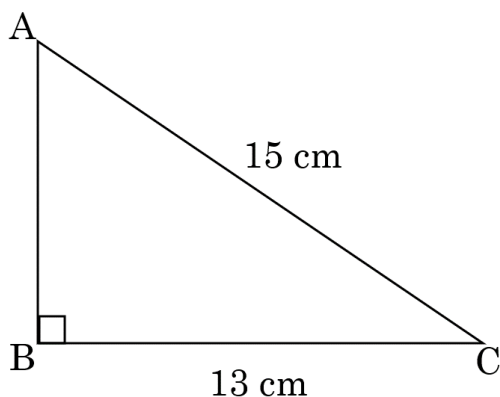




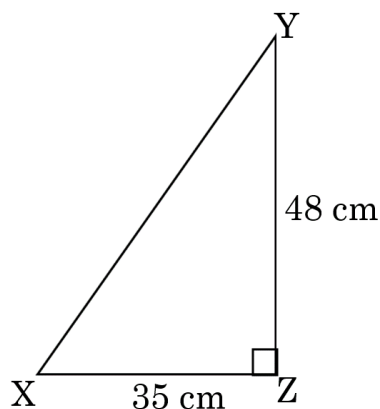
Pythagoras' Theorem Exam Practice

1. Find the length of side AB to 1 d.p.



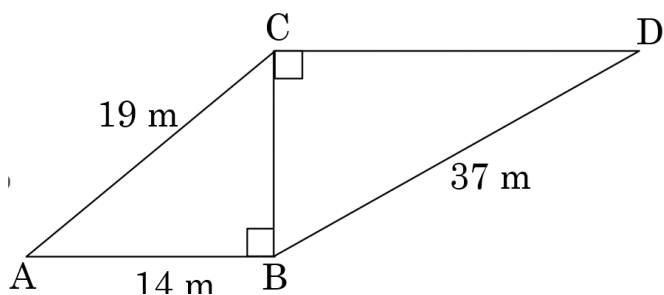
(3 marks)

2. Find the length of side XY to 1 d.p.



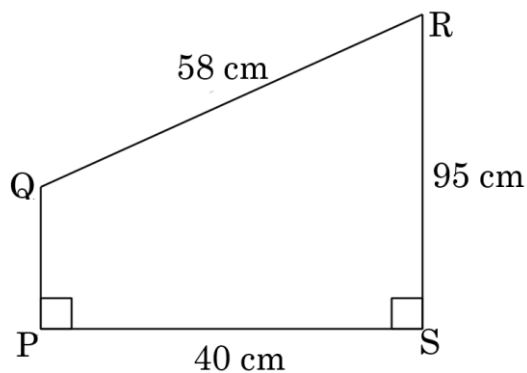
(3 marks)

3. Find the length of side CD to 1 d.p.



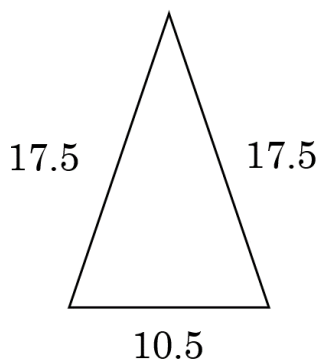
(4 marks)

4. Find the length of side PQ.



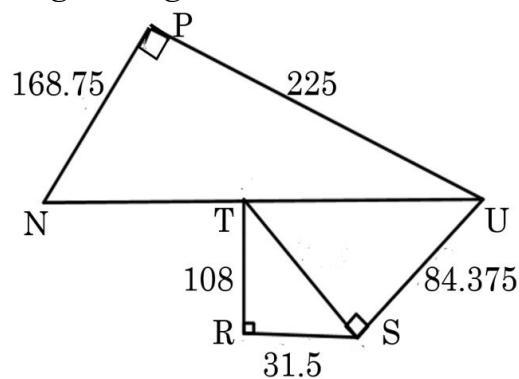
(4 marks)

5. Find the area of the triangle shown, to 3 significant figures.



(4 marks)

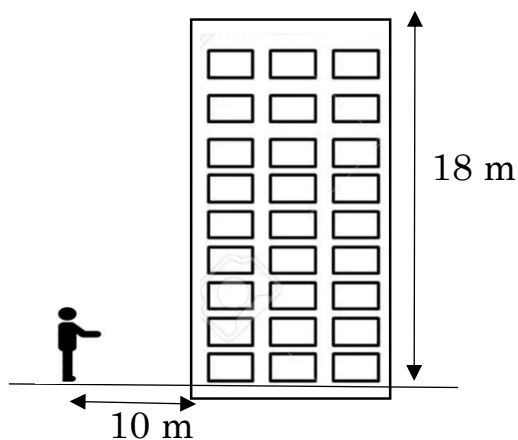
6. Given that T is the mid-point of NU, show that the triangle NPU is right-angled.



(5 marks)

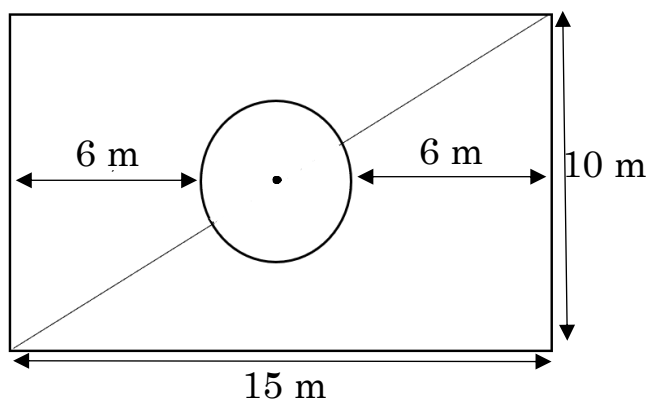


7. A boy throws a ball so that it lands on top of the building shown below:



- a) work out an estimate for the distance the ball has travelled from the boy's arm to the roof. (3 marks)
- b) Is your answer to (a) an under or over-estimate? Explain your choice. (1 mark)

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

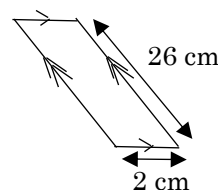


- A path is to be created along the outside border, diagonally to the pond from the corners and around the pond, using square paving slabs. If each 0.5 m^2 slab costs £11.50, work out the total cost of paving the garden. (6 marks)

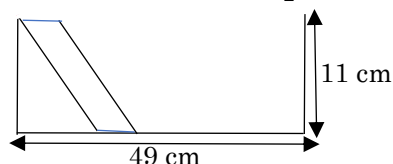
9. AB is a line segment, where A is $(-4, 10)$ and B is $(20, 7)$. The point C divides AB in the ratio $1 : 2$. Find the distance CB.

(5 marks)

10. 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.

(6 marks)