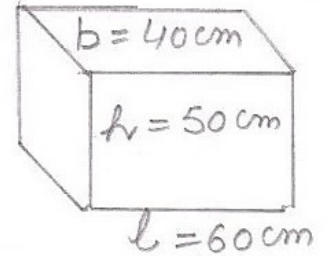
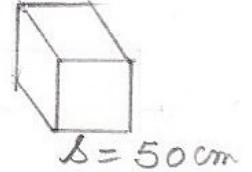




$$\begin{aligned}
 1 \text{ volume of box I} &= lbh, \\
 &= 60 \times 40 \times 50 \\
 &= 120000 \text{ cm}^3
 \end{aligned}$$

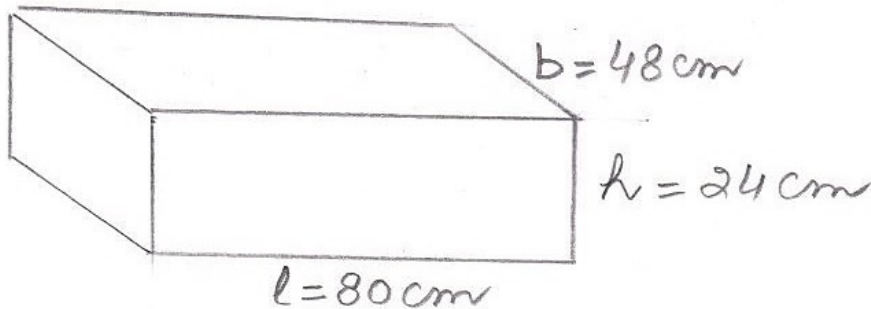


$$\begin{aligned}
 \text{volume of box II} &= s^3 \\
 &= 50^3 \\
 &= 125000 \text{ cm}^3
 \end{aligned}$$



\therefore box I needs less material

2.



$$\begin{aligned}
 \text{Surface area of } ^{200} \text{ suitcase} \\
 &= 100 \times 2 (lb + bh + lh) \\
 &= 200 (80 \times 48 + 48 \times 24 + 24 \times 80) \text{ cm}^2
 \end{aligned}$$

area of cloth = S.A. of 200 suitcases

$$\begin{aligned}
 l, b, &= 200 (80 \times 48 + 48 \times 24 + 24 \times 80) \\
 \cancel{96} l, &= \cancel{200}^{100} \times \cancel{48} (80 + 24 + 40) \\
 \Rightarrow l, &= 100 \times 144 \text{ cm} \\
 &= \frac{100 \times 144}{100} \text{ m}
 \end{aligned}$$