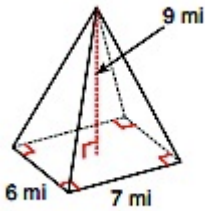


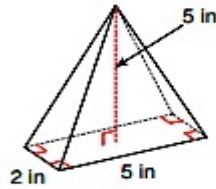
Homework 3.8 Finding Volumes of 3-D Shapes: Pyramid and Cones

Find the volume of the pyramid below. Round your answer to two decimal places. $V = \frac{1}{3} B * h$ or $V = \frac{1}{3} l * w * h$

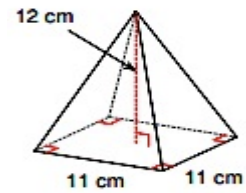
1.



2.



3.

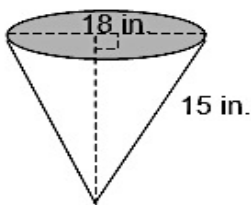


4. Find the volume of a pyramid 5m tall with a rectangular base with a side length 10 m and width 8m.

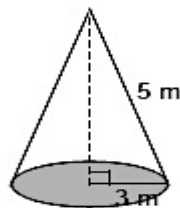
5. Find the Base area of the pyramid if it has a volume of 96.72 yd³ and a height of 6 yd.

Find the volume of the cones below. Round your answer to two decimal places. $V = \frac{1}{3} B * h$ or $V = \frac{1}{3} \pi r^2 h$

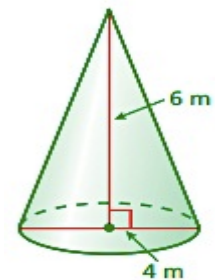
6.



7.



8.

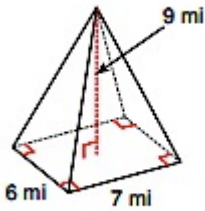


9. The volume of a cone is 956 ft³ with a radius of 9ft., find the height of the cone?

10. Find the height of the cone if the Volume is 225 cm³ and the diameter is 10cm. Round your answer to the nearest tenth?

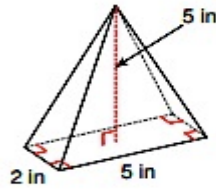
Find the volume of the pyramid below. Round your answer to two decimal places. $V = \frac{1}{3} B * h$ or $V = \frac{1}{3} l * w * h$

1.



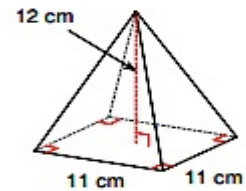
$$V = 126 \text{ mi}^3$$

2.



$$V = 16.7 \text{ in}^3$$

3.



$$V = 484 \text{ cm}^3$$

4. Find the volume of a pyramid 5m tall with a rectangular base with a side length 10 m and width 8m.

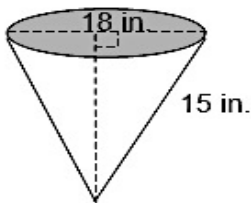
$$V = 133.33 \text{ m}^3$$

5. Find the Base area of the pyramid if it has a volume of 96.72 yd³ and a height of 6 yd.

$$B = 48.38 \text{ yd}^2$$

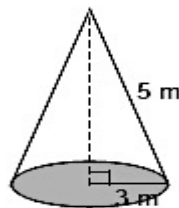
Find the volume of the cones below. Round your answer to two decimal places. $V = \frac{1}{3} B * h$ or $V = \frac{1}{3} \pi r^2 h$

6.



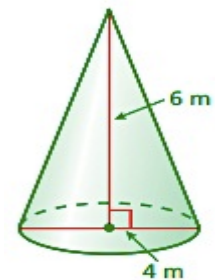
$$V = 1017.88 \text{ in}^3$$

7.



$$V = 37.70 \text{ m}^3$$

8.



$$V = 25.13 \text{ m}^3$$

9. The volume of a cone is 956 ft³ with a radius of 9ft., find the height of the cone?

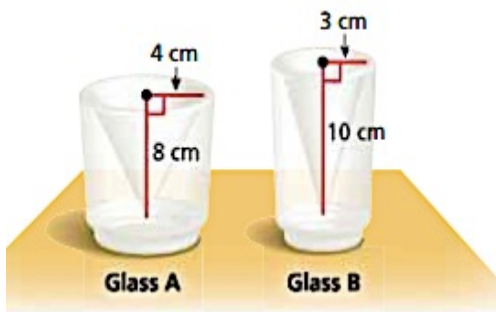
$$h = 11.3 \text{ ft.}$$

10. Find the height of the cone if the Volume is 225 cm³ and the diameter is 10cm. Round your answer to the nearest tenth?

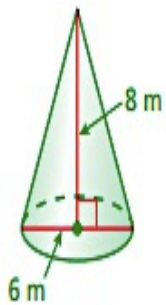
$$h = 8.59 \text{ cm}$$

Homework 3.8 Finding Volumes of 3-D Shapes: Pyramid and Cones (Page 2)

11. The inside of each glass is shaped like a cone. Which glass can hold more liquid? How much more



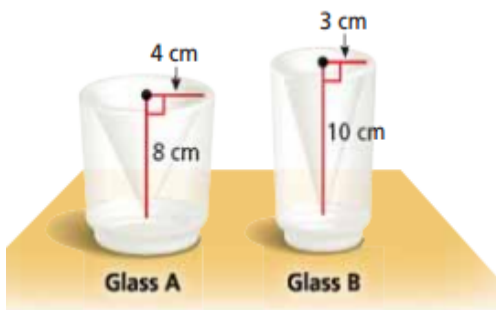
12. Describe and correct the error in finding the volume of the cone?



X

$$V = \frac{1}{3}bh$$
$$= \frac{1}{3}(\pi)(6)^2(8)$$
$$= 96\pi \text{ m}^3$$

11. The inside of each glass is shaped like a cone. Which glass can hold more liquid? How much more

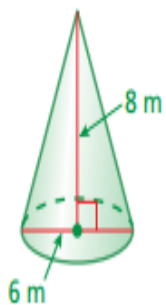


$$\text{Glass A } V = 134.04 \text{ cm}^3$$

$$\text{Glass B } V = 94.24 \text{ cm}^3$$

Glass A holds more, approximately 40 than Class B.

12. Describe and correct the error in finding the volume of the cone?



$$\begin{aligned} \times \quad V &= \frac{1}{3} B h \\ &= \frac{1}{3} (\pi)(6)^2 (8) \\ &= 96\pi \text{ m}^3 \end{aligned}$$

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

$$V = \frac{1}{3} \pi r^2 h$$

$$V = \frac{1}{3} \pi (3)^2 (8)$$

$$V = 24\pi \text{ m}^3$$