Mensuration I Ex 20.3 Q4

Answer :

We have,

Perimeter of a rhombus = 28 m

$\therefore$ 4(Side) = 28 m [Since perimeter = 4(Side)]

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

Now,

Area of the rhombus = 28 m^2

$\Rightarrow$ (Side x Altitude) = 28 m^2

$\Rightarrow$ (7 m x Altitude) = 28 m^2

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

Mensuration I Ex 20.3 Q5

Answer :

We have,

Taking *BC* as the base,

BC = 12 cm and altitude *DM* = 9.3 cm

$\therefore$ Area of parallelogram *ABCD* = Base x Altitude

= (12 cm x 9.3 cm) = 111.6 cm^2 ..... (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 cm x *DL* = 111.6 cm^2

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

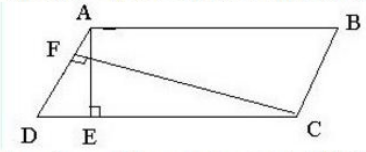
Mensuration I Ex 20.3 Q6

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* x 24 = 54 x 16

$\Rightarrow$ BC = $\frac{54\times16}{24} = 36\ \mathrm{cm}$

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

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