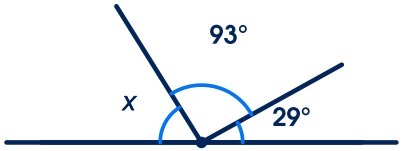
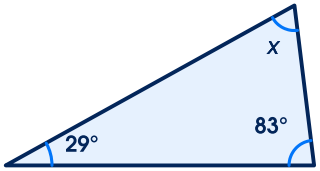
GCSE FOUNDATION · REVISION MAT 4

Angle facts

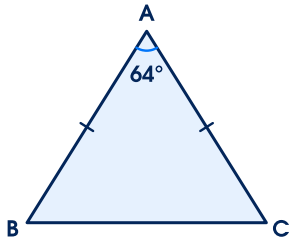
1 Work out the size of angle x.



2 Work out the size of angle x.

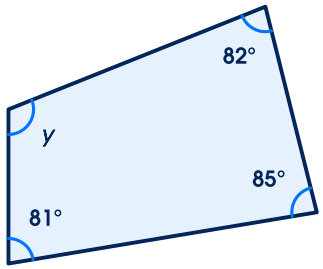


3 ABC is an isosceles triangle with AB = AC.
Angle BAC = 64°.

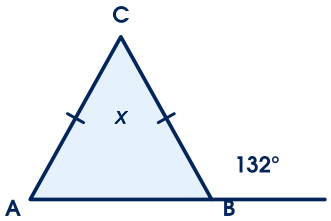


Show that angle ABC = 58°. Give reasons.

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

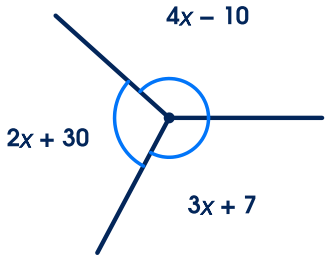


5 ABC is an isosceles triangle with AC = BC.
The line AB is extended.



Work out the size of angle x. Give reasons.

6 Angles around a point are shown.



Work out the size of the largest angle.

ANSWERS · REVISION MAT 4

Angle facts

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

180 – 29 – 93 = **58°**

2 Angles in a triangle add up to 180°.

180 – 29 – 83 = **68°**

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

(180 – 64) ÷ 2 = **58°** ✓

4 Angles in a quadrilateral add up to 360°.

360 – 81 – 85 – 82 = **112°**

5 Angle ABC = 180 – 132 = 48° (angles on a straight line)

Angle BAC = 48° (isosceles)

x = 180 – 48 – 48 = **84°**

6 Angles around a point add up to 360°.

$9x + 27 = 360$, so $x = 37$

Largest = **138°**