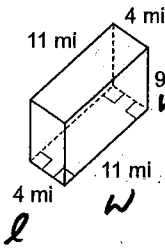
AW 10 3.4 Name _____

Volume of Prisms and Pyramids

Find the volume of each figure. Round your answers to the nearest hundredth, if necessary.

1)

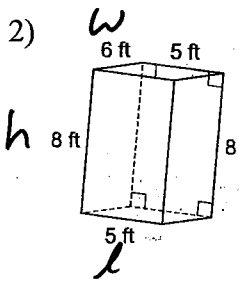


$V = \ell w h$

$V = 4 \cdot 11 \cdot 9$

$V = 396 \text{ mi}^3$

2)

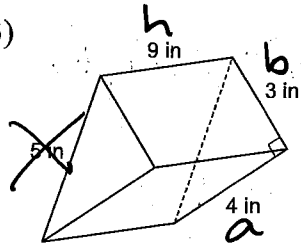


$V = \ell w h$

$V = 5 \cdot 6 \cdot 8$

$V = 240 \text{ ft}^3$

3)



DO NOT USE HYPOTENUSE!

$V = \frac{ab}{2}h$

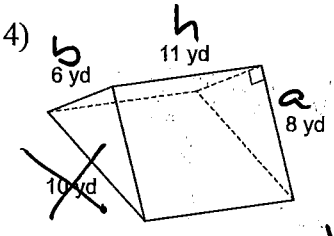
$V = \frac{4 \cdot 3}{2} 9$

$V = \frac{12}{2} \cdot 9$

$V = 6 \cdot 9$

$V = 54 \text{ in}^3$

4)



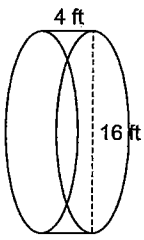
$V = \frac{ab}{2}h$

$V = \frac{8 \cdot 6}{2} 11$

$V = \frac{48 \cdot 11}{2}$

$V = 264 \text{ yd}^3$

5)



$V = \pi r^2 h$

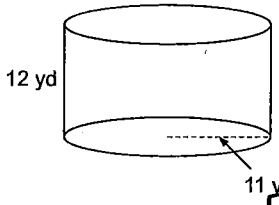
$V = \pi \left(\frac{D}{2}\right)^2 h$

$V = \pi \left(\frac{16}{2}\right)^2 (4)$

$V = \pi 8^2 \cdot 4$

$V = 804.2 \text{ ft}^3$

6)



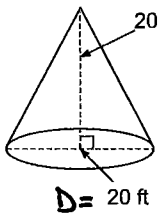
$V = \pi r^2 h$

$V = \pi (11^2)(12)$

$V = \pi \, 121 \cdot 12$

$V = 4561.6 \text{ yd}^3$

7)



$r = 10\text{ ft}$

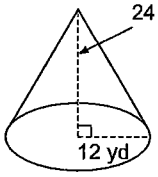
$V = \frac{\pi r^2 h}{3}$

$V = \frac{\pi(10)^2(20)}{3}$

$V = \frac{6283.2}{3}$

$V = 2094.4\text{ ft}^3$

8)



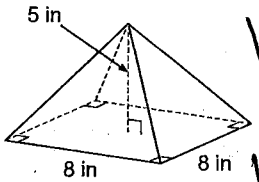
$V = \frac{\pi r^2 h}{3}$

$V = \frac{\pi(12)^2(24)}{3}$

$V = \frac{10857.3}{3}$

$V = 3619.1\text{ yd}^3$

9)



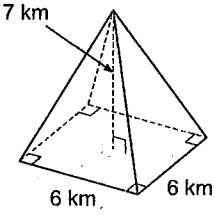
$V = \frac{b^2 h}{3}$

$V = \frac{(8)^2(5)}{3}$

$V = \frac{320}{3}$

$V = 106.7\text{ in}^3$

10)



$V = \frac{b^2 h}{3}$

$V = \frac{(6)^2(7)}{3}$

$V = \frac{252}{3}$

$V = 84\text{ km}^3$