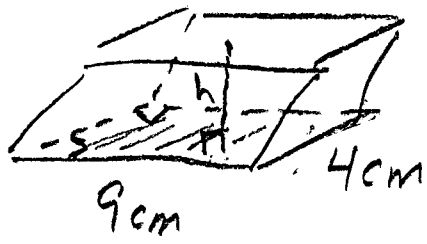
Geometry Weds. 3-20-13 Class Notes

Homework Review: Pg 753 # 2-9

(2.) $V = ?$



$h = 6cm$

$V = \underbrace{(9)(4)}_{B}\underbrace{6}_{6} = \boxed{216 cm^3}$

Rectangular prism

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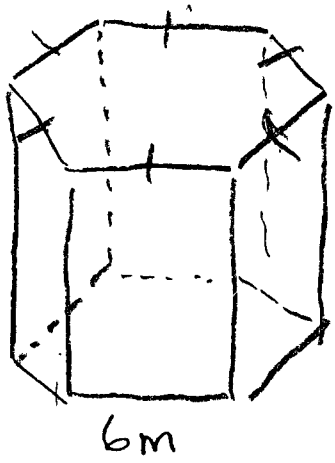
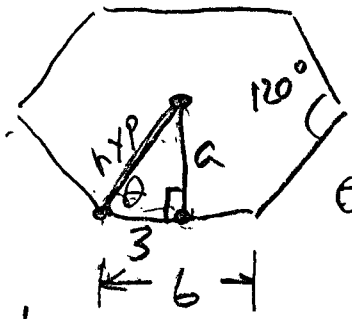
(3)



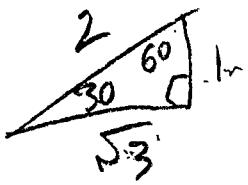
Hexagonal prism

$A = \frac{1}{2} a P$



36

$\theta = 60°$



$\tan 60° = \frac{a}{3}$

$3(\sqrt{3}) = a \quad \boxed{} = 5.196$

$(N-2)180 = \deg$

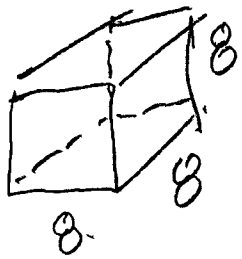
$(6-2)180 = \deg$

$4(180) = \frac{720°}{6} = 120°$

$V = \left[\frac{1}{2}(5.196)36\right]8 = 748.22$

$\boxed{V = 748.2 m^3}$

④ $V = ?$ cube, side (edge) $= 8$ ft



$V = 8^3 = \boxed{512 \text{ ft}^3}$

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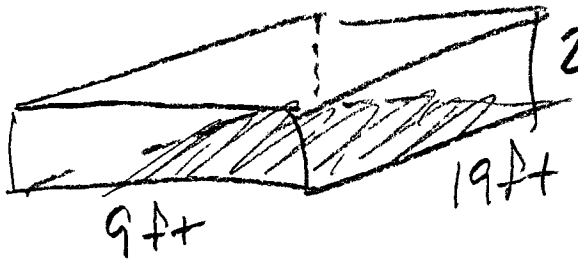
⑤



$V = ?$ GALLONS?

$W = ?$

$\text{density} = 4.73 \frac{\text{lb}}{\text{GAL}}$

B

$V = (9 \cdot 19) \cdot 2$

$V = 171 \cdot 2 = 342 \text{ ft}^3$

$1 \text{ GAL} \approx .134 \text{ ft}^3$

$\frac{1 \text{ GAL}}{.134 \text{ ft}^3}$

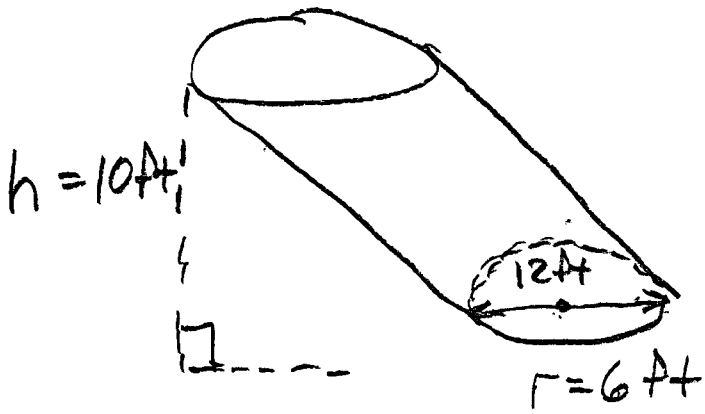
目 $342 \text{ ft}^3 \cdot \frac{1 \text{ GAL}}{.134 \text{ ft}^3} = 2552.2 \text{ GAL}$

$\boxed{V = 2552 \text{ GAL}}$

$2552 \text{ GAL} \cdot 4.73 \frac{\text{lb}}{\text{GAL}} = 12070.96$

$\boxed{W = 12,070 \text{ lb}}$

(6) $V = ?$ EXACT, nearest tenth (π)



$V = (\pi r^2)h$

$= 36\pi(10)$

$V = 360\pi \text{ ft}^3$

$V \approx 1130.97$

$V \approx 1131.0 \text{ ft}^3$

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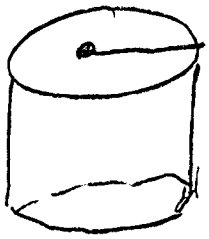
(7)



$r = 3\text{m}$

$h = 5\text{m}$

$V = 45\pi \text{ m}^3$

$V \approx 141.4 \text{ m}^3$

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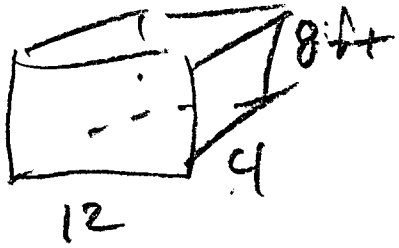
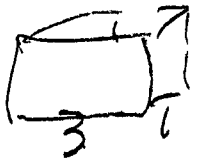
(9)



384 ft^3

by $\frac{1}{4}$

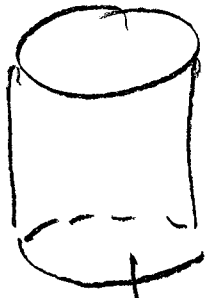


$V = 6 \text{ ft}^3$

$\frac{384}{6} = 64$

$\therefore$ V = time $\frac{1}{64}$

(8) $V = ?$ EXACT, teeth



$B = 25\pi \text{ cm}^2$

$= \pi r^2$

$\therefore r = 5$

3cm more than r

$\therefore h = 8 \text{ cm}$

$V = (25\pi)8 = 200\pi \text{ cm}^3$

$V \approx 628.318$

$V \approx 628.3 \text{ cm}^3$