

Sales Tax, Tip, and Discount

Is About... using the percent proportion to find sales tax, tip, and discount to determine the total cost or sale price.

Main Idea

Sales Tax

Sales tax is an additional amount of money added on items that people buy.

$$\text{Original Cost} + \text{Tax} = \text{Total Cost}$$

Sales Tax

Example

Kaitlin wants to buy a pair of beats for \$120.00. If the sales tax is 6%, what is the total amount she must pay for the beats?

1st)

$$\frac{x}{120} = \frac{6}{100}$$

$$\frac{100x}{100} = \frac{720}{100}$$

$$x = \$7.20 \text{ amount of tax}$$

2nd)

$$\begin{array}{r} 120.00 \\ + 7.20 \\ \hline \end{array}$$

$$\underline{\$127.20} \text{ total amount}$$

Tip

A tip or gratuity is a small amount of money given in return for a service.

$$\text{Original Cost} + \text{Tip} = \text{Total Cost}$$

Discount

Discount is the amount by which the regular price of an item is reduced.

$$\text{Original Price} - \text{Discount} = \text{Sale Price}$$

Main Idea

Tip

Example

If the bill for dinner at Frost Café is \$20.55, what is the total bill with a 15% tip?

1st)

$$\begin{array}{r} x \\ 20.55 \\ \hline 100 \end{array} = \frac{15}{100}$$

$$\frac{100x}{100} = \frac{308.25}{100}$$

$$x = 3.0825$$

$$\text{Tip} = \$3.08$$

2nd)

$$\begin{array}{r} 20.55 \\ + 3.08 \\ \hline \end{array}$$

\$23.63 total bill

Main Idea

Discount

Example

Matt went to Wal-Mart. If he spends \$35 on Pringles and receives a 25% discount, what is the final price of his purchase?

1st)

$$\begin{array}{r} x \\ 35 \\ \hline 100 \end{array} = \frac{25}{100}$$

$$\frac{100x}{100} = \frac{875}{100}$$

$$x = \$8.75 \text{ off}$$

2nd)

$$\begin{array}{r} 35.00 \\ - 8.75 \\ \hline \end{array}$$

\$26.25 sale price