

$$44.) \quad \frac{36}{100} = \frac{900}{n}$$

$$0.36n = 900$$

.

38.)

$$\frac{9b-3}{9} = \frac{5b+5}{3}$$

$$9(5b+5) = 3(9b-3)$$

$$45b+45 = 27b-9$$
$$\begin{array}{r} -27b \\ \hline 18b+45 = -9 \end{array}$$

$$\begin{array}{r} 18b+45 = -9 \\ -45 \quad -45 \\ \hline 18b = -54 \end{array}$$

$$\frac{18b}{18} = \frac{-54}{18}$$

$$b = -3$$

$$36.) \quad \frac{3-y}{4} = \frac{1}{9}$$

$$4 = 9(3-y)$$

$$4 = 27 - 9y$$

$$-23 = -9y$$

$$+2\frac{5}{9} = y$$

2.56

$$32.) \quad \frac{1 \text{ in.}}{1.67 \text{ ft.}} = \frac{110.3 \text{ in}}{}$$

$$42.) \quad \frac{0.5 \text{ gal}}{84 \text{ ft}^2} = \frac{\quad}{932 \text{ ft}^2}$$

## 2-7 Percent of Change

$$\frac{\text{change}}{\text{original}} = \text{written as a percent}$$

Percent of Increase: new  $>$  original

Percent of Decrease: new  $<$  original

1a.) original = 20       $\frac{3}{20}$  increase  
final = 23

$$\frac{3}{20} = \frac{15}{100} \quad (15\%)$$

$$\begin{array}{r} 66 \\ -30 \\ \hline 36 \end{array} \quad \frac{36}{66} = 0.\overline{54} \approx \begin{array}{l} \text{decrease} \\ 55\% \end{array}$$

p. 120

$$\frac{\text{change}}{\text{original}} = \frac{\%}{100}$$

~~$$\frac{17.22 - n}{n} = \frac{10}{100}$$~~

 $n = \# \text{ in } 2007$ 

$$10n = 100(17.22 - n)$$

$$10n = 1722 - 100n$$

$$+100n$$

$$+100n$$

$$\frac{110n}{110} = \frac{1722}{110}$$

$$n = 15.654$$

$$\approx 15.65 \text{ million}$$



2.  $n =$  original tuition

$$\frac{33,408 - n}{n} = \frac{5.4}{100}$$

$$5.4n = 100(33,408 - n)$$

$$n = \$31,696.39$$

2-7 evens #s  
(14 - 44)  
add 56.) 66.)