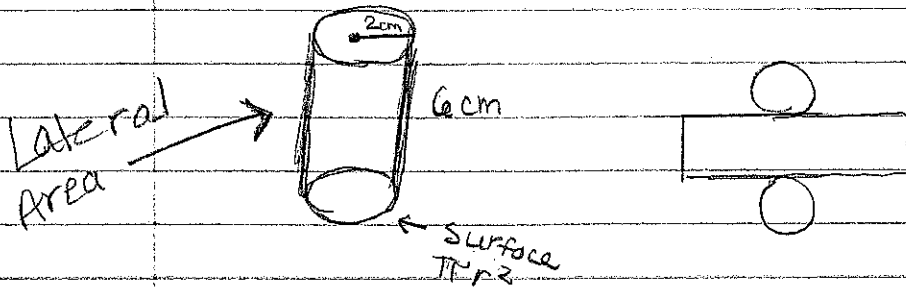


8.4 ~ Surface Area of a Cylinder

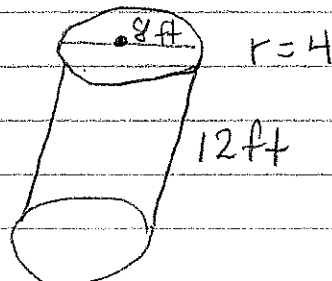


LATERAL AREA OF A CYLINDER

$$\begin{aligned} L.A. &= 2\pi rh \\ &= 2 \times 3.14 \times 2 \times 6 \\ &= 75.36 \text{ cm}^2 \end{aligned}$$

SURFACE AREA OF A CYLINDER

$$\begin{aligned} S.A. &= L.A. + 2\pi r^2 \\ * \quad S.A. &= 2\pi rh + 2\pi r^2 \end{aligned}$$



$$S.A. = 2 \times 3.14 \times 4 \times 12 + 2 \times \pi \times 4^2$$

$$301.44 + 100.48$$

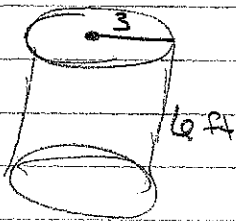
$$\begin{aligned} &301.44 \\ &+ 100.48 \\ \text{total} &\rightarrow \underline{\underline{401.92 \text{ ft}^2}} \end{aligned}$$



$$(2 \times 3.14 \times 2 \times 7) + (2 \times 3.14 \times 2^2)$$

87.92 25.12

$$\begin{array}{r} 87.92 \\ + 25.12 \\ \hline \text{S.A.} = 113.04 \text{ m}^2 \end{array}$$



$$\begin{array}{l} \text{L.A.} \quad + \quad \text{S.A.} \\ (2\pi rh) + (2\pi r^2) \\ 2(3.14)(3)(6) + 2(3.14)(3)^2 \\ 169.56 + 56.16 \end{array}$$

$$\begin{array}{r} 169.56 \\ + 56.16 \\ \hline 225.72 \text{ ft}^2 \end{array}$$