

# HW 22

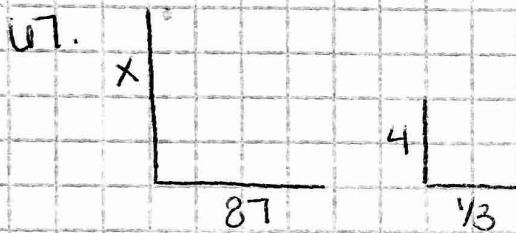
P103 #3-6, 67, 69, 71, 72, 95, 96.

3.  $\pi r^2$

4.  $2l + 2w$

5.  $s^3$

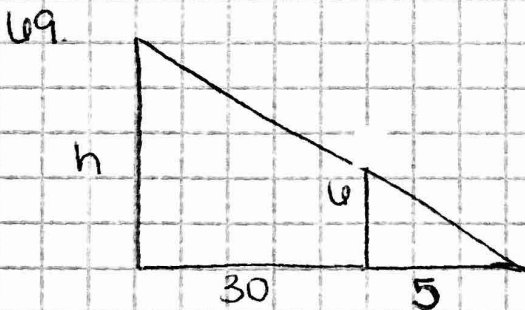
6.  $\pi r^2 \cdot h$



$$\frac{87}{x} = \frac{1/3}{4}$$

$$1/3 x = 348$$

$$x = 1,044 \text{ ft}$$



$$\frac{5}{h} = \frac{30}{35}$$

$$5h = 210$$

$$h = 42 \text{ ft}$$

71.  $0.045x + 0.05(12000 - x) = 580$   
 $0.045x + 600 - 0.05x = 580$   
 $-0.005x = -20$   
 $x = 4000$

SO \$8000 in the 5%

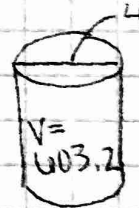
72.  $0.03x + 0.045(25000 - x) = 1000$   
 $0.03x + 1125 - 0.045x = 1000$   
 $-0.015x = -125$   
 $\$8333.33 = x$

95.  $V = \frac{4}{3}\pi r^3$   
 $5.96 = \frac{4}{3}\pi r^3$

$$r = 1.12 \text{ in}$$

\$3666.67

96.



$$V = \pi r^2 \cdot h$$

$$603.2 = \pi (2)^2 \cdot h$$

$$48 \text{ ft} = h$$