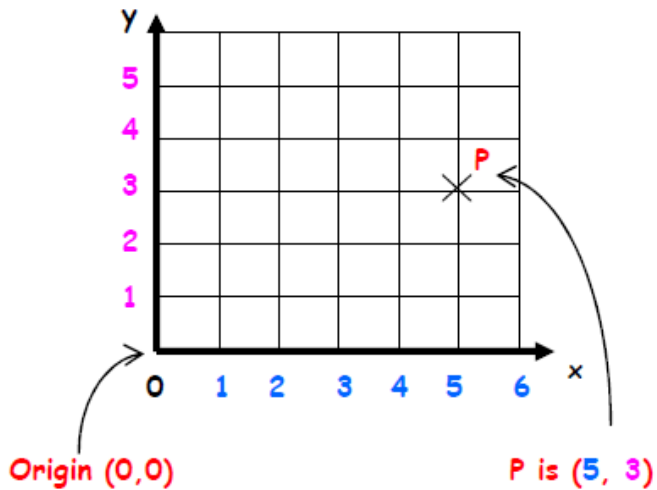
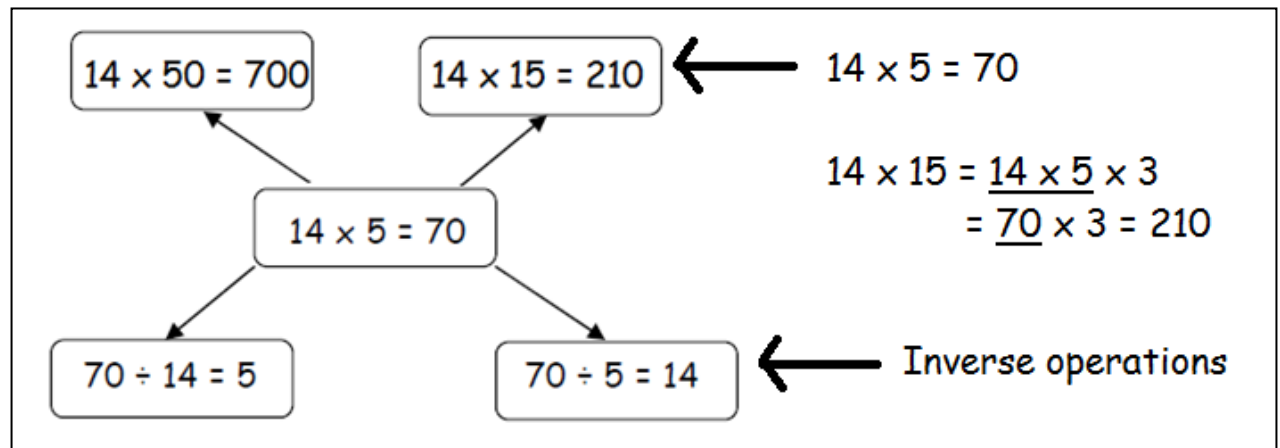


Coordinates

- The horizontal axis is the x-axis
- The vertical axis is called the y-axis
- The origin is where the axes meet
- A point is described by two numbers
The 1st number is off the x-axis
The 2nd number is off the y-axis



Use Known Facts



YEAR 7 NON CALC LEARN SHEET

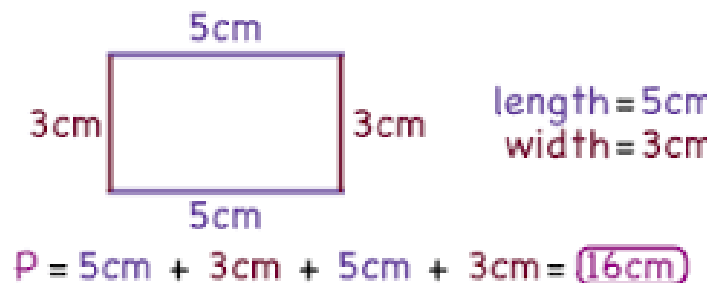
Collect Like Terms

$$4a + 2b - 3a - 7b = a - 5b$$

Like terms have the same letters and powers.

Perimeter

Add all lengths ...



Metric Unit

Length

100 cm	1 m
1000 m	1 km

Mass

1000 g	1 kg
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Capacity

1000 ml	1 litre
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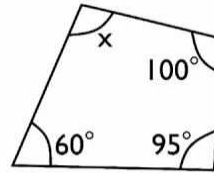
Ordering Decimals

1.23 m 1.6 m 1.65 m 1.3 m
↓ ↓ ↓ ↓
1.23 m 1.60 m 1.65 m 1.30 m

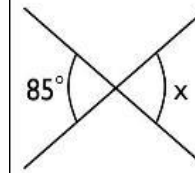
Make the number of digits the same, it is easier to order them

Smallest \longrightarrow Largest
1.23 m 1.30 m 1.60 m 1.65 m

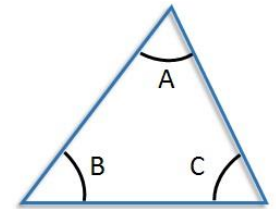
Angle Facts



Angles in a quadrilateral add up to 360°



Vertically opposite angles are equal
 $x = 85^\circ$



$A + B + C = 180^\circ$

Properties of Quadrilaterals

Square

- 4 equal sides
- 4 equal angles - 90°
- 4 lines of symmetry
- Rotational symmetry order 4

Rectangle

- Opposite sides equal
- 4 equal angles - 90°
- 2 lines of symmetry
- Rotational symmetry order 2

Fractions of Amounts

$$\frac{1}{4} \text{ of } 20 = 20 \div 4 = 5$$

$$\frac{2}{3} \text{ of } 15 = 10$$

$$15 \div 3 = 5 \quad 5 \times 2 = 10$$

Divide by the denominator.

Substitution

Replace letters with numbers ...use BIDMAS!

$$5a^2 - 3 \text{ if } a = 3$$

$$5 \times 3^2 - 3 = 5 \times 9 - 3$$