



Exercise 17C

$$AE = BC = 6 \text{ m} \quad (\text{ABCE is a rectangle})$$

$$DC = BD - AE$$

$$= 11 - 6$$

$$= 5 \text{ m}$$

In the right angled triangle ECD :

$$ED^2 = EC^2 + DC^2 \quad (\text{Pythagoras theorem})$$

$$ED^2 = 5^2 + 12^2$$

$$ED^2 = 25 + 144$$

$$ED^2 = 169$$

$$ED = \pm 13$$

The length cannot be negative.

$$\therefore ED = 13 \text{ m}$$

Q38

Answer :

$$\left(d \right) 5\sqrt{2} \text{ cm}$$

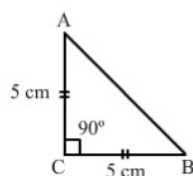
In right angled isosceles triangle, right angled at C, AC is equal to BC and AB is the hypotenuse.

$$AB^2 = AC^2 + BC^2$$

$$= 5^2 + 5^2$$

$$= 50$$

$$\therefore AB = \sqrt{2 \times 25} = 5\sqrt{2} \text{ cm}$$



***** END *****

