

Discounts

- 1) A store sells a couch for \$600 at the regular price. They offer a 10% discount. Determine the sale price.

$$\begin{array}{r}
 \$600 \times 0.90 \\
 \begin{array}{r}
 100\% \\
 - 10\% \\
 \hline
 90 \\
 \leftarrow
 \end{array} \\
 \frac{90}{100} = .90
 \end{array}$$

$\boxed{\$540}$

- 2) A store sells a lamp for \$85 at the regular price. They offer a 30% discount. Determine the sale price.

$$\begin{array}{r}
 \$85 \times .70 \\
 \begin{array}{r}
 100 \\
 - 30 \\
 \hline
 70 \\
 \frac{70}{100} = .70
 \end{array}
 \end{array}$$

$\boxed{\$59.5}$

- 3) A store sells a boat for \$3600 at the regular price. They offer a 12% discount. Determine the sale price.

$$\begin{array}{r}
 \$3600 \times .88 \\
 \begin{array}{r}
 100 \\
 - 12 \\
 \hline
 88 \\
 88 = .88
 \end{array}
 \end{array}$$

$\boxed{\$3168}$

- 4) A store sells a knife for \$4.89 at the regular price. They offer a 40% discount. Determine the sale price.

$$\begin{array}{r}
 \$4.89 \times .60 \\
 \begin{array}{r}
 100 \\
 - 40 \\
 \hline
 60 \\
 60 = .60
 \end{array}
 \end{array}$$

$\boxed{\$2.93}$

- 5) A store sells a can of soup for \$0.74 at the regular price. They offer a 15% discount. Determine the sale price.

$$\begin{array}{r}
 \$0.74 \times .85 \\
 \begin{array}{r}
 100 \\
 - 15 \\
 \hline
 85 \rightarrow .85
 \end{array}
 \end{array}$$

$\boxed{\$.63}$

- 6) A store sells a kitten for \$225 at the regular price. They offer a 92% discount. Determine the sale price.

$$\begin{array}{r}
 \$225 \times 0.08 \\
 \begin{array}{r}
 100 \\
 - 92 \\
 \hline
 8 \rightarrow .08
 \end{array}
 \end{array}$$

$\boxed{\$18}$

2 DECIMAL PLACES!

- 7) A store sells a sweater for \$90 at the regular price. They offer a 50% discount. Determine the sale price.

$$\begin{array}{r}
 \$90 \times 0.50 \\
 \begin{array}{r}
 100 \\
 - 50 \\
 \hline
 50 \rightarrow .50
 \end{array}
 \end{array}$$

$\boxed{\$45}$

- 8) A store sells a quad for \$4687 at the regular price. They offer a 2.4% discount. Determine the sale price.

$$\begin{array}{r}
 4687 \times .976 \\
 \begin{array}{r}
 100.0 \\
 - 2.4 \\
 \hline
 97.6 \rightarrow .976
 \end{array}
 \end{array}$$

$\boxed{\$4574.51}$

- 9) A store is having a BOGO (buy one get one half off) sale. A customer buys 2 products that cost \$40 and \$30. Determine the total cost for the 2 items.

Full price most expensive $50\% = .50$

Do first

$$\$40 + \frac{\$30}{2} \quad \text{OR} \quad 40 + 30 \times .5$$

$$40 + 15$$

$\boxed{\$55}$

- 10) A store is having a BOGO (buy one get one half off) sale. A customer buys 2 products that cost \$72 and \$64. Determine the total cost for the 2 items.

Full price most expensive

$$\$72 + \frac{64}{2}$$

$$72 + 32$$

$\boxed{\$104}$

- 11) A store is having a BOGO (buy one get one half off) sale. A customer buys 2 products that cost \$86 and \$105. Determine the total cost for the 2 items.

$$105 + \frac{86}{2}$$

$$105 + 43$$

$$\boxed{\$148}$$

- 13) A store is having a BOGO (buy one get one half off) sale. A customer buys 2 products that cost \$387 and \$3. Determine the total cost for the 2 items.

$$\$387 + \frac{\$3}{2}$$

$$387 + 1.5$$

$$\boxed{\$388.5}$$

- 15) A store offers its members a 20% discount. A membership costs \$200 per year. How much would the customer need to spend to make the membership worthwhile?

YOU NEED TO ^{SAVE} ~~\$200~~ \$200 TO BREAK EVEN, SO....

"20% OF WHAT IS \$200?"

$$\frac{.20 \times X = 200}{.20}$$

$$\boxed{X = \$1000}$$

- 17) A store offers its members a 15% discount. A membership costs \$60 per year. How much would the customer need to spend to make the membership worthwhile?

"15% OF WHAT IS \$60?"

$$\frac{0.15 \times X = 60}{.15}$$

$$\boxed{X = \$400}$$

- 19) A store sells a blanket for \$60 regular price. It is on sale for \$45. Determine the percent discount.

"WHAT PERCENT OF"

$$\frac{45}{60} = 0.75 - \frac{100}{.75}$$

~~25% OFF~~

- 12) A store is having a BOGO (buy one get one half off) sale. A customer buys 2 products that cost \$74 and \$53. Determine the total cost for the 2 items.

$$74 + \frac{53}{2}$$

$$74 + 26.5$$

$$\boxed{\$100.5}$$

- 14) A store offers its members a 20% discount. A membership costs \$200 per year. A customer determines that she spends \$700 at the store every year. Is it a good idea to get the membership?

$$700 \times 0.80$$

$$\$560 + \$200 \text{ MEMBERSHIP} =$$

$$\$760$$

NO. IT IS CHEAPER WITH NO MEMBERSHIP

- 16) A store offers its members a 10% discount. A membership costs \$50 per year. How much would the customer need to spend to make the membership worthwhile?

"10% OF WHAT IS \$50?"

$$\frac{.10 \times X = 50}{.10}$$

$$\boxed{X = \$500}$$

- 18) A store offers its members a choice between a 25% discount with a membership fee of \$100 per year or a 10% discount with no membership fee. A customer spends \$800 at the store per year. Which membership is better?

$$\$800 \times .75 = \frac{100}{.75} = 133.33$$

$$800 \times .90 = \frac{100}{.90} = 111.11$$

~~\$720~~

~~\$600 + \$100 Fee~~

\$700 ← MEMBERSHIP IS BETTER

- 20) A store sells a hat for \$22.95 at the regular price. It is on sale for \$19.95. Determine the percent discount.

$$\frac{19.95}{22.95} = .87 - \frac{100}{.87}$$

$$\frac{100}{.13} \rightarrow \boxed{13\%}$$