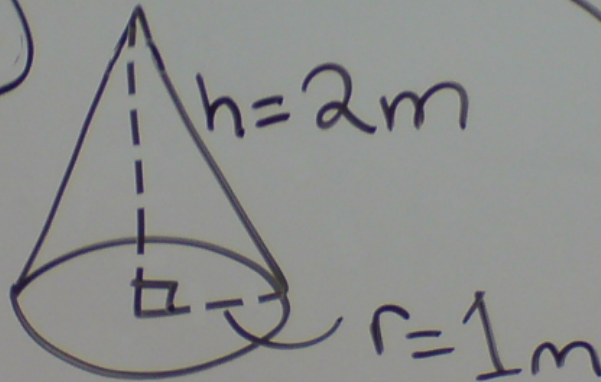


7.4 Volume of Pyramids & Cones

7.4
Pg. 421

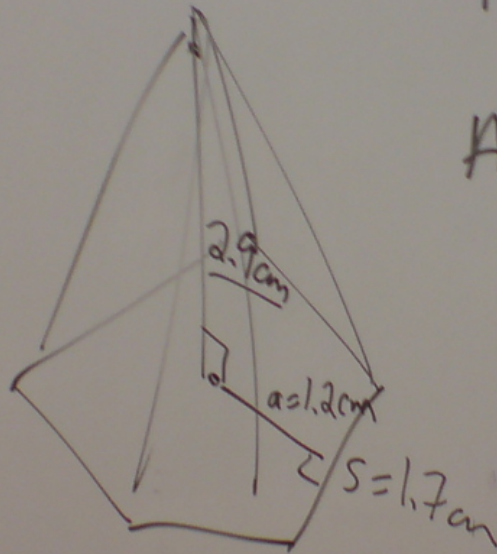
2a)



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

$$V = 2.1 m^3$$

7.4
pg 421
#2c



$$A_{\text{base}} = \frac{P_a}{2}$$

$$A_{\text{base}} = \frac{(1.7)(5)(1.2)}{2}$$

$$A_{\text{base}} = 5.1 \text{ cm}^2$$

7.4
pg 421
2d)

$$V_{\text{Pentagonal Pyramid}} = \frac{1(5.1)(2.9)}{3}$$

$$V = \underline{\underline{4.93 \text{ cm}^3}}$$

th

(7.4) pg. 419

#3a) $V = \frac{1}{3} Ah$

$$P = 8\text{cm} \times 4\text{sides}$$

$$P = 4(8)$$

$$P = 32\text{cm}$$

- by class:

$$A = \frac{Pa}{2}$$

$$A = \frac{32(4)}{2}$$

$$A = \frac{128}{2}$$

$$A = 64\text{cm}^2$$

$$V = \frac{1}{3} (64)(7.5)$$

$$V = 160\text{cm}^3$$

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

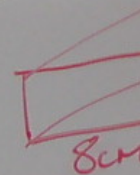
$$= \frac{1}{3} \pi (4)^2 (7.5)$$

$$= \frac{1}{3} \pi 16 \times 7.5$$

$$= 1.047197551 \times 16 \times 7.5$$

$$V = 125.66\text{cm}^3$$

7.2 #



$$V = Lw$$

$$= 15$$

$$= 3$$



0 the
gold

7.4 PAGE 421

#9a)
$$V = \frac{\pi r^2 h}{3}$$

$$= \frac{3.14 (17.2)^2 (14.2)}{3}$$

$$V_{\text{cone}} = 4396.97 \text{ m}^3$$

$d = 34.4 \text{ m}$

$r = 17.2 \text{ m}$

b) $4396.97 \text{ m}^3 \div 6.9 (\text{sanders})$
truck load

$= 637 \text{ sanders}$

Can be filled from
the pile.

7.4 pg 421 #13



Volume of tent = volume of base + Volume of pyramid.
(rectangular prism)

$$\begin{aligned}\text{volume of base} &= l \times w \times h \\ &= 3\text{m} \times 3\text{m} \times 2\text{m} \\ &= 18\text{m}^3\end{aligned}$$

$$\begin{aligned}\text{Volume of pyramid} &= \frac{1}{3} Ah \\ &= \frac{1}{3} \times 9\text{m}^2 \times 0.8\text{m} \\ &= 2.4\text{m}^3\end{aligned}$$

$$\begin{aligned}> \text{total volume of tent} \\ &= 18\text{m}^3 + 2.4\text{m}^3\end{aligned}$$

$$= 20.4\text{m}^3$$

7.4 Pag

#9a) $V =$

$= 3$

$V_{\text{cone}} =$

$d = 34.4$

$r = 17.2$