



Areas of Parallelograms and Triangles Ex 15.2 Q3

Answer :

Given: Here in the question it is given that

(1) Area of parallelogram ABCD = 124 cm^2

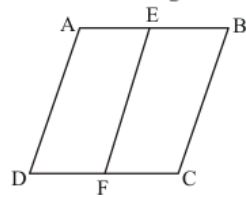
(2) E is the midpoint of AB, which means $AE = \frac{1}{2}(AB)$

(3) F is the midpoint of CD, which means $DF = \frac{1}{2}(CD)$

To Find : Area of Parallelogram AEFD

Calculation: We know that formula for calculating the

Area of Parallelogram = base \times height



Therefore,

Area of parallelogram ABCD = $AB \times AD$ (Taking base as AB and Height as AD)(1)

Therefore,

Area of parallelogram AEFD = $AE \times AD$ (Taking base as AE and Height as AD)(2)

$$= \frac{1}{2} AB \times AD \left(AE = \frac{1}{2} AB \right)$$

$$= \frac{1}{2} \text{Area of Parallelogram ABCD (from equation 1)}$$

$$= \frac{1}{2}(124)$$

$$\boxed{= 62 \text{ cm}^2}$$

Hence we got the result **Area of Parallelogram AEFD** $\boxed{= 62 \text{ cm}^2}$

***** END *****