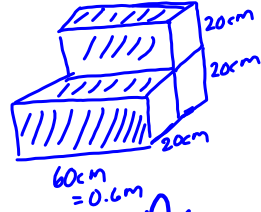


Page 28

Section 1.3 Surface Area



$$A(\text{long}) = 0.60 \times 0.20 \times 8 \\ = 0.9600 \text{ cm}^2$$

$$A_{\text{ends}} = 0.20 \times 0.20 \times 6 \\ = 0.2400 \text{ cm}^2$$

$$A_{\text{Total}} = 0.96 + 0.24 \\ = 1.2 \text{ m}^2$$

2 m² is enough material

Page 31

$$\begin{aligned} 8. a) A_{\text{small box}} &= A_{\text{top/bottom}} + A_{\text{sides}} + A_{\text{front/back}} \\ &= (2 \times 1)2 + (1 \times 1)2 + (2 \times 1)2 \\ &= 4 + 2 + 4 \\ &= 10 \text{ cm}^2 \end{aligned}$$

$$\begin{aligned} A_{\text{large box}} &= A_{\text{top/bottom}} + A_{\text{sides}} + A_{\text{front/back}} \\ &= (5 \times 3)2 + (2 \times 3)2 + (5 \times 2)2 \\ &= 30 + 12 + 20 \\ &= 62 \text{ cm}^2 \end{aligned}$$

$$\begin{aligned} A_{\text{overlap}} &= (2 \times 1)2 \\ &= 4 \text{ cm}^2 \end{aligned}$$

$$\begin{aligned} A_{\text{total}} &= A_{\text{small box}} + A_{\text{large box}} - A_{\text{overlap}} \\ &= 10 + 62 - 4 \\ &= 68 \text{ cm}^2 \end{aligned}$$