

Applications of Percent

MATH 1001 – Quantitative Skills and Reasoning

Personal Finance Unit

pp. 5-10 in textbook

Review: Percent

Definition: Percent means “of each 100 or in the 100”.

Change the percent to a decimal.

1. 14%
2. 5%
3. 100%
4. 103%

Review: Percent

Convert the decimal to a percent.

1. 0.62

2. 0.07

3. 0.8

4. 0.166

5. 1.54

Review: Percent

Convert the percent to a fraction.

1. 15%

2. 7%

3. 130%

Review: Percent

Change the following fractions to a percent.

1. $\frac{7}{8}$

2. $\frac{3}{5}$

3. $\frac{5}{100}$

4. $\frac{3}{20}$

Review: Finding the Percent of the Total

To find the percent of a total, use the following formula:

$$\textit{Percent} = \frac{\textit{part}}{\textit{whole}}$$

$$\textit{part} = \textit{Percent} \times \textit{whole}$$

Review: Finding the Percent of the Total

- There are 75 customers at Billy's gas station this morning. Thirty-two percent use a credit card to make their purchases. How many customers used credit cards this morning at Billy's?

Review: Percent of Change

$$\textit{Absolute Change} = |\textit{ending quantity} - \textit{starting quantity}|$$

$$\textit{Relative Change} = \frac{\textit{Absolute Change}}{\textit{starting quantity}}$$

Absolute Change will always be zero or positive and will result in an **increase** or **decrease** of the starting quantity.

Relative Change will be in decimal form. Be sure to convert your answer to a percent.

Review: Percent of Change

Find the Absolute and Relative Change.

Office Supply Co. purchases paper wholesale for \$18.00 per case. They sell the paper for \$20.00 per case.

Review: Percent of Change

Find the Absolute and Relative Change.

The price of gas goes from \$2.40 per gallon to \$1.30.

Applications of Percent: Tips & Commission

- Daniel makes a 4% commission on an \$8,000 pickup truck he sold. How much is his commission?
- Janet's total bill at Outback is \$45. She wants to leave a 20% tip. How much is the tip?

Applications of Percent: Discount & Sale Price

- A \$179.00 chair is on sale for 30% off. How much can I save if I buy it now?

Applications of Percent: Discount & Sale Price

- A \$74.00 chair is on sale for 25% off. How much will it cost if I buy it now?

Applications of Percent: Sales Tax

- To find sales tax, multiply the sales tax rate by the total cost.
- To find the **final cost**, add the sales tax to the total cost or multiply the total cost by $(1 + \text{sales tax rate})$.

Applications of Percent: Sales Tax

- The total price of a sofa is \$560.00 plus 7% sales tax. How much is the sales tax? What is the final cost?