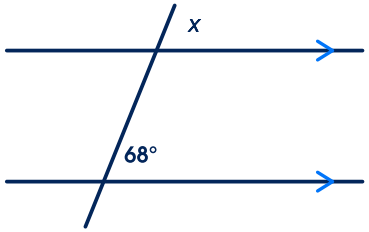
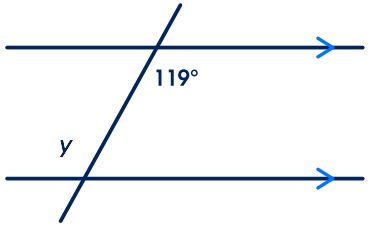
GCSE FOUNDATION · REVISION MAT 5

# Angles in parallel lines

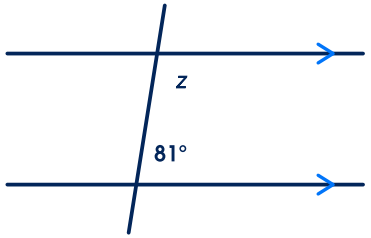
**1** Work out the size of angle $x$.
Give a reason for your answer.




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



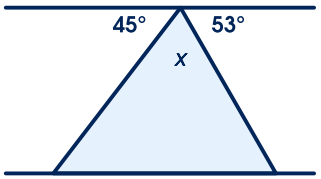

**3** Show that angle $z = 99°$. Give a reason.




**4** Two lines are crossed by a third line.
A pair of corresponding angles are 84° and 86°.

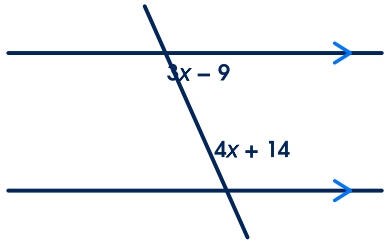
Explain how you know the
two lines are not parallel.

**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 5

# Angles in parallel lines

**1** **68°**

Corresponding angles are equal.

**2** **119°**

Alternate angles are equal.

**3** Co-interior angles add up to 180°.

180 – 81 = **99°** ✓

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

84° ≠ 86°, 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°.

$7x + 5 = 180$

$x = 25$

Mr&Mrs MATHS