



Mensuration I Ex 20.1 Q4

Answer :

We have,

(i) Length of the rectangular field = 200 m

Breadth of the rectangular field = 125 m

Therefore,

$$\begin{aligned}\text{Area of the rectangular field} &= \text{Length} \times \text{Breadth} \\ &= 200 \text{ m} \times 125 \text{ m} \\ &= 25000 \text{ m}^2 = 250 \text{ ares} \quad [\text{Since } 100 \text{ m}^2 = 1 \text{ are}]\end{aligned}$$

(ii) Length of the rectangular field = $75 \text{ m } 5 \text{ dm} = (75 + 0.5) \text{ m} = 75.5 \text{ m}$ [Since $1 \text{ dm} = 10 \text{ cm} = 0.1 \text{ m}$]

Breadth of the rectangular field = 120 m

Therefore,

$$\begin{aligned}\text{Area of the rectangular field} &= \text{Length} \times \text{Breadth} \\ &= 75.5 \text{ m} \times 120 \text{ m} \\ &= 9060 \text{ m}^2 = 90.6 \text{ ares} \quad [\text{Since } 100 \text{ m}^2 = 1 \text{ are}]\end{aligned}$$

Mensuration I Ex 20.1 Q5

Answer :

We have,

(i) Length of the rectangular field = 125 m

Breadth of the rectangular field = 400 m

Therefore,

$$\begin{aligned}\text{Area of the rectangular field} &= \text{Length} \times \text{Breadth} \\ &= 125 \text{ m} \times 400 \text{ m} \\ &= 50000 \text{ m}^2 = 5 \text{ hectares} \quad [\text{Since } 10000 \text{ m}^2 = 1 \text{ hectare}]\end{aligned}$$

(ii) Length of the rectangular field = $75 \text{ m } 5 \text{ dm} = (75 + 0.5) \text{ m} = 75.5 \text{ m}$ [Since $1 \text{ dm} = 10 \text{ cm} = 0.1 \text{ m}$]

Breadth of the rectangular field = 120 m

Therefore,

$$\begin{aligned}\text{Area of the rectangular field} &= \text{Length} \times \text{Breadth} \\ &= 75.5 \text{ m} \times 120 \text{ m} \\ &= 9060 \text{ m}^2 = 0.906 \text{ hectares} \quad [\text{Since } 10000 \text{ m}^2 = 1 \text{ hectare}]\end{aligned}$$

Mensuration I Ex 20.1 Q6

Answer :

We have,

Length of the door = 3 m

Breadth of the door = 2 m

Side of the wall = 10 m

Area of the wall = Side \times Side = $10 \text{ m} \times 10 \text{ m} = 100 \text{ m}^2$

Area of the door = Length \times Breadth = $3 \text{ m} \times 2 \text{ m} = 6 \text{ m}^2$

Thus,

Required area of the wall for painting = Area of the wall – Area of the door = $(100 - 6) \text{ m}^2 = 94 \text{ m}^2$

Rate of painting per square metre = Rs. 2.50

Hence, the cost of painting the wall = Rs. $(94 \times 2.50) = \text{Rs. } 235$

***** END *****