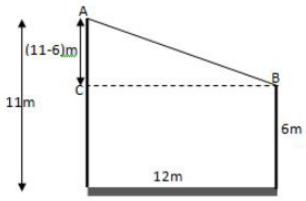
Properties of Triangles Ex 15.5 Q7

Answer :



The distance between the tops of the poles is the distance between points A and B.

We can see from the given figure that points A, B and C form a right triangle, with AB as the hypotenuse.

On using the Pythagoras Theorem in $\triangle ABC$, we get :

$$(11-6)^2 + 12^2 = AB^2$$

$$\Rightarrow 25 + 144 = AB^2$$

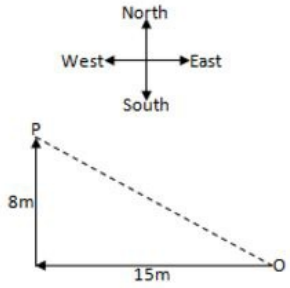
$$\Rightarrow AB^2 = 169$$

$$\Rightarrow AB = 13$$

Hence, the distance between the tops of the poles is 13 m.

Properties of Triangles Ex 15.5 Q8

Answer :



Let O be the starting point and P be the final point.

By using the Pythagoras theorem, we can find the distance OP.

$$15^2 + 8^2 = OP^2$$

$$\Rightarrow OP^2 = 225 + 64$$

$$\Rightarrow OP^2 = 289$$

$$\Rightarrow OP = 17$$

Hence, the required distance is 17 m.

********** END **********