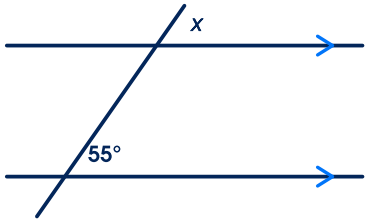
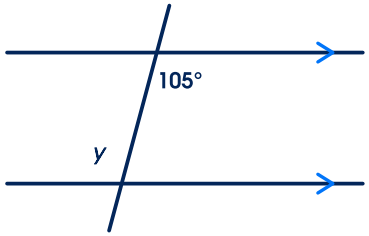
GCSE FOUNDATION · REVISION MAT 3

Angles in parallel lines

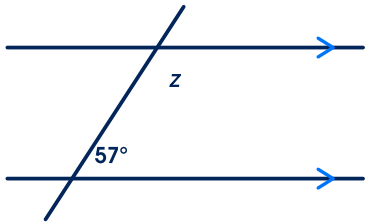
1 Work out the size of angle x.
Give a reason for your answer.



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



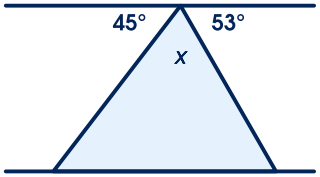
3 Show that angle $z = 123°$. Give a reason.



4 Two lines are crossed by a third line.
A pair of corresponding angles are 65° and 68°.

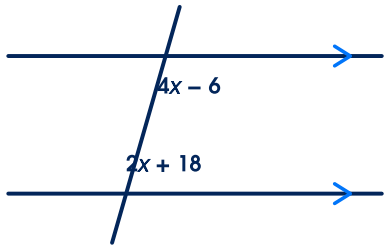
Explain how you know the
two lines are not parallel.

5 The two horizontal lines are parallel.



Work out the size of angle x. Give reasons.

6 Work out the value of x.



Mr&Mrs MATHS

ANSWERS · REVISION MAT 3

Angles in parallel lines

1 **55°**

Corresponding angles are equal.

2 **105°**

Alternate angles are equal.

3 Co-interior angles add up to 180°.

180 – 57 = **123°** ✓

4 If the lines were parallel, corresponding angles would be **equal**.

65° ≠ 68°, so the lines are not parallel.

5 The angles at the base are 45° and 53° (alternate angles).

180 – 45 – 53 = **82°** (angles in a triangle)

6 Co-interior angles add up to 180°.

$6x + 12 = 180$

$x = 28$

Mr&Mrs MATHS