

Grade- VIII

MATHS

1. $(\text{hypotenuse})^2 = (\text{Base})^2 + (\text{perpendicular})^2$
2. Right angled
3. Hypotenuse
4. Greater than
5. 10 cm
6. $AC^2 = 15^2 - 12^2$

$$225 - 144$$

$$AC^2 = 9^2$$

$$AC = 9$$

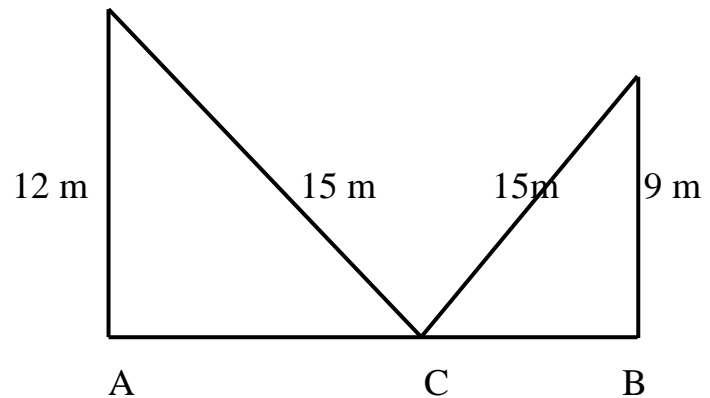
$$BC^2 = 15^2 - 9^2$$

$$BC^2 = 12^2$$

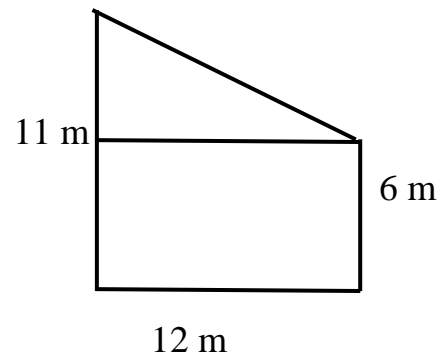
$$BC^2 = 12^2$$

$$BC = 12$$

$$\text{Width of the street} = 12 + 9 = 21 \text{ m}$$



7. Distance between tops of two poles
 $= \sqrt{5^2 + 12^2}$
 $= 25 + 144$
 $\sqrt{169} = 13 \text{ m}$



8. Sum of sides = $8 + 5 = 13 \text{ m}$
 Difference of sides = $8 - 5 = 3 \text{ m}$
 Possible values of third side are more than 3 m and less than 13 m
9. Distance = $\sqrt{10^2 + 24^2}$
 $= 26 \text{ m}$

10. Length of broken part of tree = $\sqrt{15^2 + 8^2}$
 $\sqrt{225 + 64} = 17 \text{ m}$

$$\text{Height of original tree} = 17 + 8 = 25 \text{ m}$$