

Use a scientific calculator and this formula

$$\text{mystery} = \sqrt{\text{longest}^2 - \text{shorter}^2}$$

1. Here is a right angled triangle.

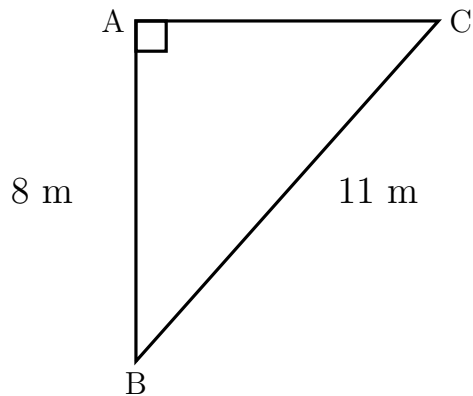


Diagram NOT  
accurately drawn

$$AB = 8 \text{ m}$$

$$BC = 11 \text{ m}$$

Work out the length of AC.

Give your answer correct to 1 decimal place.

..... m

2. Complete this formula       $\text{mystery} = \sqrt{\dots\dots\dots est^2 - \dots\dots\dots er^2}$

Use the words *long* and *short*

3. Complete this formula       $\text{mystery} = \sqrt{\dots\dots\dots est^2 - \dots\dots\dots er^2}$

Use the words *long* and *short*

4. Here is a right angled triangle.

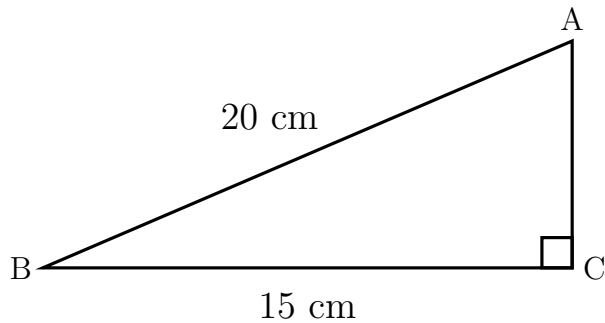


Diagram NOT  
accurately drawn

$$AB = 20 \text{ cm}$$

$$BC = 15 \text{ cm}$$

Work out the length of AC.

Give your answer correct to 1 decimal place.

..... cm

5. Complete this formula

$$\text{mystery} = \sqrt{\phantom{2} \phantom{2}}$$

6. Complete this formula       $\text{mystery} = \sqrt{\quad\quad\quad^2 - \quad\quad\quad^2}$

7.

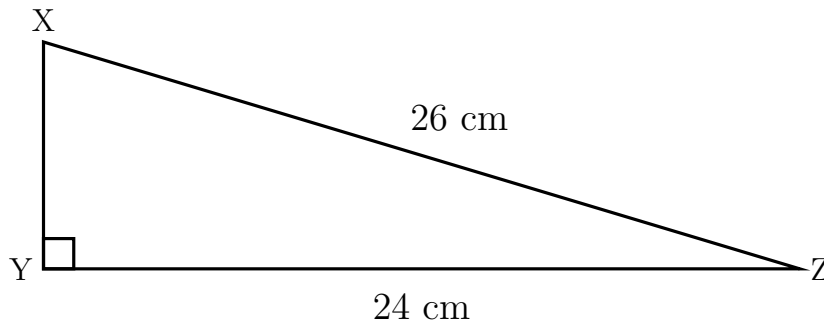


Diagram NOT  
accurately drawn

In triangle XYZ

$YZ = 24 \text{ cm}$

$XZ = 26 \text{ cm}$

angle  $XYZ = 90^\circ$

Work out the length of XY

..... cm

8. Complete this formula

$$\text{mystery} = \sqrt{\quad \square \quad - \quad \square \quad}$$

9. Complete this formula

$$\text{mystery} = \sqrt{\quad \square \quad - \quad \square \quad}$$

10. Complete this formula       $\text{mystery} = \sqrt{\quad \square \quad \_ \quad \square}$

11. The diagram shows right angled triangle ABC.

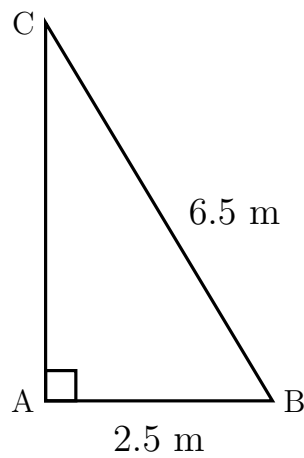


Diagram NOT  
accurately drawn

BC represents a ladder resting on the ground AB and against a wall AC.

The distance AB between the base of the wall and the foot of the ladder is 2.5 m

The length of the ladder BC is 6.5 m

Calculate the height AC.

..... m



## Answers

1. 7.5 m

2.  $\text{mystery} = \sqrt{\text{longest}^2 - \text{shorter}^2}$

3.  $\text{mystery} = \sqrt{\text{longest}^2 - \text{shorter}^2}$

4. 13.2 cm

5.  $\text{mystery} = \sqrt{\text{longest}^2 - \text{shorter}^2}$

6.  $\text{mystery} = \sqrt{\text{longest}^2 - \text{shorter}^2}$

7. 10 cm

8.  $\text{mystery} = \sqrt{\text{longest}^2 - \text{shorter}^2}$

9.  $\text{mystery} = \sqrt{\text{longest}^2 - \text{shorter}^2}$

10.  $\text{mystery} = \sqrt{\text{longest}^2 - \text{shorter}^2}$

11. 6 m