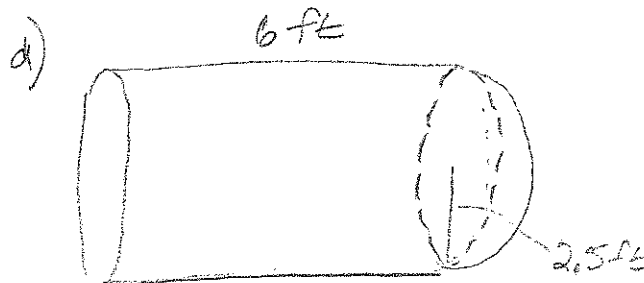
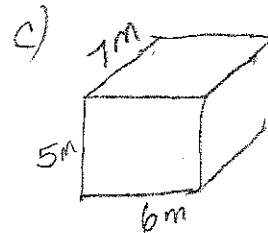
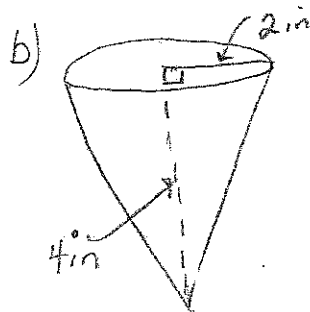
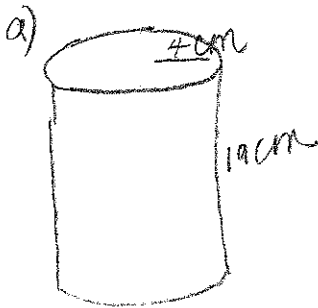


Mr. Wood wants to install a huge fish tank in the lobby. It will have the following inside measurements: 8' X 5' 6" X 4' 6". How many square meters of glass will be required. You can only get glass by the full square meter and the company allows for 2 square meters for corner overlaps and wastage? How many square meters of glass will be required?

If the glass costs 25.99/m<sup>2</sup>, and the cost of the manufacturing and installations is \$999.99, what is the total price of the tank?

How much water will the tank hold in Liters? In Kiloliters? (Hint: Convert to cm<sup>3</sup> after finding the volume in feet.)

Do the Surface Area and Volume of each of these shapes:



Answers:

$$SA = 209.5 \text{ ft}^2 \rightarrow 21.5 \text{ m}^2 \rightarrow 22 \text{ m}^2$$

$$\text{Cost} = \$1571.77$$

$$\begin{aligned} V &= 198 \text{ ft}^3 \rightarrow 5606735 \text{ cm}^3 \\ &= 5606735 \text{ ml} \\ &= 5606.7 \text{ L} \\ &= 5.6 \text{ K} \end{aligned}$$

$$\begin{aligned} \text{a) } SA &= 578.1 \text{ cm}^2 \\ V &= 955.04 \text{ cm}^3 \end{aligned}$$

$$\begin{aligned} \text{b) } SA &= 40.7 \text{ in}^2 \\ V &= 16.8 \text{ in}^3 \end{aligned}$$

$$\begin{aligned} \text{c) } SA &= 214 \text{ m}^2 \\ V &= 210 \text{ m}^3 \end{aligned}$$

$$\begin{aligned} \text{d) } SA &= 153.1 \text{ ft}^2 \\ &= 150.5 \text{ ft}^3 \end{aligned}$$