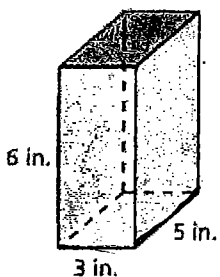


Chapter 9 Practice Test

Find the Surface Area and Volume for each figure. You can show your work in this packet. Circle your answers.

1.



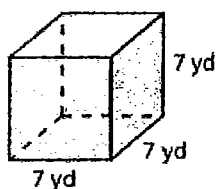
$$V = 6 * 3 * 5 = 90 \text{ in}^3$$

$$SA = \frac{\square}{3} 5 + \frac{\square}{3} 5 = 30$$

$$\frac{\square}{3} 6 + \frac{\square}{3} 6 = 36$$

$$\frac{\square}{5} 6 + \frac{\square}{5} 6 = 60$$

$$SA = 126 \text{ in}^2$$



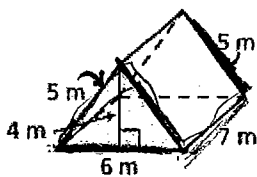
$$V = 7 * 7 * 7 = 343 \text{ yd}^3$$

$$SA = \frac{\square}{7} 7 \quad 49 * 6 = 294 \text{ yd}^2$$

$$V = B \cdot h$$

$$b = \frac{6 \cdot 4}{2} = 12 \cdot 7 = 84 \text{ m}^2$$

3.



$$SA = \frac{\square}{2} = 24$$

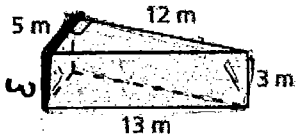
$$\frac{\square}{2} = 7 * 5 = 70$$

$$\frac{\square}{6} = 42$$

$$136 \text{ m}^2$$

$$SA : \frac{5 \cdot 12}{2} = 30 * 2 = 60 m^2$$

4.



$$5 \cdot 3 = 15 m^2$$

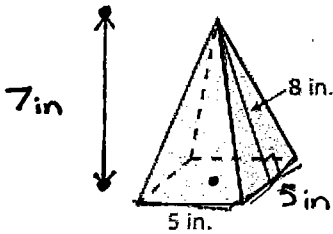
$$13 \cdot 3 = 39 m^2$$

$$12 \cdot 3 = 36 m^2$$

$$SA : 150 m^2$$

$$V = \frac{1}{2} (3 \cdot 5 \cdot 12) = 90 m^3$$

5.



$$SA : 5 \cdot 5 = 25 in^2$$

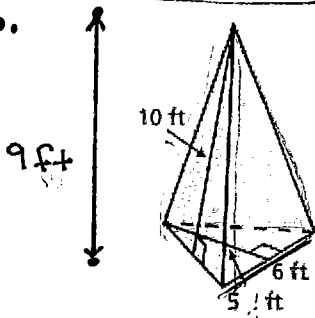
$$\frac{4}{5} \cdot 8 = 20 * 4 = 80$$

$$SA = \frac{25}{25} 105 in^2$$

$$V = \frac{1}{3} * 25 * 7 = 58.33 in^3$$

$$58 \frac{1}{3} in^3$$

6.



$$SA = \frac{3}{2} \cdot \frac{6 \cdot 10}{2} = 30 * 3 = 90$$

$$Base \frac{6 \cdot 6}{2} = 15$$

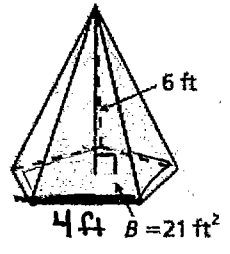
$$SA = 105 ft^2$$

$$V = \frac{1}{3} \cdot B \cdot h$$

$$\frac{1}{3} \cdot 15 \cdot 9 = 45 ft^3$$

7.

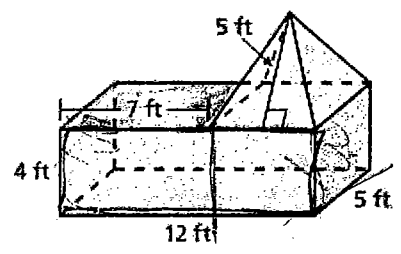
Regular Pyramid



$$V = \frac{1}{3} * 21 * 6 = 35 \text{ ft}^3$$

* Can't find S.A. because we don't know slant height.

8.



Height of Pyramid = 4 ft.

$$5 \cdot \frac{5}{2} = 17.5$$

$$4(17.5) = 70$$

X2

$$SA = 4 \cdot 12 = 96$$

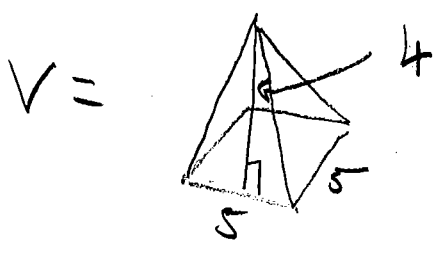
$$5 \cdot 4 = 40$$

$$2 \cdot 5 = 60$$

$$7 \cdot 5 = 35$$

$$V = 4 \cdot 12 \cdot 5 = 240 \text{ ft}^3$$

$$SA = 281 \text{ ft}^2$$



$$V = \frac{1}{3} * B * h$$

$$\frac{1}{3} * 25 * 4$$

$$V = 33 \frac{1}{3} \text{ ft}^3$$

$$V = 273 \frac{1}{3} \text{ ft}^3$$

Find the Surface Area

$$A = \pi r^2$$

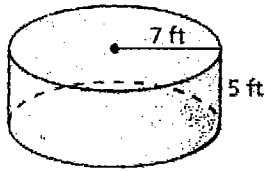
$$A = 3.14 (7.7)$$

$$A = 153.86 \text{ ft}^2 \times 2 = 307.72$$

$$\pi \cdot d$$

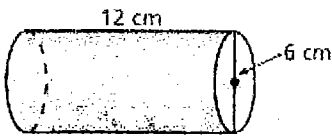
$$A_{\text{rect}} = h + \text{Circumference} = 5 * 43.96 = 219.8$$

$$527.52 \text{ ft}^2$$



9.

10.

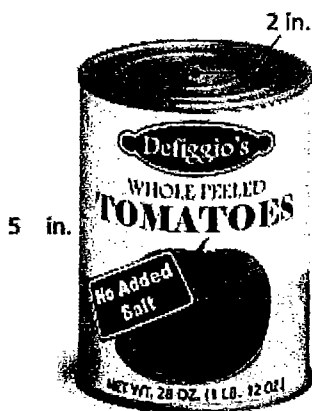


$$A = 56.52 \text{ cm}^2$$

$$A_{\text{rect}} = 226.08$$

$$SA = 282.6 \text{ cm}^2$$

11. Find the Lateral Surface Area



$$\pi \cdot d * h$$

$$62.8 \text{ in}^2$$