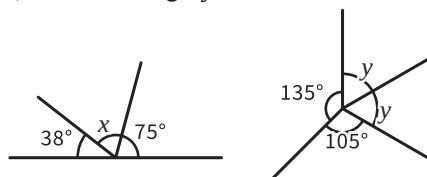


1 Angle facts

- a) Work out angle x .
b) Work out angle y .

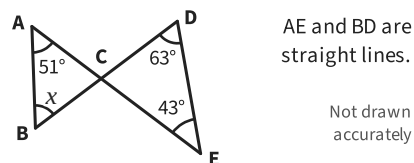


Not drawn accurately

a) $180 - 38 - 75 = 67^\circ$
b) $(360 - 135 - 105) \div 2 = 60^\circ$

2 Angle facts

- a) Work out angle DCE.
b) Work out angle x . Give your reasons.



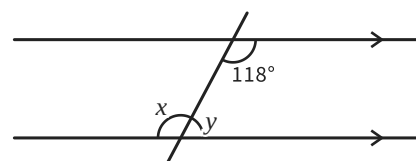
AE and BD are straight lines.

Not drawn accurately

a) $180 - 63 - 43 = 74^\circ$
b) $ACB = 74^\circ$, vertically opposite
 $x = 180 - 51 - 74 = 55^\circ$

3 Angles on parallel lines

- a) Work out angle x . Give a reason.
b) Work out angle y . Give a reason.

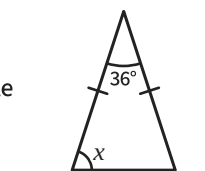


Not drawn accurately

a) 118° , alternate angles
b) 62° , co-interior angles

4 Angles in isosceles triangles

- a) Work out angle x .
b) Another isosceles triangle has an angle of 110° . Work out its other two angles.



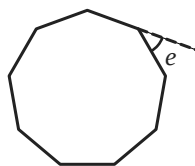
Not drawn accurately

a) $(180 - 36) \div 2 = 72^\circ$
b) $(180 - 110) \div 2 = 35^\circ$ and 35°

5 Angles in regular polygons

This is a regular nonagon (9 sides).

- a) Work out the exterior angle e .
b) A regular polygon has interior angles of 150° . How many sides?



a) $360 \div 9 = 40^\circ$
b) $360 \div (180 - 150) = 12$ sides

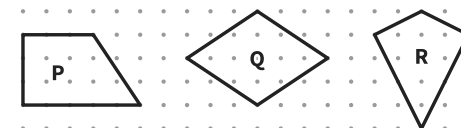
Angles and 2D shapes

revision mat answers

Foundation A

6 Properties of quadrilaterals

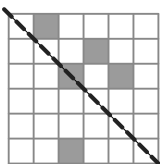
- a) Name the quadrilaterals P, Q and R.
b) Which of them has exactly one line of symmetry?



a) P trapezium, Q rhombus, R kite
b) R (the kite)

7 Lines of symmetry

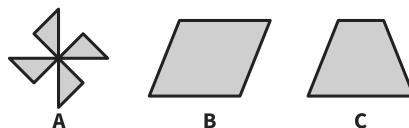
- a) Shade 4 more squares so that the dashed line is a line of symmetry.
b) How many lines of symmetry does a regular pentagon have?



a)  b) 5

8 Rotational symmetry

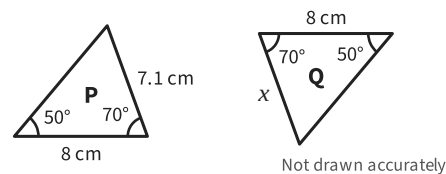
- a) Write down the order of rotational symmetry of A, B and C.
b) Name a quadrilateral with order 2 and exactly 2 lines of symmetry.



a) A 4, B 2, C 1
b) a rectangle (or a rhombus)

9 Congruent triangles

- a) Explain why triangles P and Q are congruent.
b) Write down the length x .



Not drawn accurately

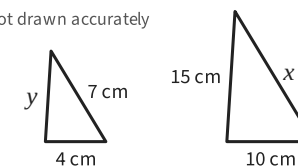
a) ASA: 50° , 8 cm, 70° match
b) $x = 7.1$ cm

10 Similar shapes

The two triangles are similar.

- a) Work out x .
b) Work out y .

Not drawn accurately



a) $x = 7 \times 2.5 = 17.5$ cm
b) $y = 15 \div 2.5 = 6$ cm