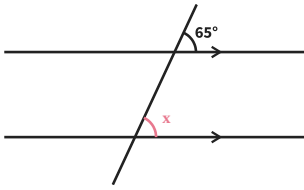


Angles on Parallel Lines

ANSWERS

1

Find the size of angle x . Give a reason for each step.

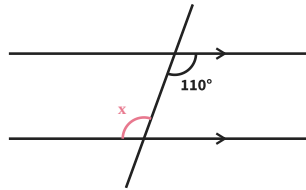


Reason: corresponding angles are equal
corresponding angles are equal

Answer $x = 65^\circ$

2

Find the size of angle x . Give a reason for each step.

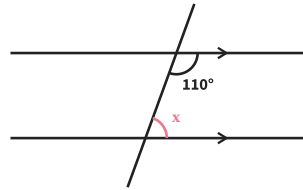


Reason: alternate angles are equal
alternate angles are equal

Answer $x = 110^\circ$

3

Find the size of angle x . Give a reason for each step.

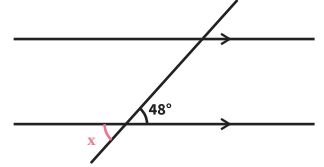


corresponding alternate co-interior
vertically opposite straight line
co-interior angles add to 180°

Answer $x = 70^\circ$

4

Find the size of angle x . Give a reason for each step.

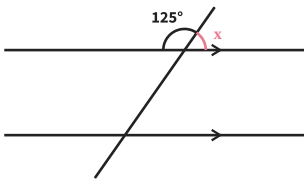


corresponding alternate co-interior
vertically opposite straight line
vertically opposite angles are equal

Answer $x = 48^\circ$

5

Find the size of angle x . Give a reason for each step.

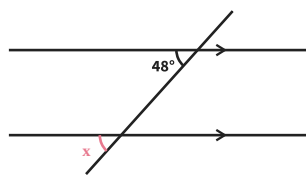


angles on a straight line add to 180°

Answer $x = 55^\circ$

6

Find the size of angle x . Give a reason for each step.

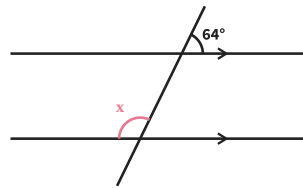


corresponding angles are equal

Answer $x = 48^\circ$

7

Find the size of angle x . Give a reason for each step.

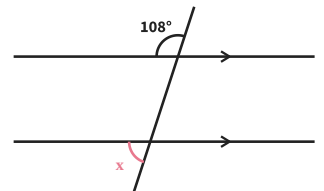


*corresponding angles are equal
angles on a straight line add to 180°*

Answer $x = 116^\circ$

8

Find the size of angle x . Give a reason for each step.



*corresponding angles are equal
angles on a straight line add to 180°*

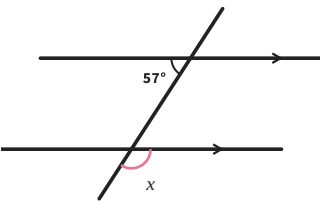
Answer $x = 72^\circ$

Angles on Parallel Lines further practice

ANSWERS

9

Find the size of angle x . Give a reason for each step.

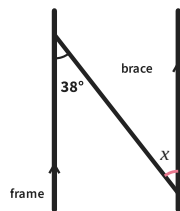


*corresponding angles are equal
angles on a straight line add to 180°*

Answer $x = 123^\circ$

10

The two sides of a door frame are parallel. A straight brace is fixed across them. Find the size of angle x .

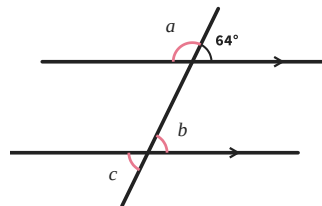


alternate angles are equal

Answer $x = 38^\circ$

11

Find the sizes of angles a , b and c .

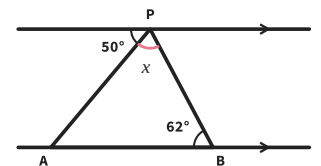


*straight line, corresponding,
vertically opposite*

Answer $a = 116^\circ, b = 64^\circ, c = 64^\circ$

12

Find the size of angle x . Give a reason for each step.

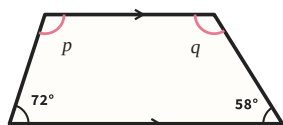


*alternate angles, so angle $PAB = 50^\circ$
angles in a triangle add to 180°*

Answer $x = 68^\circ$

13

A table top is a trapezium. Its top and bottom edges are parallel. Find the sizes of angles p and q .

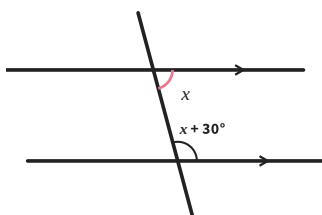


co-interior angles add to 180°

Answer $p = 108^\circ, q = 122^\circ$

14

Find the size of angle x . Give a reason for each step.

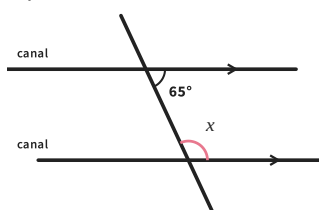


co-interior: $2x + 30 = 180$

Answer $x = 75^\circ$

15

Two straight canals are parallel. A road crosses them. Ana says $x = 65^\circ$ because alternate angles are equal. Explain Ana's mistake and find x .

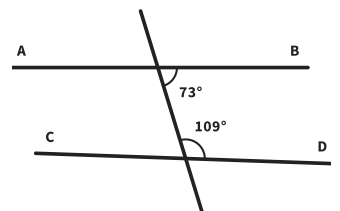


they are co-interior: they add to 180°

Answer $x = 115^\circ$

16

Are the lines AB and CD parallel? Explain how you know.



*co-interior angles would add to 180°
 $73 + 109 = 182$*

Answer *No*