



Understanding shapes-III special types of quadrilaterals Ex 17.3 Q7

Answer :

Let the side be x cm and y cm.

So, we have :

$$2(x + y) = 90$$

Sides are in the ratio 4 : 5.

$$\therefore y = \frac{5x}{4}$$

Putting the value of y :

$$2\left(x + \frac{5x}{4}\right) = 90$$

$$\frac{4x + 5x}{4} = 45$$

$$9x = 180$$

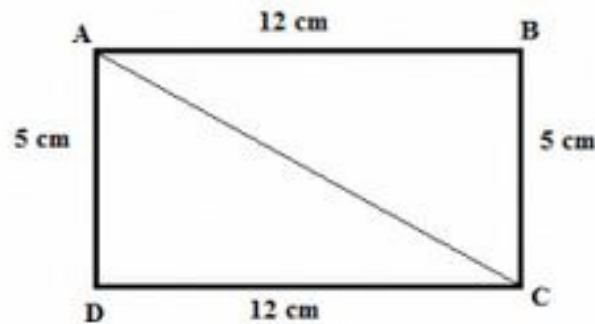
$$x = 20$$

$$\therefore y = \frac{5 \times 20}{4} = 25$$

Thus, the sides of the rectangle will be 20 cm and 25 cm.

Understanding shapes-III special types of quadrilaterals Ex 17.3 Q8

Answer :



Using Pythagoras theorem :

$$AD^2 + DC^2 = AC^2$$

$$5^2 + 12^2 = AC^2$$

$$25 + 144 = AC^2$$

$$169 = AC^2$$

$$AC = \sqrt{169}$$

$$= 13 \text{ cm}$$

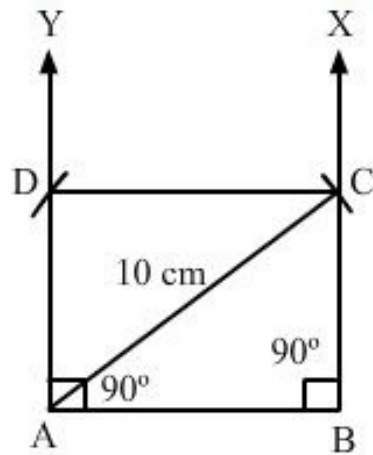
Thus, length of the diagonal is 13 cm.

Understanding shapes-III special types of quadrilaterals Ex 17.3 Q9

Answer :

- (i) Draw a side AB, equal to 8 cm.
- (ii) With A as the centre, draw an arc of length 10 cm.
- (iii) Draw $\angle ABX = 90^\circ$, which intersects the arc at C.
- (iv) Draw $\angle BAY = 90^\circ$.
- (v) With C as the centre, draw an arc of length 8 cm.
- (vi) Join CD.

Thus, ABCD is the required rectangle.



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