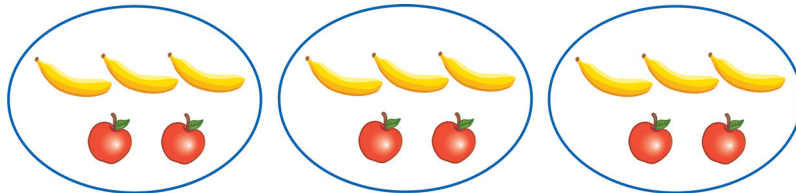
**Common multiples** are numbers that are in both lists.

I can see that 15 and 30 are **common multiples** of 3 and 5.



# ratio

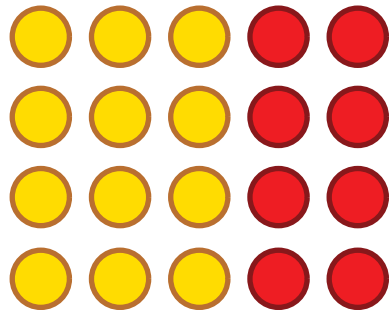
A **ratio** compares two or more parts of the whole.



For every 3 bananas, there are 2 apples.

The **ratio** of bananas to apples is 3 to 2.

There are 12 yellow counters and 8 red counters. The **ratio** is 12:8.



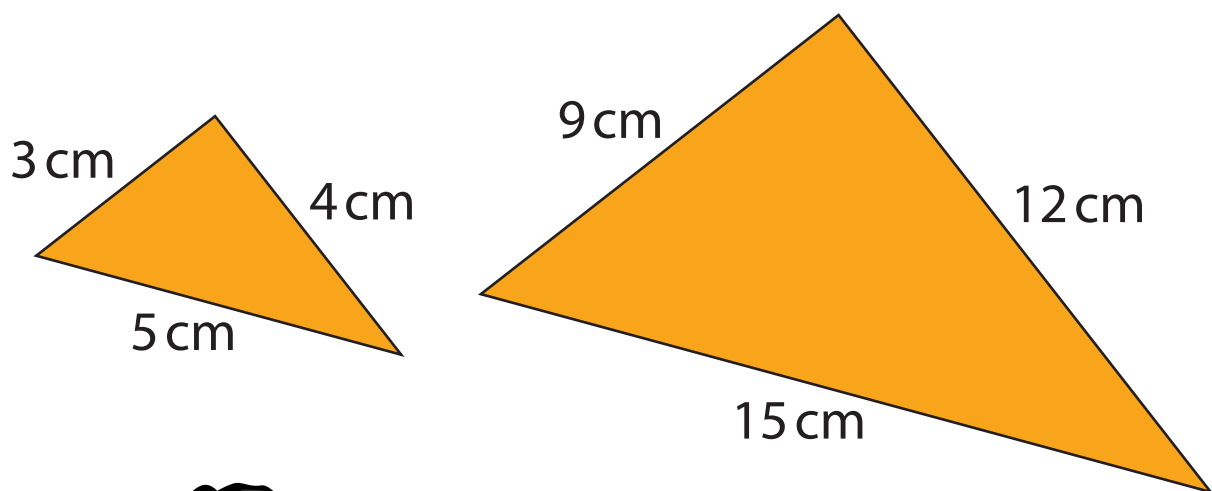
3	2
6	4
9	6
12	8

The ratio is equivalent to 3:2, 6:4, and 9:6.



# scale factor

A **scale factor** says how many times bigger or smaller an object is than another one. The objects stay in the same proportion.

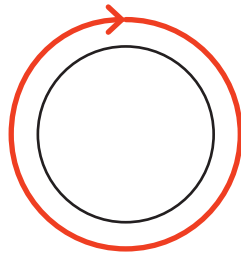


I can see that this triangle has been enlarged by a **scale factor** of 3. Each length has been multiplied by 3.

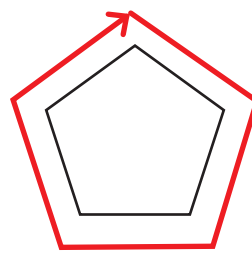
# circumference, diameter and radius

These are all parts of a circle.

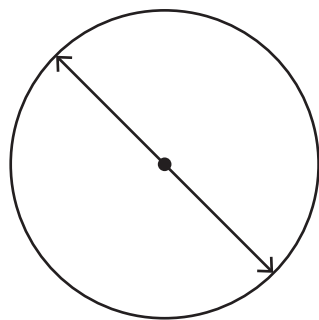
The **circumference** is the distance around a circle. It is similar to the perimeter of a polygon.



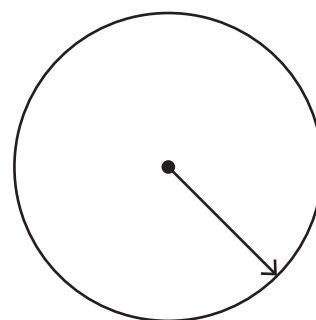
circumference



perimeter



diameter



radius

The widest part of a circle is called the **diameter**.

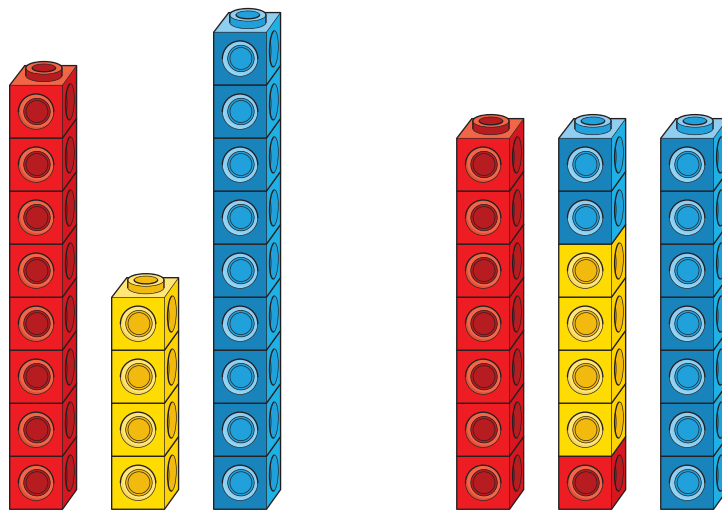
The **radius** is half the **diameter**. It is the distance from the centre to the **circumference**.

# mean

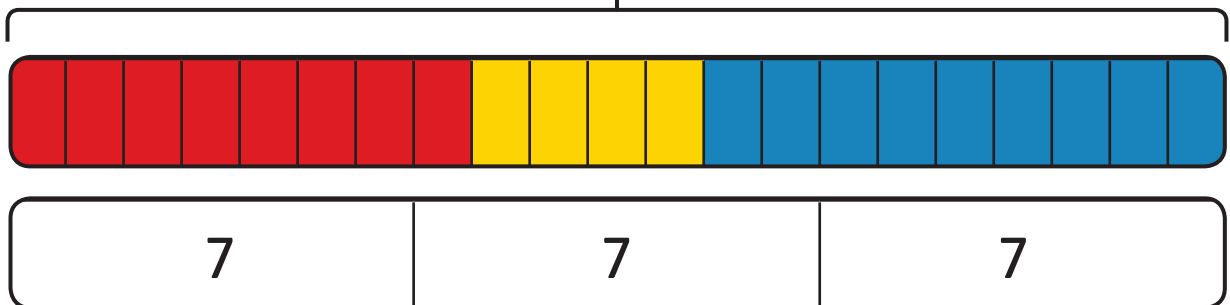
a type of average



To find the **mean**, you work out how big each group would be if they were rearranged to be equal.



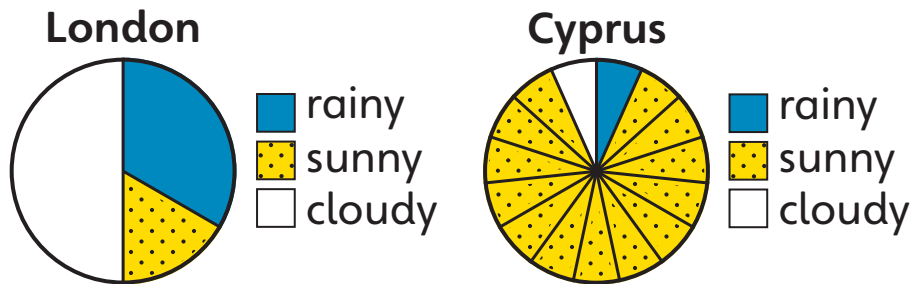
21



The mean of 8, 4 and 9 is 7.

# pie chart

A **pie chart** is used to show fractions of a whole.



These **pie charts** show the weather in London and Cyprus in April.

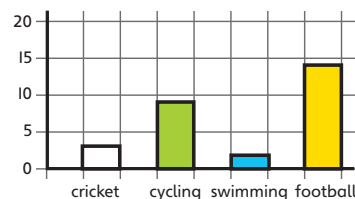
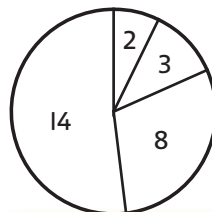


I can see that in London  $\frac{1}{3}$  of the month was rainy. In Cyprus,  $\frac{1}{15}$  of the month was rainy.

You may be able to work out the exact fractions, or you may have to estimate.



cricket	
cycling	###
swimming	
football	### ##



Different charts can be used to show the same information.