



3. An open cuboidal box is made of wood 2.5 cm thick. Its external length, breadth and height are 60 cm, 60 cm and 50 cm respectively. Find cost of painting the inner surface at Rs 20 per 100 square cm.

$$\begin{aligned}
 \text{inner surface area} &= 2h(l+b) + lb \\
 &= 2 \times 47.5 (60+55) + 60 \times 55 \\
 &= 95 \times 115 + 3300 \\
 &= 10925 + 3300 \\
 &= 14225 \text{ cm}^2
 \end{aligned}$$

$$\text{cost of painting } 100 \text{ cm}^2 = \text{Rs } 20$$

$$\begin{aligned}
 \text{cost of painting } 14225 \text{ cm}^2 &= \frac{14225 \times 20}{100} \\
 &= \text{Rs } 2845.00
 \end{aligned}$$