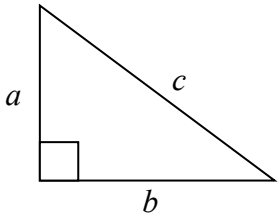
Topic Test 1 (20 minutes)

Pythagoras' Theorem - Foundation

1 For this triangle, which of the following is **not** true?



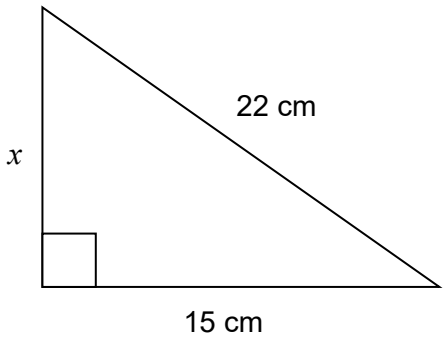
Circle your answer.

[1 mark]

$a^2 + b^2 = c^2$ $\quad c = \sqrt{a + b}$ $\quad a = \sqrt{c^2 - b^2}$ $\quad b^2 = c^2 - a^2$

2 Work out the length x.

[2 marks]

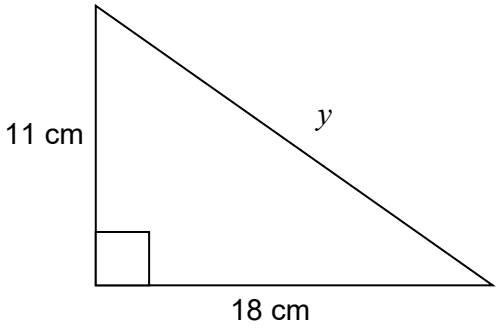


Not drawn accurately

Answer _____ cm

3 Work out the length y.

[2 marks]

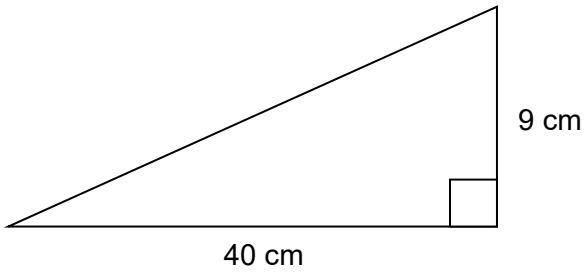


Not drawn accurately

Answer _____ cm

4 Work out the perimeter of this triangle.

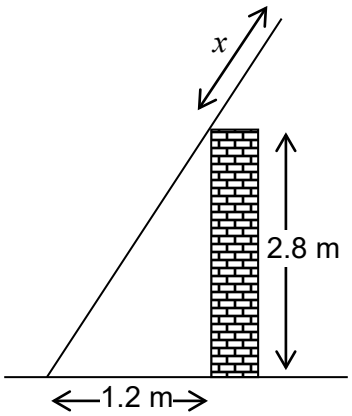
[3 marks]



Not drawn accurately

Answer _____ cm

5 A ladder of length 4 metres leans against a wall that is 2.8 metres high.
The foot of the ladder is 1.2 metres from the base of the wall.
The length of the ladder above the wall is marked x in the diagram.



Not drawn accurately

Work out the value of x.

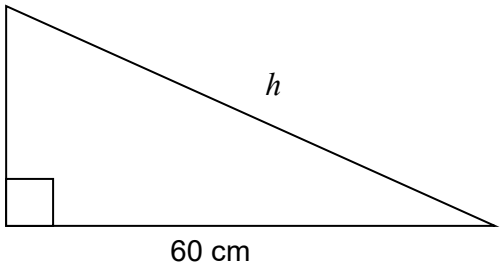
[3 marks]

Answer _____ m

6 The area of this triangle is 330 cm^2

Work out the length of the hypotenuse, h.

[4 marks]



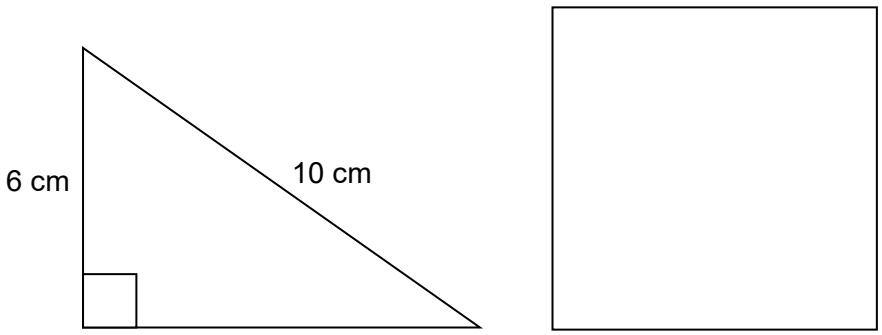
Not drawn accurately

Answer _____ cm

7 This triangle and square have the same perimeter.

Show that the square has an area 50% greater than the triangle.

[5 marks]



Not drawn accurately