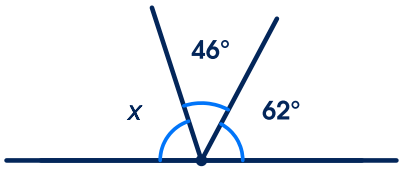
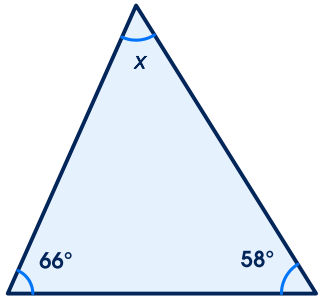
GCSE FOUNDATION · REVISION MAT 5

Angle facts

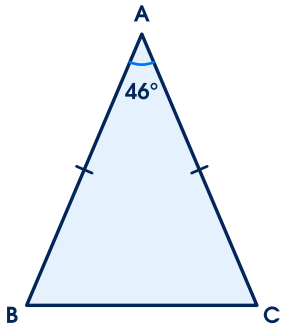
1 Work out the size of angle x.



2 Work out the size of angle x.

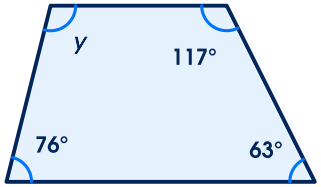


3 ABC is an isosceles triangle with AB = AC.
Angle BAC = 46°.

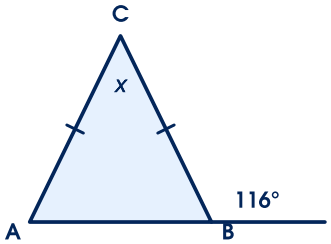


Show that angle ABC = 67°. Give reasons.

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

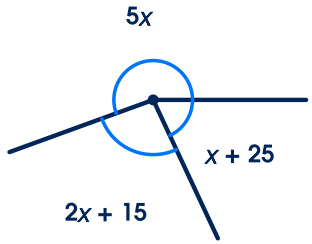


5 ABC is an isosceles triangle with AC = BC.
The line AB is extended.



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 5

Angle facts

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

180 – 62 – 46 = **72°**

2 Angles in a triangle add up to 180°.

180 – 66 – 58 = **56°**

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

(180 – 46) ÷ 2 = **67°** ✓

4 Angles in a quadrilateral add up to 360°.

360 – 76 – 63 – 117 = **104°**

5 Angle ABC = 180 – 116 = 64° (angles on a straight line)

Angle BAC = 64° (isosceles)

x = 180 – 64 – 64 = **52°**

6 Angles around a point add up to 360°.

$8x + 40 = 360$, so $x = 40$

Largest = **200°**