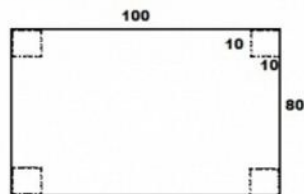




Mensuration I Ex 20.2 Q4

Answer :

We have,



Length of the rectangular sheet = 100 cm

Breadth of the rectangular sheet = 80 cm

Area of the rectangular sheet of tin = $100 \text{ cm} \times 80 \text{ cm} = 8000 \text{ cm}^2$

Side of the square at the corner of the sheet = 10 cm

Area of one square at the corner of the sheet = $(10 \text{ cm})^2 = 100 \text{ cm}^2$

\therefore Area of 4 squares at the corner of the sheet = $4 \times 100 \text{ cm}^2 = 400 \text{ cm}^2$

Hence,

Area of the remaining sheet of tin = Area of the rectangular sheet – Area of the 4 squares

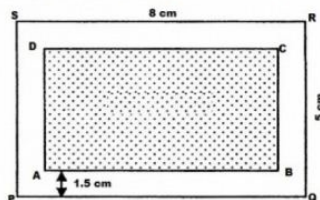
Area of the remaining sheet of tin = $(8000 - 400) \text{ cm}^2$
 $= 7600 \text{ cm}^2$

Mensuration I Ex 20.2 Q5

Answer :

We have,

Length of the cardboard = 8 cm and breadth of the cardboard = 5 cm



\therefore Area of the cardboard including the margin = $8 \text{ cm} \times 5 \text{ cm} = 40 \text{ cm}^2$

From the figure, it can be observed that,

New length of the painting when the margin is not included = $8 \text{ cm} - (1.5 \text{ cm} + 1.5 \text{ cm}) = (8 - 3) \text{ cm} = 5 \text{ cm}$

New breadth of the painting when the margin is not included = $5 \text{ cm} - (1.5 \text{ cm} + 1.5 \text{ cm}) = (5 - 3) \text{ cm} = 2 \text{ cm}$

\therefore Area of the painting not including the margin = $5 \text{ cm} \times 2 \text{ cm} = 10 \text{ cm}^2$

Hence,

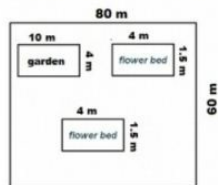
Area of the margin = Area of the cardboard including the margin – Area of the painting
 $= (40 - 10) \text{ cm}^2$
 $= 30 \text{ cm}^2$

Mensuration I Ex 20.2 Q6

Answer :

Length of the rectangular field = 80 m

Breadth of the rectangular field = 60 m



$$\begin{aligned}\therefore \text{Area of the rectangular field} &= 80 \text{ m} \times 60 \\ &= 4800 \text{ m}^2\end{aligned}$$

Again,

$$\text{Area of the garden} = 10 \text{ m} \times 4 \text{ m} = 40 \text{ m}^2$$

$$\text{Area of one flower bed} = 4 \text{ m} \times 1.5 \text{ m} = 6 \text{ m}^2$$

Thus,

$$\text{Area of two flower beds} = 2 \times 6 \text{ m}^2 = 12 \text{ m}^2$$

Remaining area of the field for applying manure = Area of the rectangular field – (Area of the garden + Area of the two flower beds)

$$\begin{aligned}\text{Remaining area of the field for applying manure} &= 4800 \text{ m}^2 - (40 + 12) \text{ m}^2 \\ &= (4800 - 52) \text{ m}^2 \\ &= 4748 \text{ m}^2\end{aligned}$$

Since $100 \text{ m}^2 = 1 \text{ are}$

$$\therefore 4748 \text{ m}^2 = 47.48 \text{ ares}$$

So, cost of applying manure at the rate of Rs. 300 per are will be Rs. $(300 \times 47.48) = \text{Rs. } 14244$

***** END *****