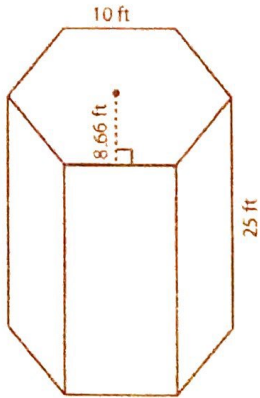


8.10 Regular Polygonal Prisms

$V = Bh$
 $V = \frac{1}{2}ap \cdot h$

Name: Key

1)



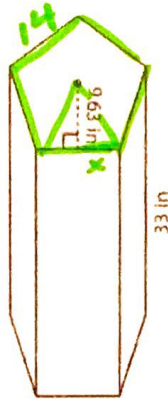
$P = 10 \times 6$
 $P = 60$

Volume = 6495 ft^3

$V = \frac{1}{2}ap \cdot h$

$V = \frac{1}{2}(8.66)(60)(25)$

2)



Volume = $11,122.65 \text{ in}^3$

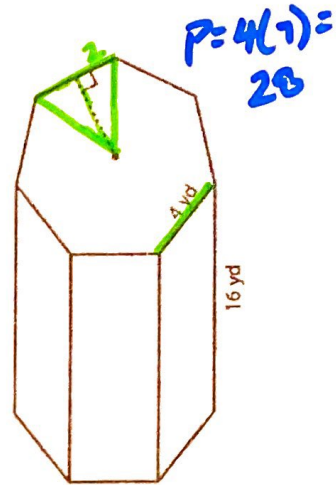
$V = \frac{1}{2}ap \cdot h$

$V = \frac{1}{2}(9.63)(70)(33)$

① $72 \cdot \frac{360}{5} = 72$ $P = 14(5) = 70$

② $\tan 36 = \frac{x}{9.63}$
 $9.63 \tan 36 = 7$
 $7 \times 2 = 14$

3)



Volume = 929.6 yd^3

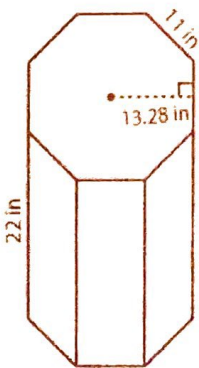
$V = \frac{1}{2}ap \cdot h$

$V = \frac{1}{2}(4.15)(28)(16)$

① $51.43 \cdot \frac{360}{7} = 51.43$

② $\tan 25.72 = \frac{x}{20}$
 $\frac{2}{\tan 25.72} = 4.15$

4)



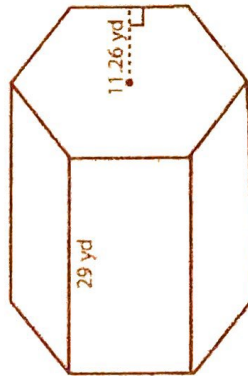
Volume = 12855.04 in^3

$a = 13.28$

$P = 88$

$h = 22$

5)



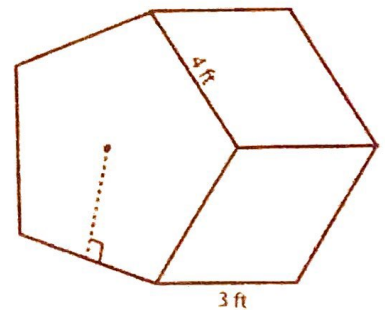
Volume = 12735.06 yd^3

$a = 11.26$

$P = 70$

$h = 29$

6)



Volume = 82.5 ft^3

$a = 2.75$

$P = 20$

$h = 3$

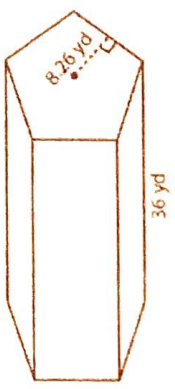
8.10 Regular Polygonal Prisms

Name: _____

$$V = Bh$$

$$V = \frac{1}{2}ap \cdot h$$

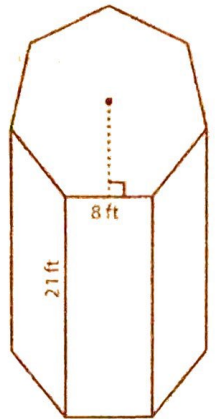
7)



Volume = 8920.8 yd³

$a = 8.26$
 $P = 60$
 $h = 30$

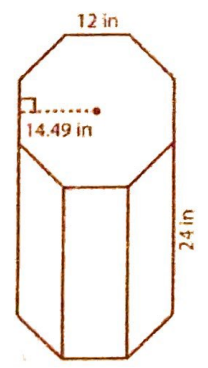
8)



Volume = 4886.28 ft³

$a = 8.31$
 $P = 56$
 $h = 21$

9)



Volume = 16692.48 in³

$a = 14.49$
 $P = 96$
 $h = 24$