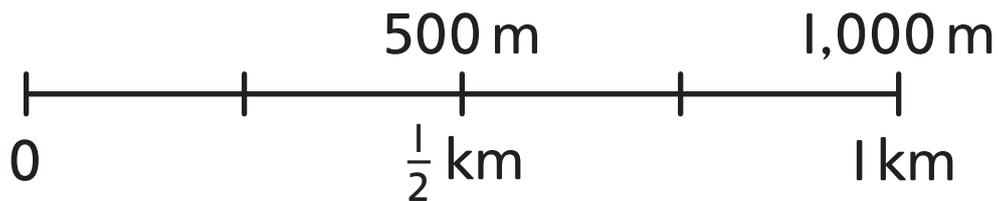
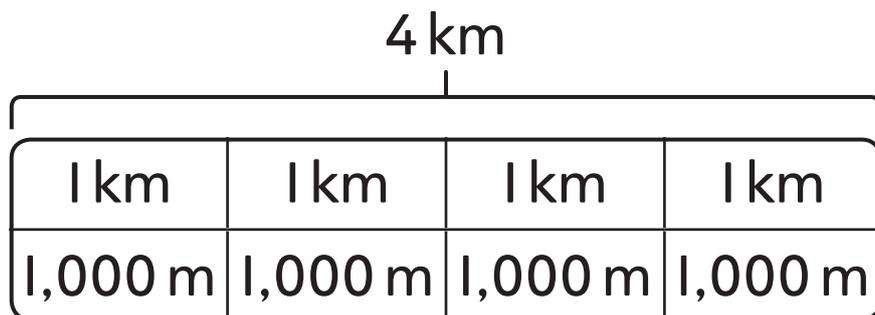


kilometre

One kilometre (km) is 1,000 metres.
Half a kilometre is 500 metres.



4 km is 4,000 m



I used a bar model
to show **kilometres**
and metres.



efficient

Being **efficient** means using a method that takes fewer steps.

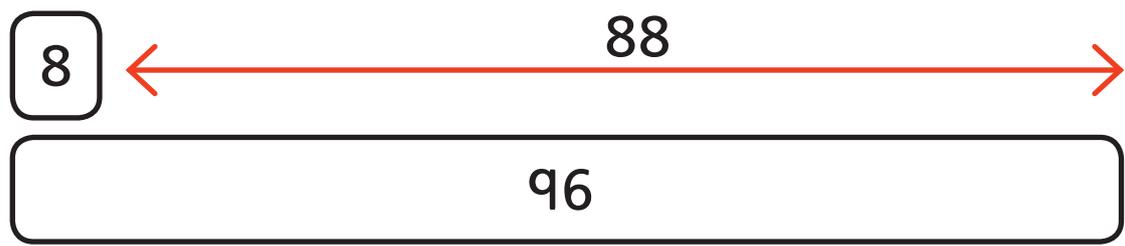


You must think flexibly to be **efficient**.



I look at the numbers then choose the most **efficient** method.

$$96 - 8 = ?$$



| | | |
|-------|---|---|
| | T | O |
| | 9 | 6 |
| - | | 8 |
| <hr/> | | |
| <hr/> | | |

| | | |
|-------|---|---|
| | T | O |
| | 9 | 7 |
| - | | 9 |
| <hr/> | | |
| <hr/> | | |

| | | |
|-------|---|---|
| | T | O |
| | 9 | 8 |
| - | 1 | 0 |
| <hr/> | | |
| | 8 | 8 |

| | | |
|-------|---|---|
| | T | O |
| | 9 | 9 |
| - | 1 | 1 |
| <hr/> | | |
| | 8 | 8 |

| | | | |
|-------|---|---|---|
| | H | T | O |
| | 1 | 0 | 0 |
| - | | 1 | 2 |
| <hr/> | | | |
| <hr/> | | | |

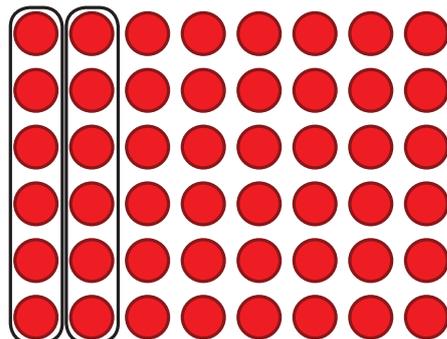
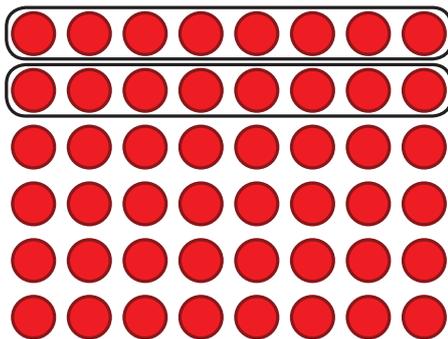
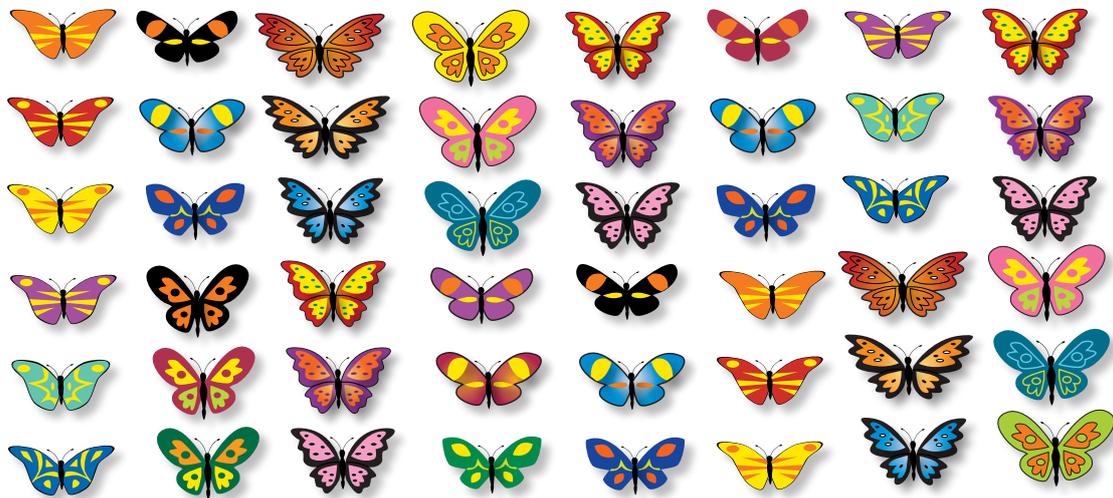
commutative

A calculation that can be done in any order is called **commutative**.

Addition and multiplication are **commutative**.



There are 6 rows of 8 butterflies.
I could calculate 6×8 or 8×6 .
The answer will be the same.



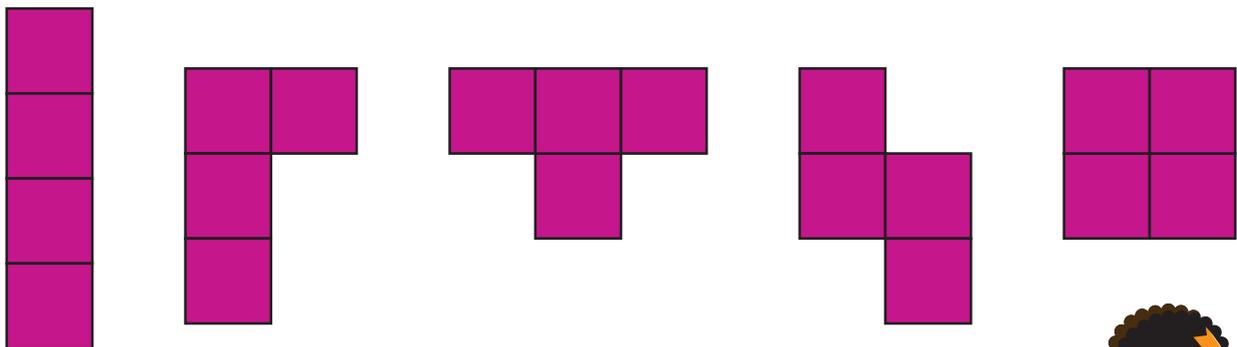
area

the amount of space that the surface of a shape fills

| | | | | | | |
|----|----|----|--|----|----|----|
| | | 1 | | | | |
| | | 2 | | | | |
| | 3 | 4 | | | 1 | 2 |
| | 5 | 6 | | 3 | 4 | 5 |
| | 7 | 8 | | 6 | 7 | 8 |
| | 9 | 10 | | 9 | 10 | 11 |
| | 11 | 12 | | 12 | | |
| 13 | 14 | 15 | | 13 | 14 | 15 |
| | | 16 | | | 16 | 17 |



I worked out the **area** of the two shapes by counting the squares.

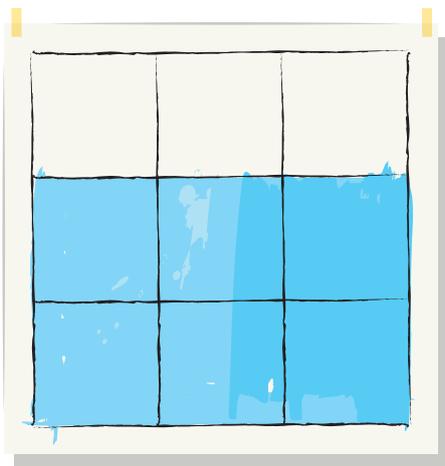


Shapes can look different but have the same **area**.



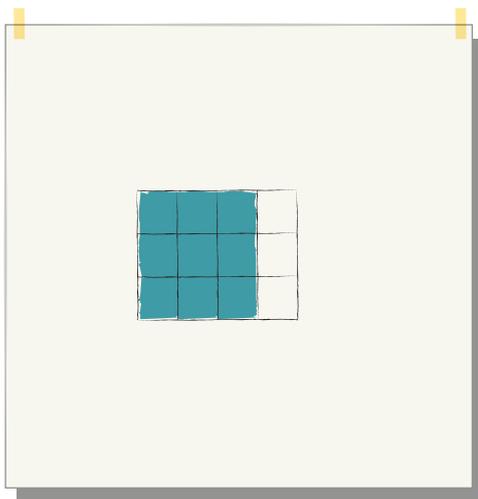
simplify

to find an equivalent fraction with the smallest possible numerator and denominator

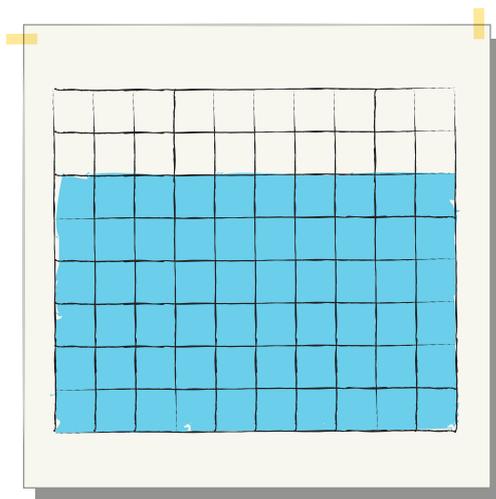


$$\begin{array}{c} \div 3 \\ \curvearrowright \\ \frac{6}{9} = \frac{2}{3} \\ \curvearrowleft \\ \div 3 \end{array}$$

The shaded area is $\frac{6}{9}$. The fraction can be **simplified** to $\frac{2}{3}$.



$$\frac{9}{12} = \frac{3}{4}$$



$$\frac{60}{80} = \frac{6}{8} = \frac{3}{4}$$



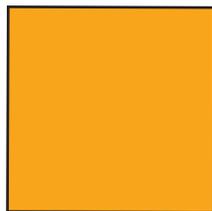
Both these fractions can be **simplified**.
Not all fractions can be **simplified**.

quadrilateral

a 2D shape with four sides and four vertices



A square is the name for a regular **quadrilateral**. All angles are the same size, and all sides are the same length



square

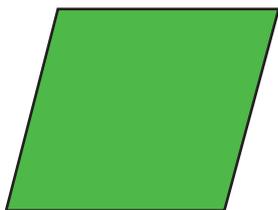
A parallelogram has two pairs of parallel sides. A rectangle is a special kind of parallelogram.



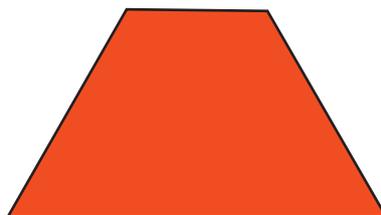
rectangle



parallelogram



rhombus

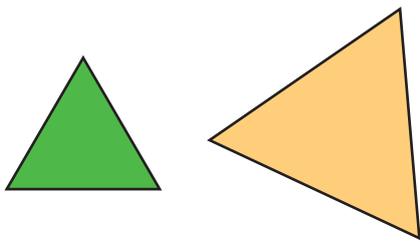


trapezium



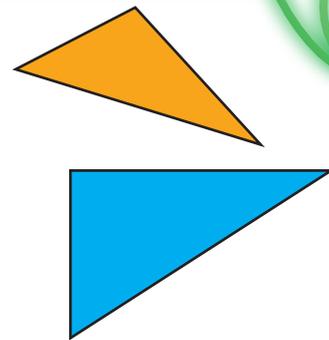
isosceles, scalene and equilateral

These are all types of triangle.

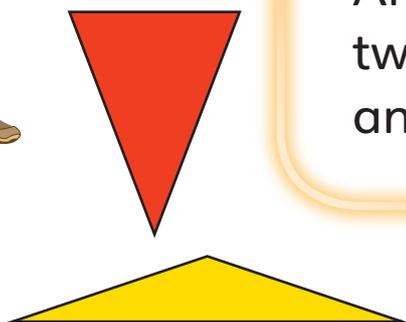


An **equilateral** triangle has all sides the same length, and all the angles are the same size.

A **scalene** triangle has all three sides different lengths and all angles different sizes.

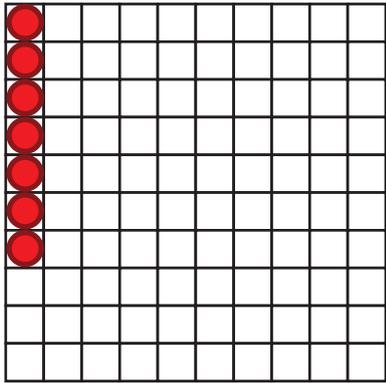


An **isosceles** triangle has two sides the same length and two equal angles.



hundredth

There are 100 hundredths in 1 whole.
10 hundredths are equal to 1 tenth.



The counters cover
7 hundredths.



I think of tenths and **hundredths** as fractions or decimals. This number has 3 tenths and 5 hundredths in the place value columns. It is 0.35.



| 0 | . | Tth | Hth |
|---|---|-------------|--------------------------|
| | | 0.1 0.1 0.1 | 0.01 0.01 0.01 0.01 0.01 |

You can also say it is $\frac{35}{100}$.



I can count in hundredths.

