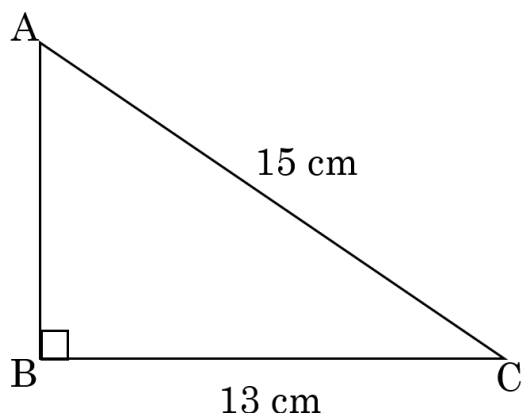




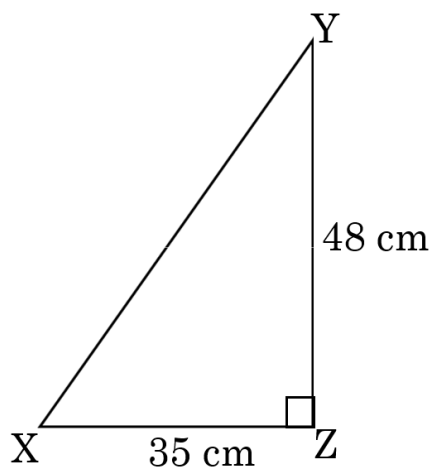
## Pythagoras' Theorem Exam Practice

Q1. Find the length of side AB correct to 1 decimal place.



Answer: \_\_\_\_\_  
(3 marks)

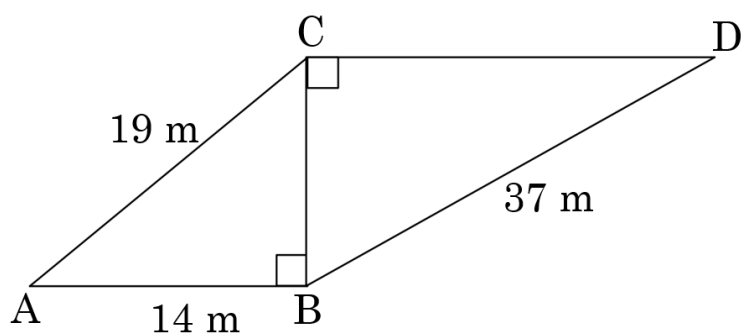
Q2. Find the length of side XY correct to 1 decimal place.



Answer: \_\_\_\_\_  
(3 marks)

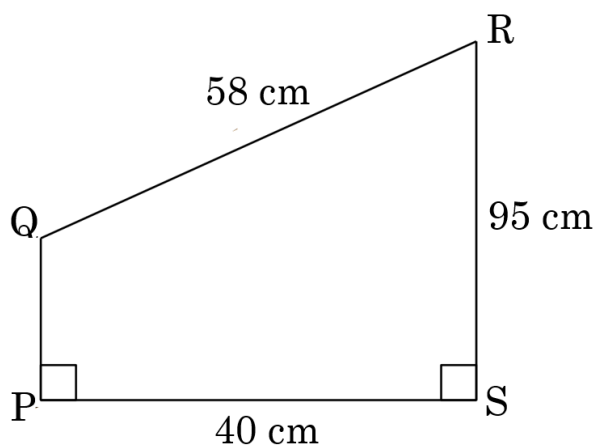


Q3. Find the length of side CD correct to 1 decimal place.



Answer: \_\_\_\_\_  
(4 marks)

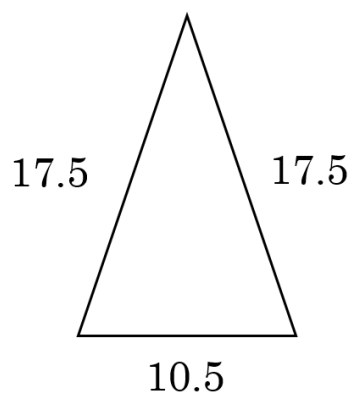
Q4. Find the length of side PQ.



Answer: \_\_\_\_\_  
(4 marks)



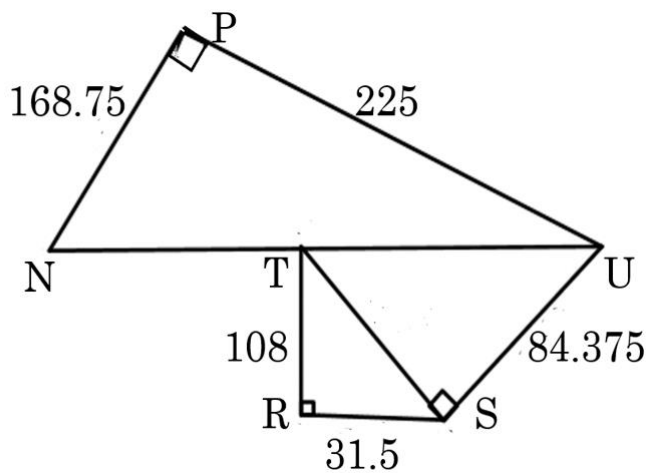
Q5. Find the area of the triangle shown, giving your answer to 3 significant figures.



Answer: \_\_\_\_\_  
(4 marks)



Q6. Given that T is the mid-point of side NU, show that the triangle NPU is right-angled.



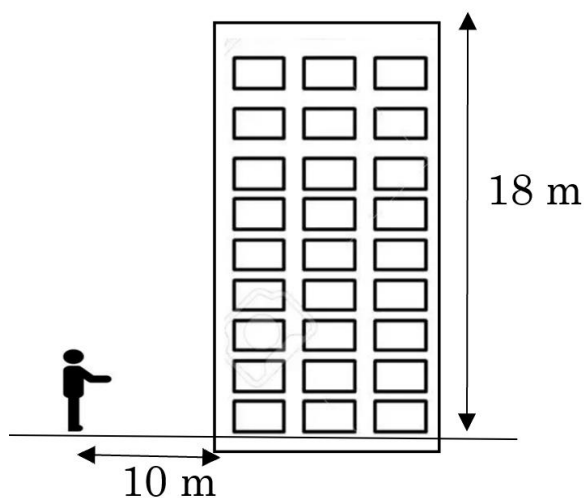
Answer: \_\_\_\_\_

(5 marks)



### Problem Questions:

Q7. A boy throws a ball so that it lands on top of the building shown below:



- a) Work out an estimate for the distance the ball has travelled from the boy's arm to the roof.

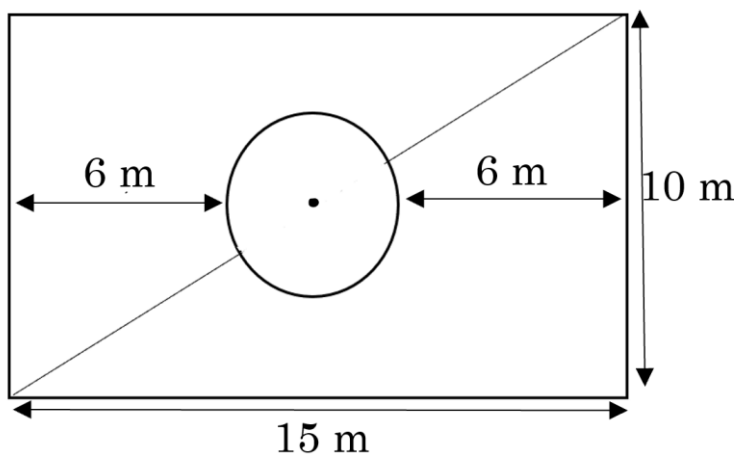
Answer: \_\_\_\_\_  
(3 marks)

- b) Is your answer to (a) an under or over-estimate?  
Explain your choice.

Answer: \_\_\_\_\_  
(1 mark)



Q8. Here is a plan of an ornamental garden with a circular pond in the middle. The centre of the pond is marked on.



A path is to be created along the outside border, diagonally to the pond from the corners, and around the pond, using square paving slabs. If each  $0.5 \text{ m}^2$  slab costs £11.50, work out the total cost of paving the garden.

Answer: \_\_\_\_\_  
(6 marks)



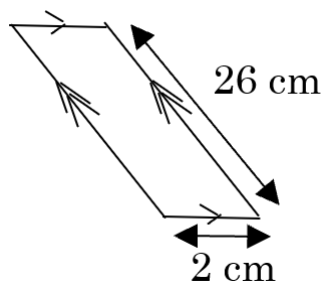
Q9. AB is a line segment, where A is  $(-4, 10)$  and B is  $(20, 7)$ . The point C divides AB in the ratio  $1 : 2$ .

Find the distance CB to 1 decimal place.

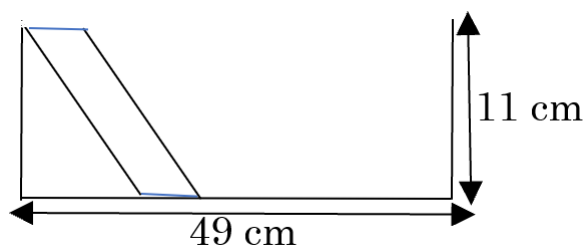
Answer: \_\_\_\_\_  
(5 marks)



Q10. Identical models in the following shape are to be packed into a box:



The first is fixed in place as shown:



More models are then placed on the right of the one already in place. Work out how many models can put in the box in this way:

Answer: \_\_\_\_\_  
(6 marks)