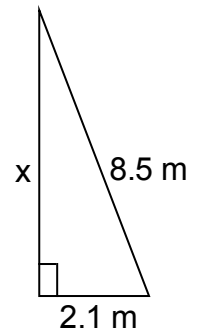
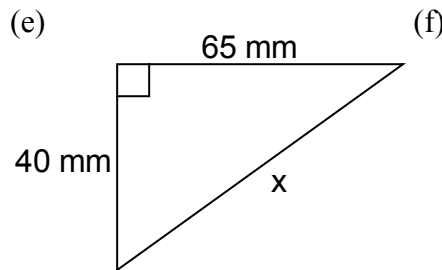
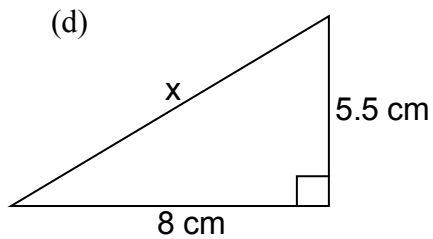
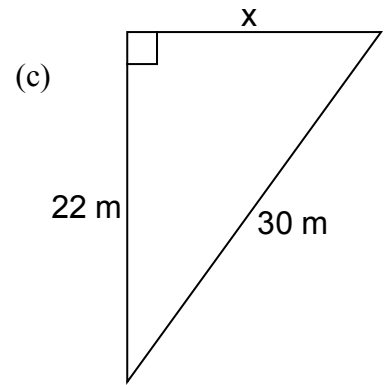
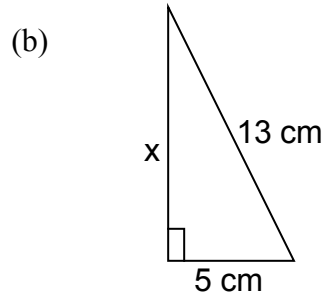
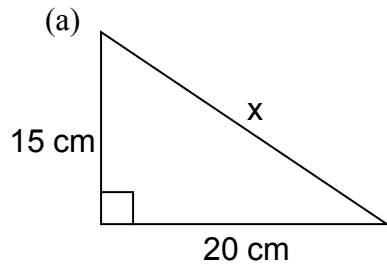


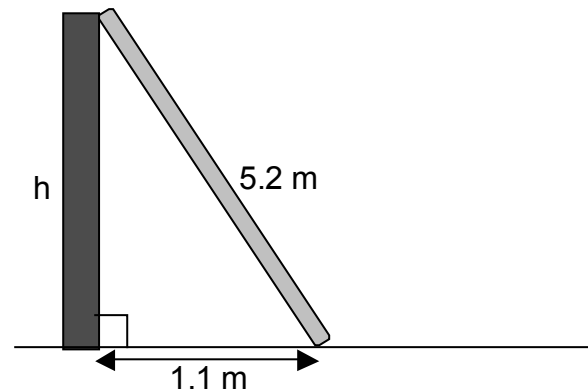
Pythagoras' Theorem

1. Calculate x in each of the following.



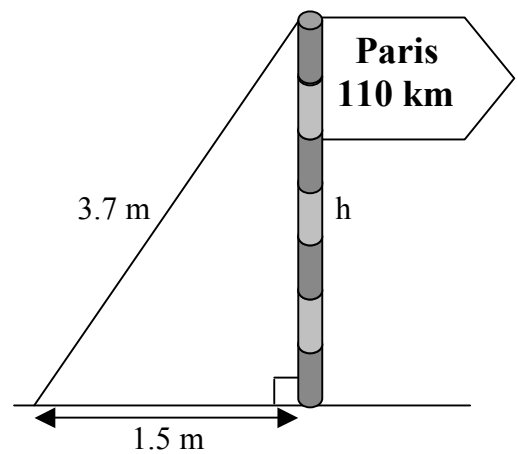
2. A ladder 5.2 metres long is resting against the top of a wall, as shown.

Calculate h , the height of the wall.



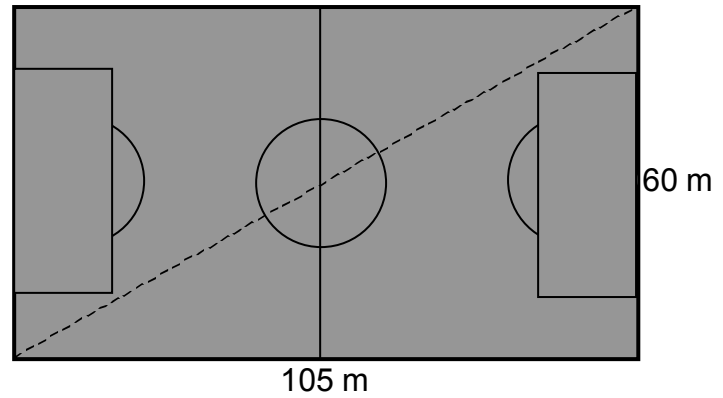
3. A signpost is supported by a metal wire 3.7 metres long. The wire is connected to the ground 1.5 metres from the signpost.

Calculate the height of the signpost.



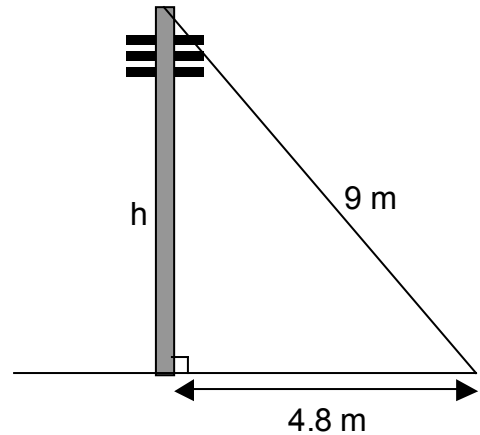
4. The diagram shows a football pitch. The length of the pitch is 105 metres and the breadth of the pitch is 60 metres.

Calculate the distance, shown by a dotted line, from one corner flag to the opposite corner flag on this pitch.



5. A telegraph pole is connected to the ground by wires. Each wire is 9 metres long and is fixed to the ground 4.8 metres from the pole.

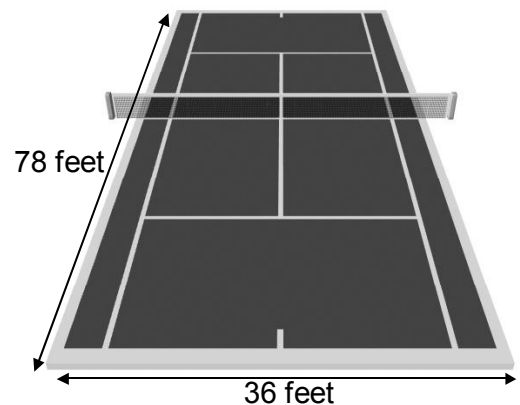
Use this information to calculate the height of the telegraph pole.



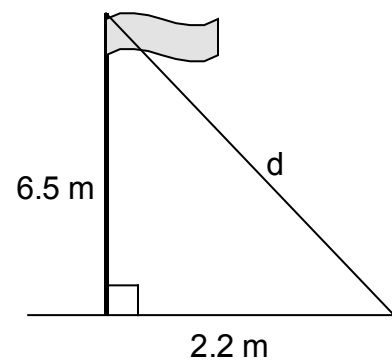
6. The diagram opposite shows a rectangular tennis court.

The length of the court is 78 feet and the breadth is 36 feet.

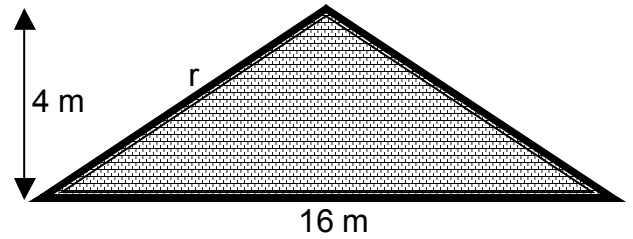
Calculate the distance from one corner of the court to the opposite corner.



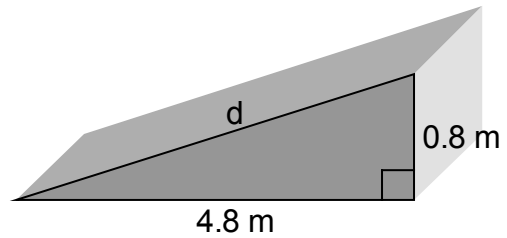
7. A flagpole 6.5 metres high is connected to the ground by a metal wire. If the bottom of the wire is 2.2 metres from the flagpole, calculate the length of the wire.



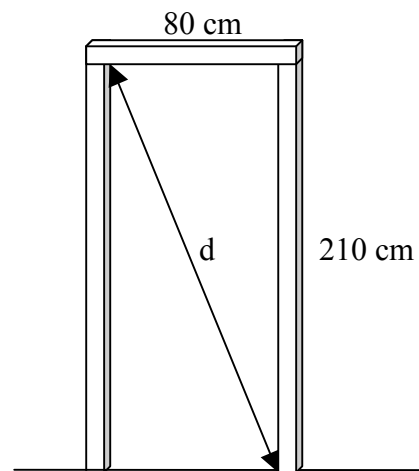
8. The side view of the roof of a house is in the shape of an isosceles triangle, as shown.
Calculate the length r of the sloping side of the roof.



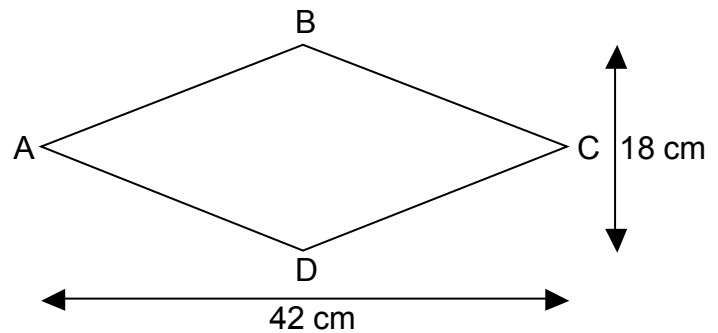
9. The diagram shows the end view of a ramp.
Calculate d , the length of the ramp.



10. The diagram shows a door space which is 80 cm wide and 210 cm high.
Calculate the diagonal distance d .



11. The diagram opposite shows a rhombus ABCD.
Given the information in the diagram, calculate the length of AB.



12. The diagram opposite shows the side view of a shed, in the shape of a rectangle and a right angled triangle.
Calculate the width of the shed.

