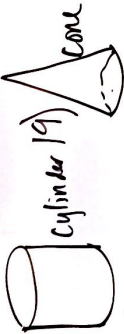


"The deer alone learneth."

Answers to work, HW #13

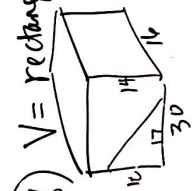
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21)

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#16) $\frac{1}{3}BH = \frac{1}{3}\pi r^2 H$ $r=2$ $H=3$
 $\frac{1}{3} \cdot \pi \cdot 2^2 \cdot 3 = 4\pi \text{ cm}^3$



#18) $V = \text{rectangular prism} - \text{triangular prism}$
 $bhH - \frac{1}{2}bhH$
 $30 \cdot 16 \cdot 14 - \frac{1}{2} \cdot 17 \cdot 10 \cdot 16$
 $480 \cdot 14 - 80 \cdot 17 = 5360 \text{ ft}^3$
 $5360 \cdot 7.5 = 40200 \text{ gal}$ $\div 15 \div 60 = 44\frac{2}{3} \text{ hr}$

#17) $V = \frac{1}{2}BH = \frac{1}{2} \cdot bhH = \frac{1}{2} \cdot 6 \cdot 4 \cdot 12 = 144 \text{ cm}^3$

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3) $b = 15 \text{ cm}$
 $180 = \frac{1}{2} \cdot \frac{1}{2} \cdot b \cdot b \cdot 12$

4) $h = 11 \text{ cm}$

3) $168 = \frac{1}{2} \cdot \frac{1}{2} \cdot (20+28) \cdot h \cdot 36$
 $V = \frac{1}{2} \cdot \frac{1}{2} \cdot (b_1+b_2) \cdot h \cdot H$
 $V \approx 5 \text{ cm}^3$

10) 1502 hr
 $V = 5.5 \cdot 6.5 \cdot \frac{2}{3}$
 Then $\cdot 63$
 11) $V = \pi \cdot 3.5^2 \cdot \frac{2}{3}$
 Then $\cdot 7.5 \approx 192$

5) $628 = \pi r^2 \cdot 8$

7) $\approx 257 \text{ ft}^3$

$V = \frac{1}{3} \pi \left(\frac{44}{2\pi}\right)^2 \cdot 5$

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- 1) 675 cm^3
 - 2) $34\pi \text{ cm}^3$
 - 3) 47 in^3
 - 4) ≈ 1799
 - 5) $36\pi \text{ cm}^3$
 - 6) $\frac{1}{6}\pi \text{ cm}^3$
 - 7) $32\pi \text{ cm}^3$
 - 8) $720\pi \text{ cm}^3$
 - 9) $3756\pi \text{ cm}^3$