

**GRADE 11 ESSENTIAL
VOLUME OF PYRAMIDS AND CONES**

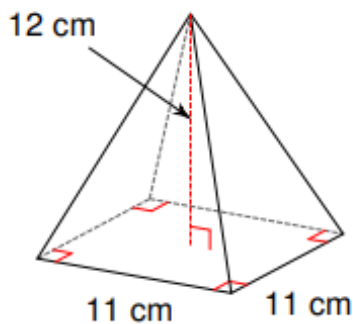
Name: _____

Date: _____

Use an **accurate value** of π for these calculations.

Find the **volume** of the figures: (an answer is given **so show your work!**)

1.



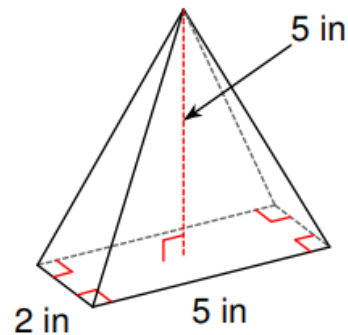
$$484 \text{ cm}^3$$

$$V = \frac{1}{3} \cdot \text{Base AREA} \cdot h_{\text{pyramid}}$$

$$V = \frac{1}{3} \cdot (11 \text{ cm} \cdot 11 \text{ cm}) \cdot 12 \text{ cm}$$

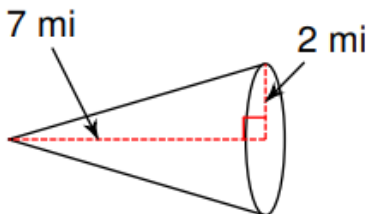
$$V = 484 \text{ cm}^3 \text{ or ml}$$

2.



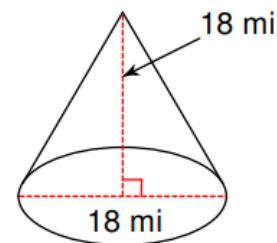
$$16.7 \text{ in}^3$$

3.



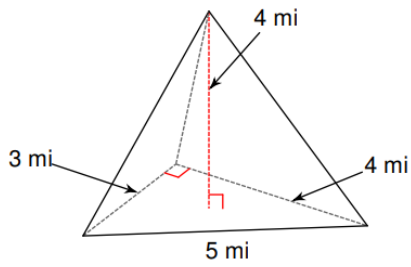
$$29.3 \text{ mi}^3$$

4.



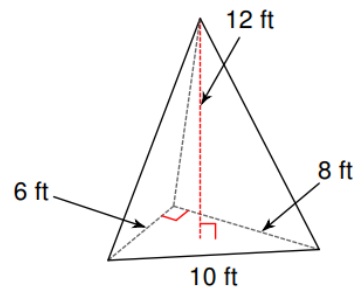
$$1526.8 \text{ mi}^3$$

5.



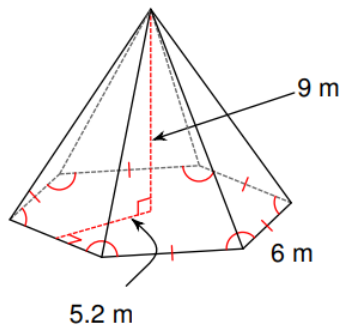
$$8 \text{ mi}^3$$

6.



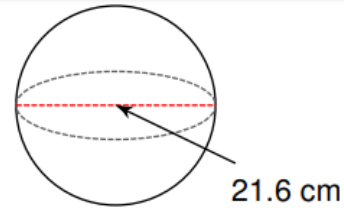
$$96 \text{ ft}^3$$

7. Tricky one!



$$280.8 \text{ m}^3$$

8. A sphere



$$5276.7 \text{ cm}^3$$

9.

A square pyramid measuring 10 yd along each edge of the base with a height of 6 yd.

$$200 \text{ yd}^3$$

10.

A cone with radius 4 m and a height of 12 m.

$$201.1 \text{ m}^3$$