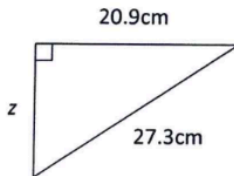


Pythagoras Past Papers (Y8)

Question 1

Calculate the length of the side labelled z in the triangle shown. Give your answer to 1 dp.



Answer: _____ cm (4 marks)

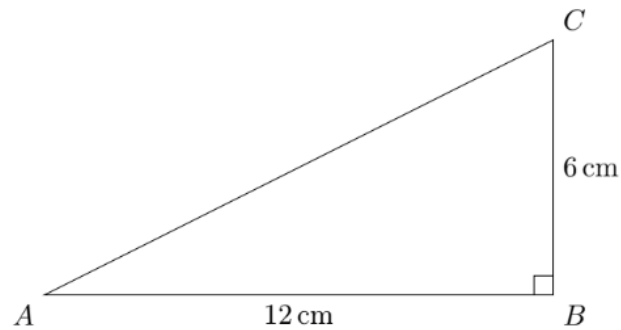
Question 2

A rectangular garden has sides of length 6m and 12m. Harry needs to cross the garden from one corner to the opposite corner. How much further does he walk if he walks round the edges of the garden rather than directly across? Give your answer to 2 d.p.

Answer: _____ m (5 marks)

Question 3

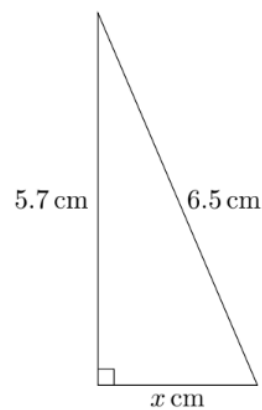
In triangle ABC shown below, $\angle ABC = 90^\circ$, $AB = 12$ cm and $BC = 6$ cm.

2

Find the length of AC , correct to two decimal places.

Question 4

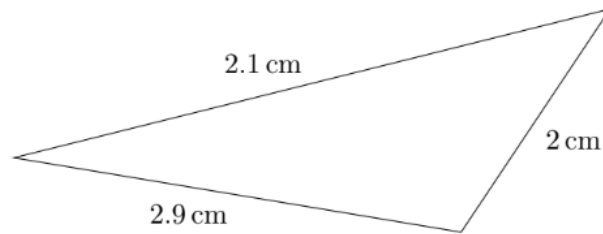
A right-angled triangle has a hypotenuse measuring 6.5 cm and one short side of length 5.7 cm as shown. The length of the third side is x cm.

2

Find the value of x , correct to one decimal place.

Question 5

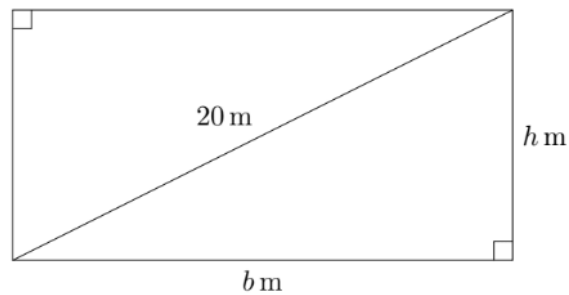
Consider the triangle shown below.

2

Determine, using calculations, whether this triangle is right-angled.

Question 6

The base length, b metres, of the rectangle shown below is twice its height, h metres.
The diagonal of the rectangle measures 20 metres.

3

Find the area of the rectangle, correct to one decimal place.



Question 7

A painter rests a 3 metre long ladder against a vertical wall. The foot of the ladder is 1.5 metres away from the base of the wall. The painter notices that the top of the ladder reaches too high up the wall and wants to lower it by 1 metre. **3**

How far away from the wall does he need to move the foot of the ladder? Give your answer correct to 1 decimal place.