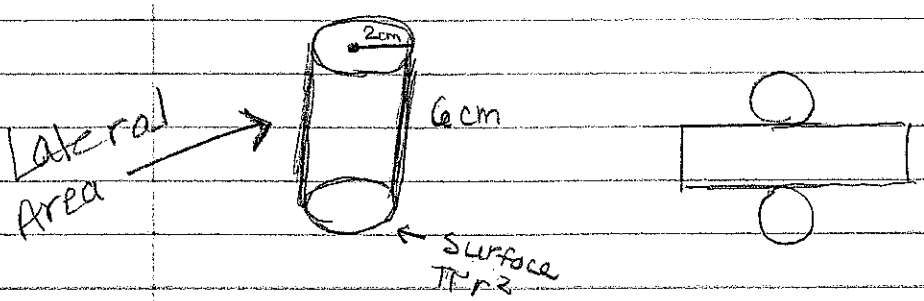
8.4 ~ Surface Area of a Cylinder



LATERAL AREA OF A CYLINDER

$$L.A. = 2\pi rh$$

$$= 2 \times 3.14 \times 2 \times 6$$

$$= 75.36 \text{ cm}^2$$

SURFACE AREA OF A CYLINDER

$$S.A. = L.A + 2\pi r^2$$

$$\downarrow$$

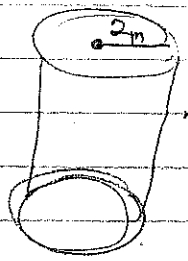
$$* \quad S.A = 2\pi rh + 2\pi r^2$$

$$S.A. = \underbrace{2 \times 3.14 \times 4 \times 12}_{301.44} + \underbrace{2 \times \pi \times 4^2}_{100.48}$$

$$\begin{array}{r} 301.44 \\ + \ 100.48 \\ \hline 401.92 \text{ ft}^2 \end{array}$$

total →

36



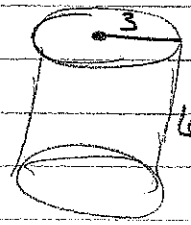
$(2 \times 3.14 \times 2 \times 7) + (2 \times 3.14 \times 2^2)$

87.92 25.12

87.92
+ 25.12
S.A. = 113.04 m^2

L.A + S.A.

$(2\pi rh) + (2\pi r^2)$



$2(3.14)(3)(6) + 2(3.14)(3)^2$

169.56 + 56.16

169.56
+ 56.16
225.72 ft^2