

#1. WHAT IS 80% OF 320?

$$X = (80\%)(320)$$

$$X = (.80)(320)$$

$$X = 256$$

$$\begin{array}{r} 320 \\ \cdot 8 \\ \hline 2560 \end{array}$$

#2. 70% OF WHAT NUMBER IS 77?

$$(70\%)(X) = 77$$

$$.70X = 77$$

$$\frac{.70X}{.70} = \frac{77}{.70}$$

$$X = 110$$

$$7 \overline{) 77} \\ 70 \\ \hline 70 \\ \hline 70$$

#3

25 IS WHAT PERCENT OF 80?

$$25 = (X)(80)$$

$$\frac{25}{80} = \frac{X(80)}{80}$$

$$.3125 = X$$

$$31.25\% = X$$

TWO TYPES

$$\text{AMT} + (\text{AMT} \times \%) = \text{NEW AMT}$$

$$\text{AMT} - (\text{AMT} \times \%) = \text{NEW AMT}$$

4. $\text{COST} + (\text{COST} \times \text{TAX \%}) = \text{TOTAL COST}$

$$C + (C)(6.25\%) = 5312.50$$

$$1C + .0625C = 5312.50$$

$$1.0625C = 5312.50$$

$$\frac{1.0625C}{1.0625} = \frac{5312.50}{1.0625}$$

$$C = 5000$$

5. $\text{OLD VALUE} + (\text{OLD VALUE} \times \%) = \text{NEW VALUE}$

$$X + (X)(5\%) = 89250$$

$$1X + .05X = 89250$$

$$1.05X = 89250$$

$$\frac{1.05X}{1.05} = \frac{89250}{1.05}$$

$$X = 85000$$

6. $\text{OLD AMT} - (\text{OLD AMT} \times \%) = \text{NEW AMT}$

$$X - (X)(20\%) = 9600$$

$$1X - .20X = 9600$$

$$.80X = 9600$$

$$\frac{.80X}{.80} = \frac{9600}{.80}$$

$$X = 12000$$

7. $\text{LOSER} = 75\%X = .75X$

$\text{WINNER} = X$

450

600

$$1X + .75X = 1050$$

$$1.75X = 1050$$

$$\frac{1.75X}{1.75} = \frac{1050}{1.75}$$

$$X = 600$$