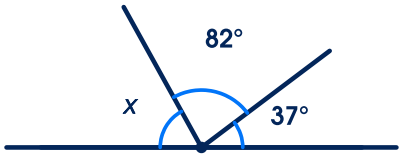
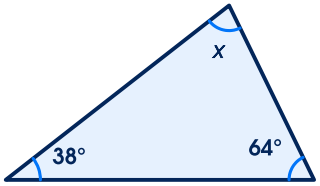
GCSE FOUNDATION · REVISION MAT 2

Angle facts

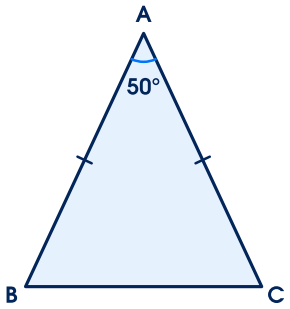
1 Work out the size of angle *x*.



2 Work out the size of angle *x*.

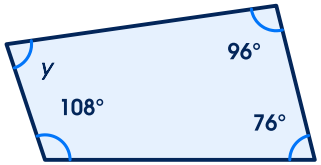


3 ABC is an isosceles triangle with AB = AC.
Angle BAC = 50°.

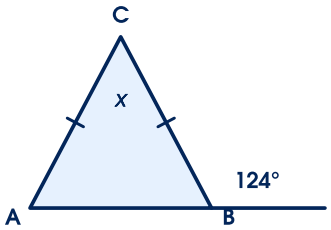


Show that angle ABC = 65°. Give reasons.

4 Work out the size of angle *y*.
Give a reason for your answer.

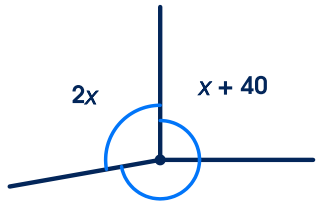


5 ABC is an isosceles triangle with AC = BC.
The line AB is extended.



Work out the size of angle *x*. Give reasons.

6 Angles around a point are shown.



$3x + 20$

Work out the size of the largest angle.

ANSWERS · REVISION MAT 2

Angle facts

1 Angles on a straight line add up to 180°.

180 – 37 – 82 = **61°**

2 Angles in a triangle add up to 180°.

180 – 38 – 64 = **78°**

3 Base angles of an isosceles triangle are equal, and angles in a triangle add to 180°.

(180 – 50) ÷ 2 = **65°** ✓

4 Angles in a quadrilateral add up to 360°.

360 – 108 – 76 – 96 = **80°**

5 Angle ABC = 180 – 124 = 56° (angles on a straight line)

Angle BAC = 56° (isosceles)

x = 180 – 56 – 56 = **68°**

6 Angles around a point add up to 360°.

$6x + 60 = 360$, so $x = 50$

Largest = **170°**