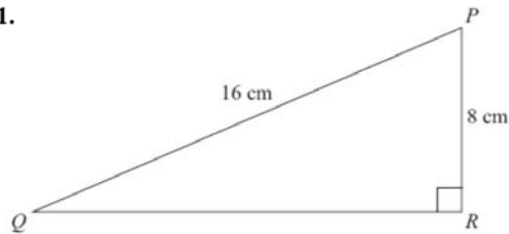


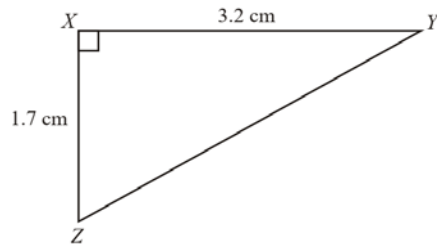
1.



PQR is a right-angled triangle.
 $PQ = 16$ cm.
 $PR = 8$ cm.

Calculate the length of QR .
 Give your answer correct to 2 decimal places.

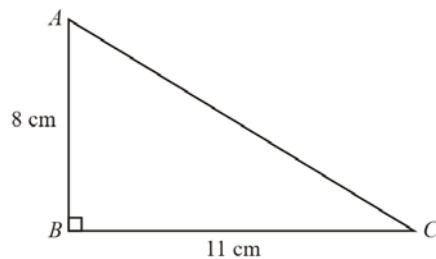
2.



XYZ is a right-angled triangle.
 $XY = 3.2$ cm.
 $XZ = 1.7$ cm.

Calculate the length of YZ .
 Give your answer correct to 3 significant figures.

3.

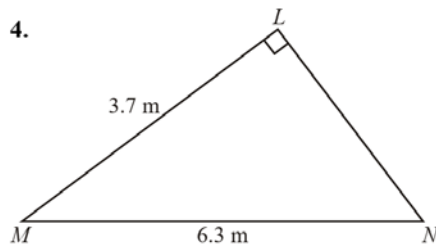


ABC is a right-angled triangle.

$AB = 8$ cm,
 $BC = 11$ cm.

Calculate the length of AC .
 Give your answer correct to 3 significant figures.

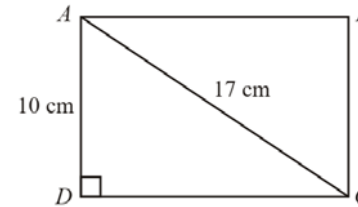
4.



Angle $MLN = 90^\circ$.
 $LM = 3.7$ m.
 $MN = 6.3$ m.

Work out the length of LN .
 Give your answer correct to 3 significant figures.

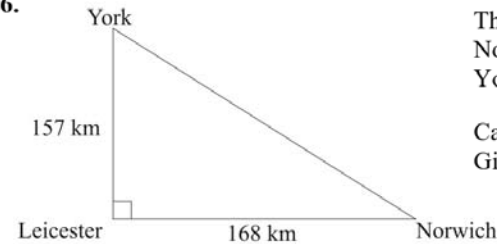
5.



$ABCD$ is a rectangle.
 $AC = 17$ cm.
 $AD = 10$ cm.

Calculate the length of the side CD .
 Give your answer correct to one decimal place.

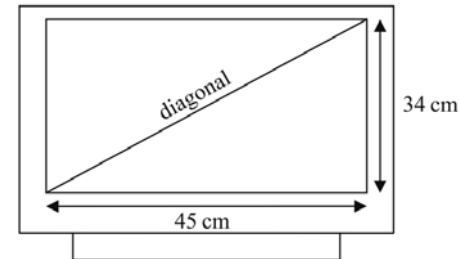
6.



The diagram shows three cities.
 Norwich is 168 km due East of Leicester.
 York is 157 km due North of Leicester.

Calculate the distance between Norwich and York.
 Give your answer correct to the nearest kilometre.

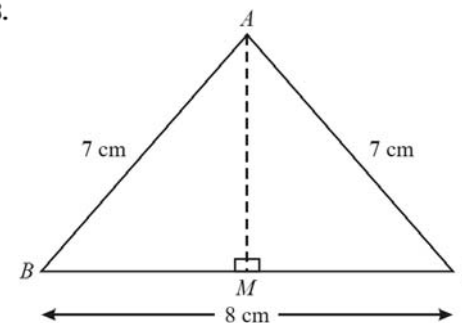
7.



A rectangular television screen has a width of 45 cm and a height of 34 cm.

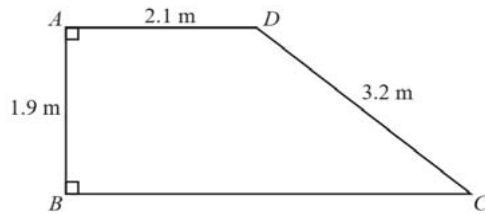
Work out the length of the diagonal of the screen.
 Give your answer correct to the nearest centimetre.

8.



Work out the length, in centimetres, of AM .
 Give your answer correct to 2 decimal places.

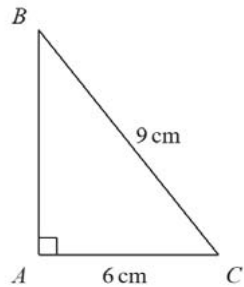
9.



$ABCD$ is a trapezium.
 AD is parallel to BC .
 Angle $A =$ angle $B = 90$.
 $AD = 2.1$ m, $AB = 1.9$ m, $CD = 3.2$ m.

Work out the length of BC .
 Give your answer correct to 3 significant figures.

10.

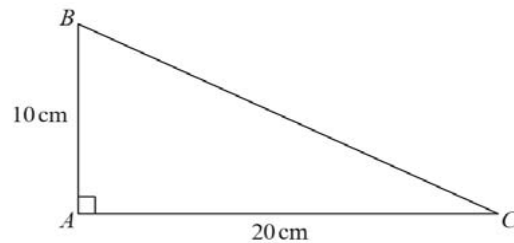


ABC is a right-angled triangle.

$AC = 6$ cm.
 $BC = 9$ cm.

Work out the length of AB .
 Give your answer correct to 3 significant figures.

11.

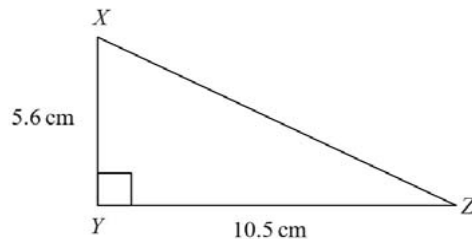


In triangle ABC ,

$AB = 10$ cm
 $AC = 20$ cm
 angle $BAC = 90^\circ$

Work out the length of BC .
 Give your answer correct to 3 significant figures.
 You must state the units in your answer.

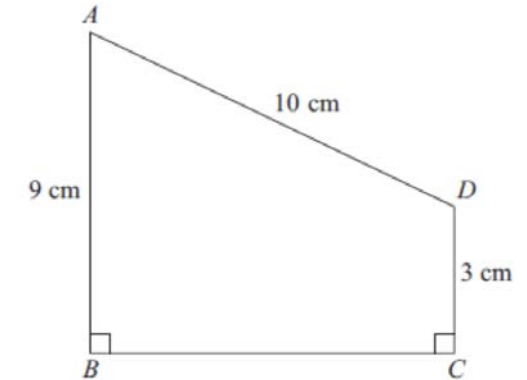
12.



In the triangle XYZ

$XY = 5.6$ cm
 $YZ = 10.5$ cm
 angle $XYZ = 90$

Work out the length of XZ .

13. $ABCD$ is a trapezium.

$AD = 10$ cm
 $AB = 9$ cm
 $DC = 3$ cm
 Angle $ABC =$ angle $BCD = 90^\circ$

Calculate the length of AC .
 Give your answer correct to 3 significant figures.

14. A ladder is 6 m long.
 The ladder is placed on horizontal ground, resting against a vertical wall.

The instructions for using the ladder say that the bottom of the ladder must **not** be closer than 1.5 m from the bottom of the wall.

How far up the wall can the ladder reach?
 Give your answer correct to 1 decimal place.