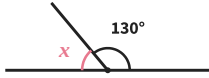


1

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

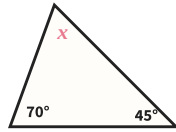


Reason: angles on a straight line add to 180°
angles on a straight line add to 180°

Answer $x = 50^\circ$

2

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

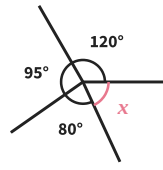


Reason: angles in a triangle add to 180°
angles in a triangle add to 180°

Answer $x = 65^\circ$

3

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

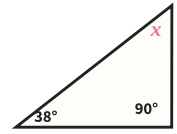


straight line around a point triangle
 isosceles
angles around a point add to 360°

Answer $x = 65^\circ$

4

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

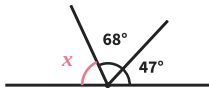


straight line around a point triangle
 isosceles
angles in a triangle add to 180°

Answer $x = 52^\circ$

5

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

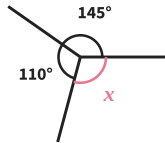


angles on a straight line add to 180°

Answer $x = 65^\circ$

6

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



angles around a point add to 360°

Answer $x = 105^\circ$

7

Three angles on a straight line are x , $2x$ and $3x$. Find x .

$$6x = 180$$

Answer $x = 30^\circ$

8

Two angles in a triangle are 65° and 48° . Find the third angle.

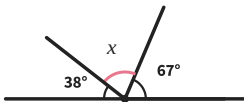
$$180 - 65 - 48$$

Answer $x = 67^\circ$

Angle Facts further practice

9

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

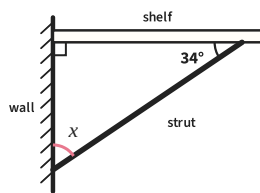


angles on a straight line add to 180°

Answer $x = 75^\circ$

10

A shelf bracket is fixed to a wall. The wall and the shelf meet at a right angle. Find the size of angle x .

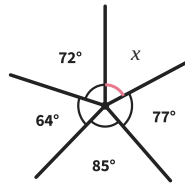


angles in a triangle add to 180°

Answer $x = 56^\circ$

11

Five straight paths meet at a fountain. Find the size of angle x between two of the paths.



angles around a point add to 360°

$$360 - 298$$

Answer $x = 62^\circ$

12

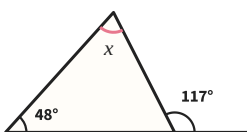
Can a triangle have angles of 52° , 61° and 74° ? Show how you know.

$$52 + 61 + 74 = 187, \text{ not } 180$$

Answer *No*

13

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



straight line, so the inside angle is 63°
angles in a triangle add to 180°

Answer $x = 69^\circ$

14

The end of a tent is an isosceles triangle. The angle at the top is 112° . Find the size of angle x between the side of the tent and the ground.

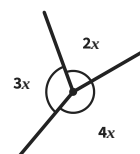


isosceles, so the base angles are equal
 $(180 - 112) \div 2$

Answer $x = 34^\circ$

15

Three angles around a point are $2x$, $3x$ and $4x$. Find the size of the largest angle.



$$9x = 360, \text{ so } x = 40$$

Answer 160°

16

A triangle has a right angle. Sam says the other two angles must both be acute. Is Sam right? Explain.

they add to $180 - 90 = 90^\circ$, so each is less than 90°

Answer *Yes*