

Math 10  
ER Assignment  
volumes : SA

- 1.
- a) 508 cm
  - b) 260 °C
  - c) 990 lbs
  - d) 670 g
  - e) 1.76 oz
  - f) 0.358 m
  - g) 850 cm<sup>2</sup>
  - h) 8 000 000 cm<sup>3</sup>
  - i) 7 3/4 ft = 7.75 ft  
2.58 yd
  - j) 68 °F

$$2. \quad \begin{array}{r} 3.67 \text{ kg} \\ 2.85 \text{ kg} \\ \hline 0.82 \text{ kg} \end{array} \rightarrow 820 \text{ g}$$

$$3. \quad 0.3 \times 0.3 \times 60 \times 72 = \$ 388.80$$

$$4. \quad A_b = \frac{4(11+5)}{2} = 32 \text{ cm}^2$$

$$SA = \begin{array}{r} 32 \\ 32 \\ 33 \\ 15 \\ \hline 15 \\ \hline 142 \text{ cm}^2 \end{array}$$

$$\begin{aligned} v &= A_b \times h \\ &= 32 \times 3 \\ &= 96 \text{ cm}^3 \end{aligned}$$

$$ER = \frac{Vol}{SA} = \frac{96}{142} = 0.676$$

4 (b) Cone

$$SA = \pi r^2 + \pi r s$$

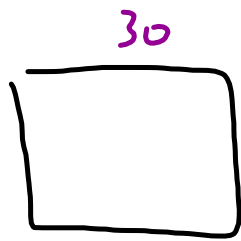
$$= 113.04 + 188.4$$
$$= 301.44 \text{ cm}^2$$

$$V = \frac{A_b \times h}{3} = \frac{\pi r^2 h}{3} = 301.44 \text{ cm}^3$$

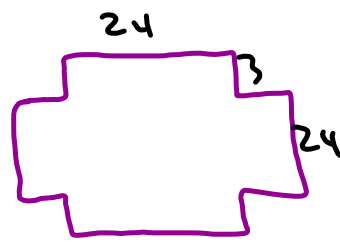
$$ER = \frac{Vol}{SA} = \frac{301.44}{301.44} = 1$$



5.



30



$$\begin{aligned}
 U &= 24 \times 24 + 3 \\
 &= 1728 \text{ cm}^2
 \end{aligned}$$

$$\begin{aligned} 6 \quad V_{\text{cylinder}} &= \pi r^2 h \\ &= 5024 \text{ cm}^3 \end{aligned}$$

$$V_{\text{cube}} = 3 \times 3 \times 3 = 27 \text{ cm}^3$$

$$\begin{aligned} \leftarrow 30 \text{ ic} &= 27 \times 30 \\ &= 810 \text{ cm}^3 \end{aligned}$$

$$\begin{aligned} V_{\text{juice}} &= V_{\text{cylinder}} - V_{\text{ic}} \\ &= 5024 \text{ cm}^3 - 810 \text{ cm}^3 = 4214 \text{ cm}^3 \end{aligned}$$