

Mensuration I Ex 20.3 Q4

Answer:

We have,

Perimeter of a rhombus = 28 m

[Since perimeter = 4(Side)]

$$\Rightarrow$$
 Side = $\frac{28 \text{ m}}{4} = 7 \text{ m}$

Now

Area of the rhombus = 28 m²

$$\Rightarrow$$
 (Side x Altitude) = 28 m²

$$\Rightarrow$$
 (7 m x Altitude) = 28 m²

$$\Rightarrow$$
 Altitude = $\frac{28 \text{ m}^2}{7\text{m}} = 4 \text{ m}$

Mensuration I Ex 20.3 O5

Answer:

We have,

Taking BC as the base,

BC = 12 cm and altitude DM = 9.3 cm

:. Area of parallelogram ABCD = Base x Altitude

$$= (12 \text{ cm x } 9.3 \text{ cm}) = 111.6 \text{ cm}^2 \dots (i)$$

Now,

Taking AB as the base, we have,

Area of the parallelogram ABCD = Base x Altitude = (18 cm x DL).....(ii)

From (i) and (ii), we have

 $18 \text{ cm x } DL = 111.6 \text{ cm}^2$

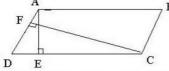
$$\Rightarrow DL = \frac{111.6 \text{ cm}^2}{18 \text{ cm}} = 6.2 \text{ cm}$$

Mensuration I Ex 20.3 Q6

Answer:

We have

ABCD is a parallelogram with the longer side AB = 54 cm and corresponding altitude AE = 16 cm. The shorter side is BC and the corresponding altitude is CF = 24 cm.



Area of a parallelogram = base × height. We have two altitudes and two corresponding bases. So, $\frac{1}{2} \times BC \times CF = \frac{1}{2} \times AB \times AE$

$$\Rightarrow$$
 BC x CF = AB x AE

$$\Rightarrow$$
 BC = $\frac{54 \times 16}{24} = 36$ cm

Hence, the length of the shorter side BC = AD = 36 cm.