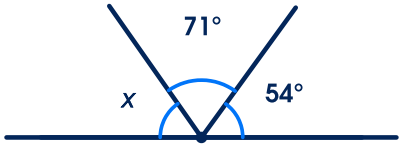
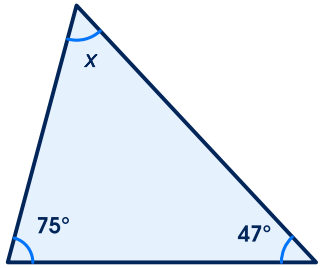
GCSE FOUNDATION · REVISION MAT 3

Angle facts

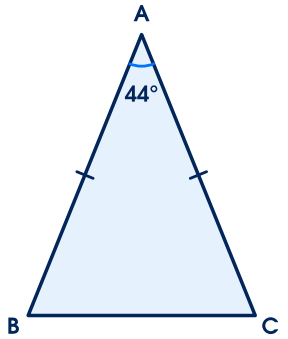
1 Work out the size of angle x.



2 Work out the size of angle x.

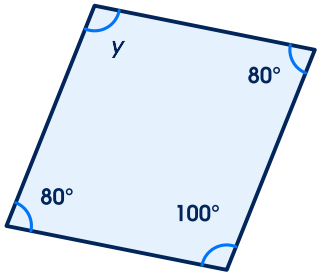


3 ABC is an isosceles triangle with AB = AC.
Angle BAC = 44°.

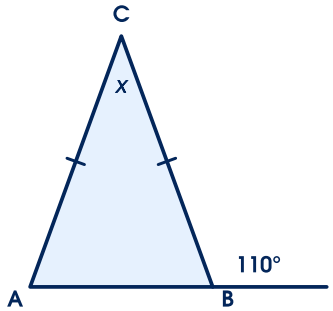


Show that angle ABC = 68°. Give reasons.

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

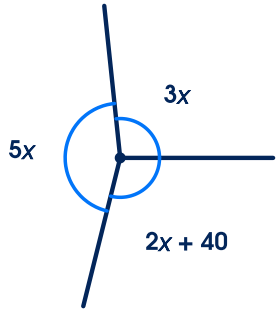


5 ABC is an isosceles triangle with AC = BC.
The line AB is extended.



Work out the size of angle x. Give reasons.

6 Angles around a point are shown.



Work out the size of the largest angle.

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

180 – 54 – 71 = **55°**

2 Angles in a triangle add up to 180°.

180 – 75 – 47 = **58°**

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

(180 – 44) ÷ 2 = **68°** ✓

ANSWERS · REVISION MAT 3

Angle facts

4 Angles in a quadrilateral add up to 360°.

360 – 80 – 100 – 80 = **100°**

5 Angle ABC = 180 – 110 = 70° (angles on a straight line)

Angle BAC = 70° (isosceles)

x = 180 – 70 – 70 = **40°**

6 Angles around a point add up to 360°.

$10x + 40 = 360$, so $x = 32$

Largest = **160°**