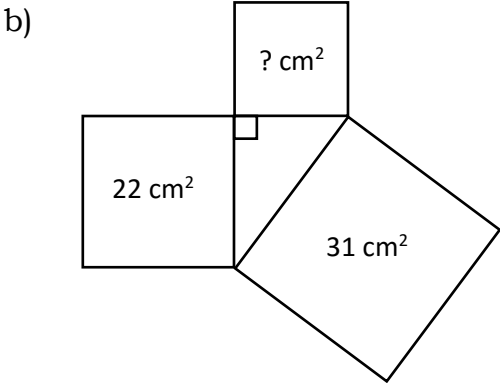
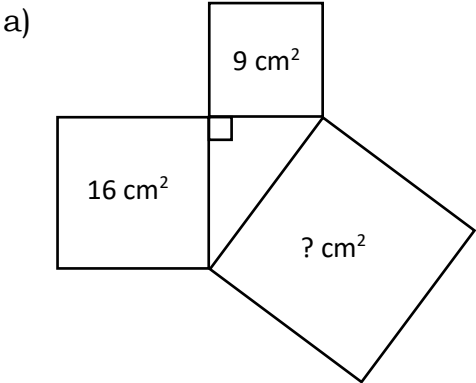
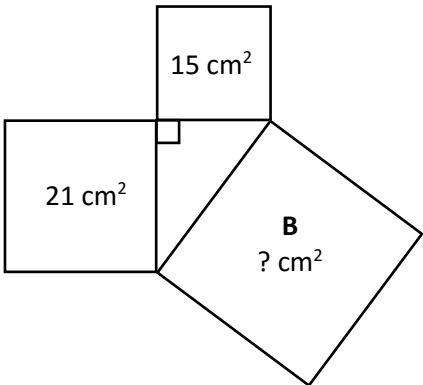
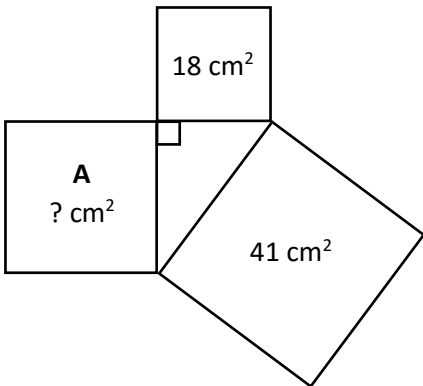


# Worksheet 1 – Pythagoras Theorem

1. Find the missing areas of the squares on these right-angled triangles.

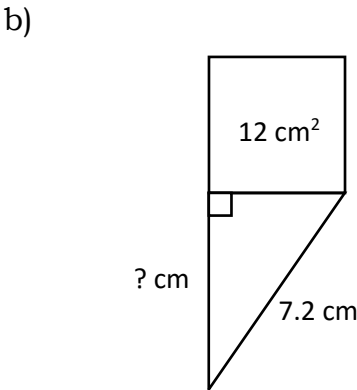
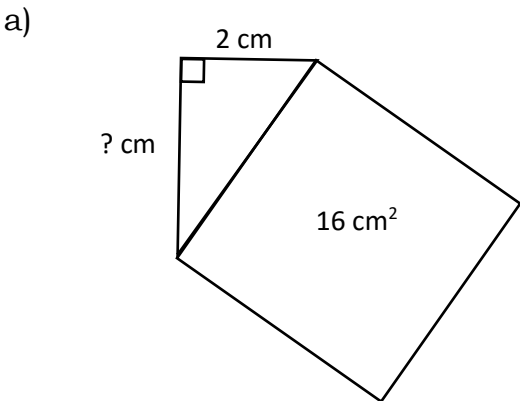


2. a) What is the area of the square A?  
 b) What is the length of a side of square A?  
 Give your answer correct to 1 decimal place.



3. a) What is the area of the square B?  
 b) What is the length of a side of square B?

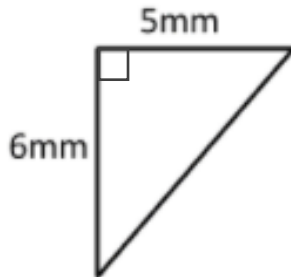
4. Work out the missing length in each of these diagrams.  
 Give your answer correct to 2 decimal places.



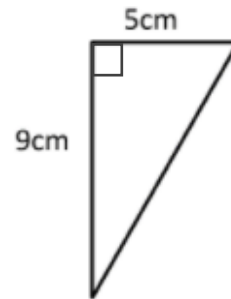
## Worksheet 2 – Finding the side of a right-angled triangle

1. Work out the length of the hypotenuse of each of these triangles.  
Give your answer correct to 1 decimal place.

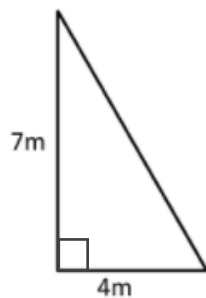
a)



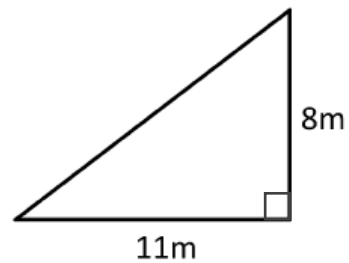
b)



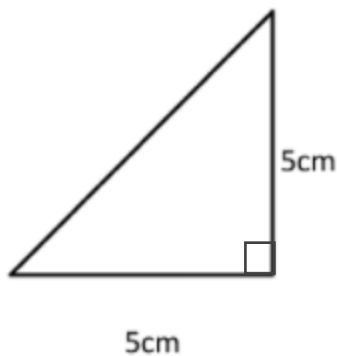
c)



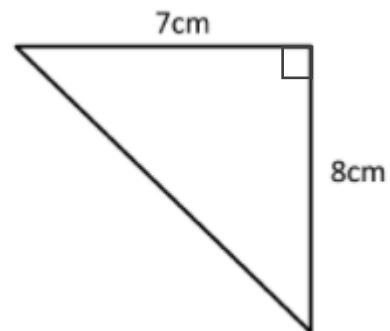
d)



e)

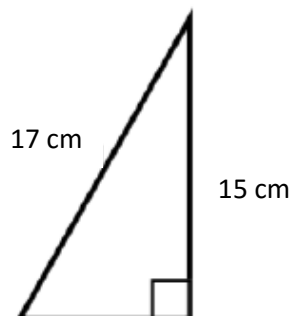


f)

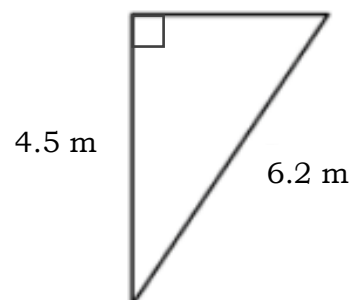


2. Work out the length of the missing side of each of these triangles.  
Give your answer correct to 1 decimal place.

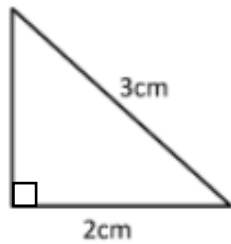
a)



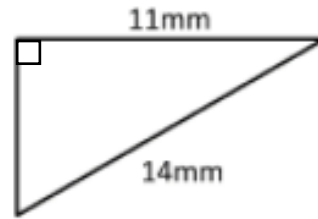
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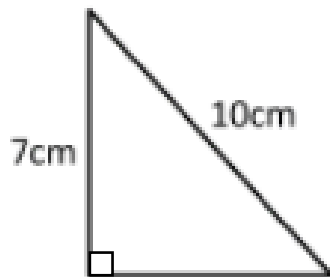
c)



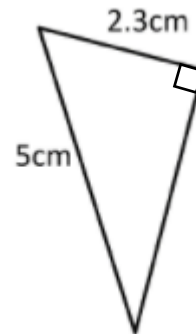
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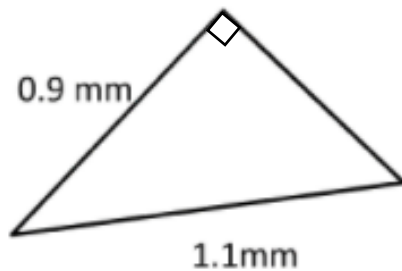
e)



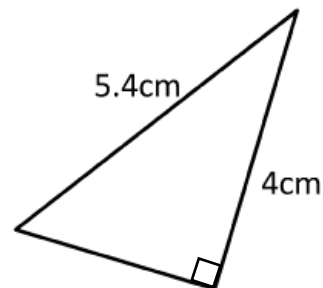
f)



g)

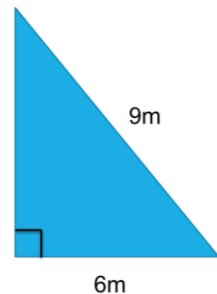


h)

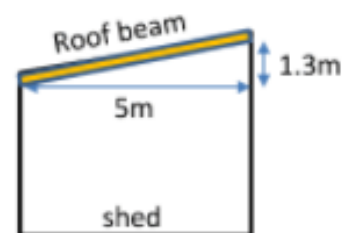


3. Giving your answers correct to 2 s.f., work out:

- Work out the height of this triangle.
- Hence, calculate the area of this triangle.

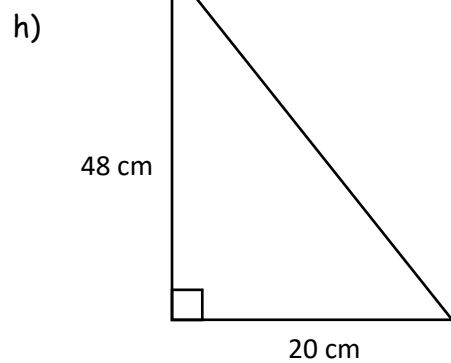
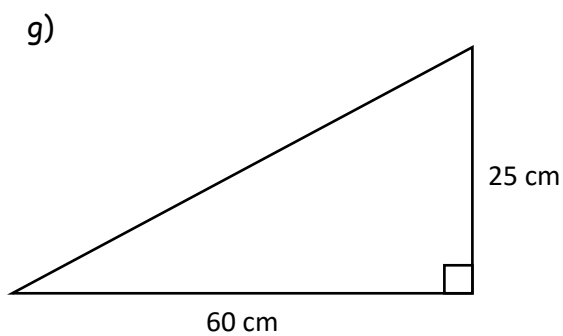
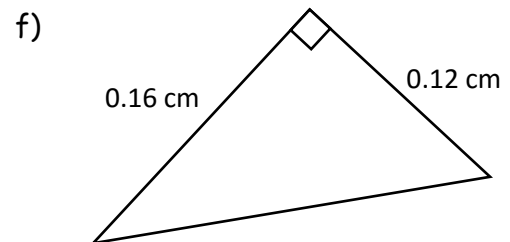
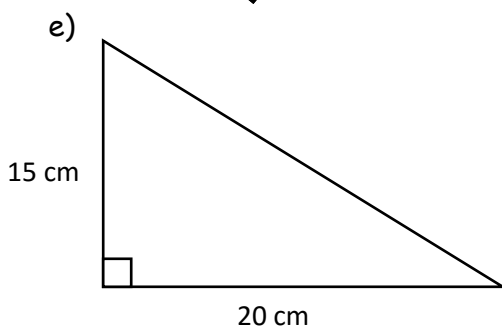
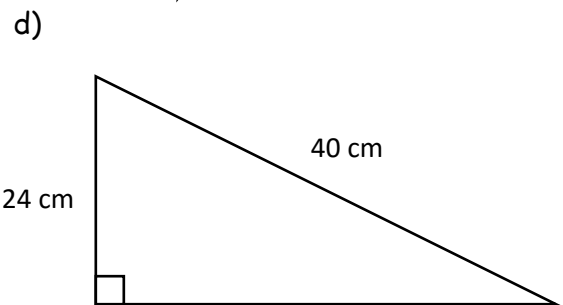
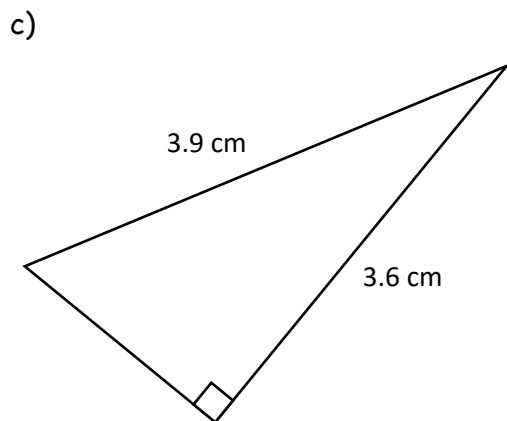
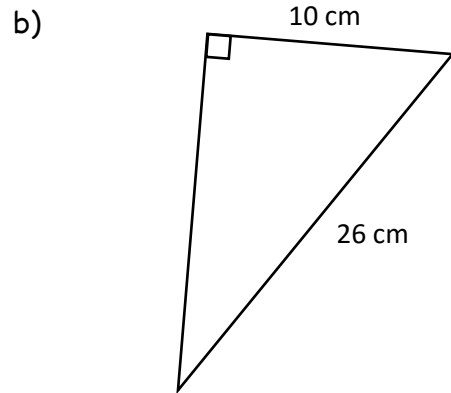
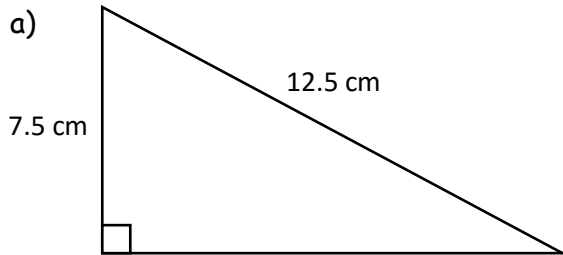


- An electricity pole 7.5 metres high is held vertical by a wire attached to its top and fixed to the ground 6.4 metres away from the foot of the pole. How long is the wire? Give your answer correct to 2 decimal places.
- A ship leaves port and sails 12.9 km due east and then 4.6 km due south. The ship gets into difficulty and needs to return to port. Calculate the shortest distance back to port. Give your answer correct to the nearest km.
- A shed with a pending roof needs to have some new roof beams fitted. The width of the shed is 5 m and the height of the pending roof is 1.3 m. Work out the length of the roof beams needed, giving your answer correct to 1 d.p.



## Worksheet 3 – Pythagorean triples

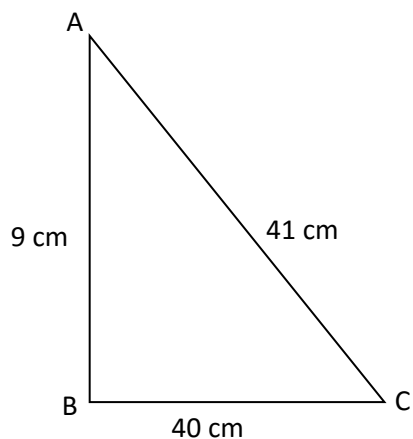
Use Pythagorean triples to work out the length of the missing sides.



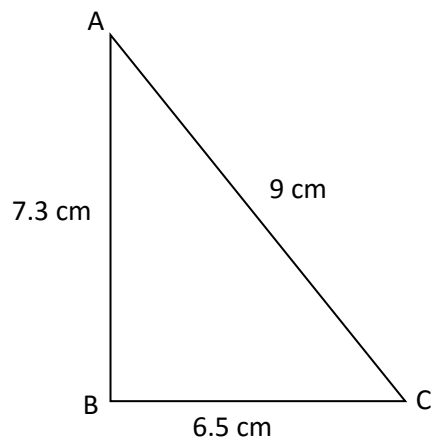
## Worksheet 4 – Converse of Pythagoras theorem

Are these triangles right-angled? If yes, which angle is right-angled?

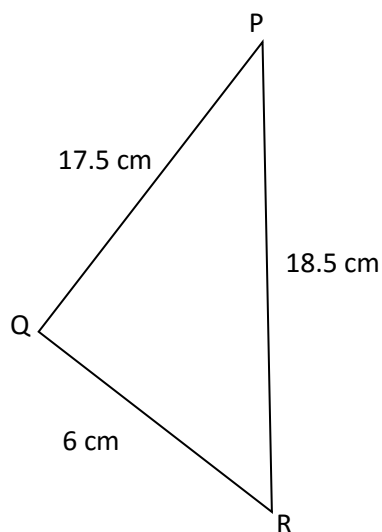
a)



b)



c)



d)

