

GCSE Maths: Equations from geometry: perimeters and angles (Foundation): worksheet

GCSE Maths - Linear Equations - Foundation - Lesson 9.8

Name: _____

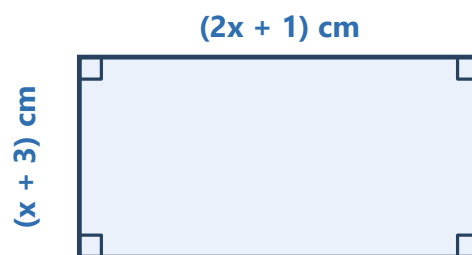
Date: _____

Score: _____

14 questions. Write your answers in the spaces. Answers and step-by-step help are free at websink.site/gcse/maths/ch09-linear-equations/foundation/equations-from-geometry-perimeters-and-angles/

Exercise 9H Equations from perimeters and angles Non-calculator

- 1 The perimeter of the rectangle is 32 cm. Work out the value of x .

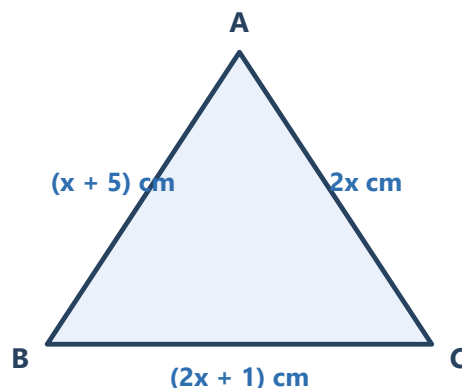


Answer:

- 2 A square has sides of length $(4x - 3) \text{ cm}$. The perimeter of the square is 52 cm. Work out the value of x , and the length of one side.

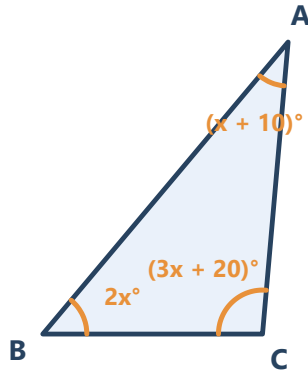
Answer:

- 3 The perimeter of the triangle is 31 cm. Find the length of the longest side.



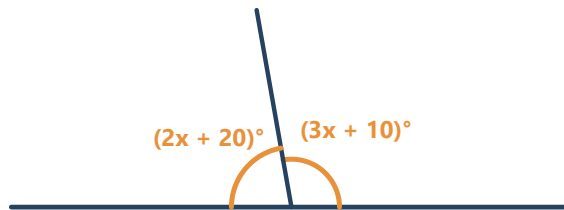
Answer:

- 4 Work out the value of x , and the size of the largest angle in the triangle.



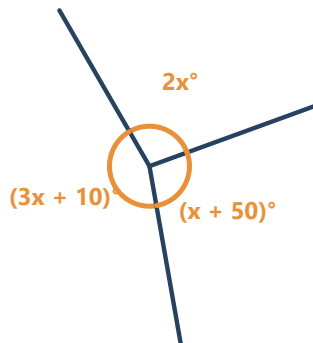
Answer:

- 5 The angles are on a straight line. Work out the value of x .



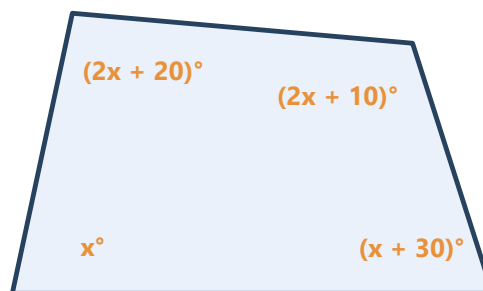
Answer:

- 6 Three angles meet at a point. Work out the value of x , and the size of the smallest angle.



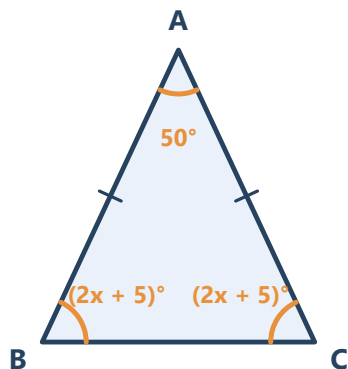
Answer:

- 7 The four angles of the quadrilateral add up to 360° . Work out the value of x .



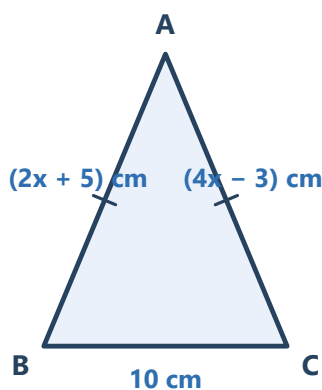
Answer:

- 8 Triangle ABC is isosceles. Work out the value of x , and the size of each base angle.



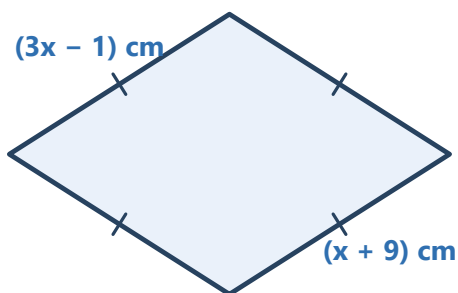
Answer:

- 9 Triangle ABC is isosceles with $AB = AC$. Work out the perimeter of the triangle.



Answer:

- 10 The shape is a rhombus. Work out the perimeter of the rhombus.



Answer:

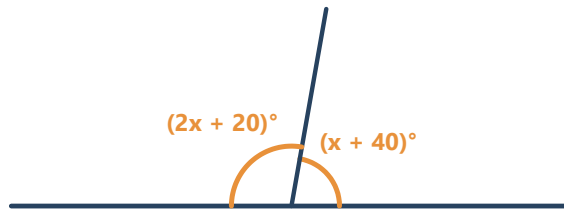
- 11 Zane says that the triangle with angles x° , $2x^\circ$ and $3x^\circ$ must have a right angle. Is he correct? You must show your working.

Answer:

- 12 The angles of a triangle are $(2x - 10)^\circ$, $(x + 30)^\circ$ and $(3x - 20)^\circ$. Find the size of the largest angle.

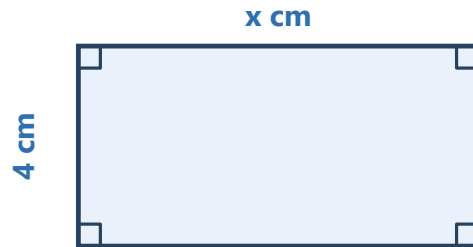
Answer:

- 13 Work out the value of x .



Answer:

- 14** A rectangle has width 4 cm and length x cm. The perimeter is 20 cm. Work out the length.



Answer: