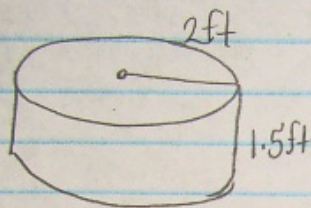


Pg. 171 #1



$$\begin{aligned} SA &= \pi r^2 + 2\pi r h \\ &= \pi (2)^2 + 2\pi (2)(1.5) \\ &= 12.56 + 18.84 \\ &= 31.4 \text{ ft}^2 \end{aligned}$$

(a) One Pond $10' \times 15' = 150 \text{ ft}^2$

$$150 \div 31.4 = 4.7$$

\therefore 4 ponds.

(b) \$149.00

\$37.25

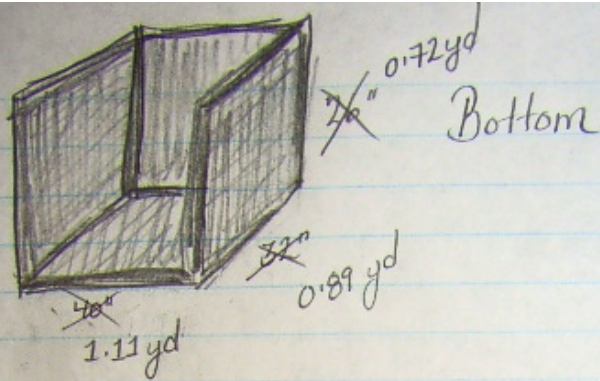
4.

$$\begin{aligned}\text{Cylinder} &= \cancel{2\pi r^2} + 2\pi rh \\ &= 2(3.14)(1.75)(4.7) \\ &= 51.65 \text{ yd}^2.\end{aligned}$$

$$\begin{aligned}2 \text{ Cones} &= 2(\cancel{\pi r^2} + \pi rs) \\ &= 2\pi rs \\ &= 2(3.14)(1.75)(2.73) \\ &= 30. \text{ yd}^2.\end{aligned}$$

$$\text{Total} = 51.65 + 30 = 81.65 \text{ yd}^2.$$

#5.



Convert to yards

$$\begin{aligned} \text{(inches to feet)} \quad 40'' \times \frac{1 \text{ ft}}{12 \text{ in.}} \\ = \frac{40}{12} \\ = 3.33 \text{ ft} \end{aligned}$$

$$\begin{aligned} \text{(feet to yards)} \quad 3.33 \times \frac{1 \text{ yd}}{3 \text{ ft}} \\ \frac{3.33}{3} \\ = 1.11 \end{aligned}$$

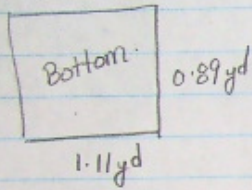
$$\begin{aligned} 32'' \times \frac{1 \text{ ft}}{12 \text{ in.}} \\ \frac{32}{12} \\ = 2.7 \text{ ft} \end{aligned}$$

$$\begin{aligned} \frac{2.7}{3} \\ = 0.89 \text{ yd} \end{aligned}$$

$$\begin{aligned} 26'' \times \frac{1 \text{ ft}}{12 \text{ in.}} \\ \frac{26}{12} \\ = 2.17 \text{ ft} \end{aligned}$$

$$\begin{aligned} \frac{2.17}{3} \\ = 0.72 \text{ yd} \end{aligned}$$

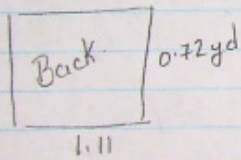
Base



$$\begin{aligned} A &= l \times w \\ &= 1.11 \times 0.89 \\ &= 0.9879 \text{ yd}^2 \end{aligned}$$

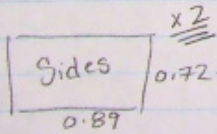
Total
Needed

$$\begin{aligned} &0.9879 \\ + &0.7992 \\ \hline &1.2816 \end{aligned}$$



$$\begin{aligned} &= 1.11 \times 0.72 \\ &= 0.7992 \text{ yd}^2 \end{aligned}$$

$$\begin{aligned} &3.0687 \\ &\times 1.05 \\ \hline &= 3.222135 \end{aligned}$$



$$\begin{aligned} &= 0.89 \times 0.72 \times 2 \\ &= 1.2816 \text{ yd}^2 \end{aligned}$$

$$\begin{aligned} &3.222135 \text{ yd}^2 \\ &\times 48 \text{ blocks} \\ \hline &= \underline{\underline{155 \text{ Blocks}}} \end{aligned}$$

