**Module 7      Ratio, Proportion, and Percent**
**Lesson 5      Percent Proportions**

**Lesson Notes 7.5**

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### Lesson Objectives

- Use the percent proportion to write fractions as percents.
- Determine the percent of a number and solve related problems in real-world situations (e.g. gratuities, sales tax, discounts, and mark up).
- Use percents to estimate.

**Subtopic 1**      **Use the Percent Proportion to Write Fractions as Percents**

A proportion states that two ratios are _____.
If one of the _____ of the equivalent fractions is one hundred, the proportion is a _____ proportion.

**Solve using the percent proportion.**

**1**   Moon Lighting Company tested 250 light bulbs and found five light bulbs to be defective. What percent of the light bulbs tested were defective?

**2**   The Moon Dogs football team won eight games last year. This year, they won 12 games. What percent more games did the Moon Dogs win this year?

**Subtopic 2**     **Estimate a Percent of a Number**

**3**   Mary's weekly salary is $880. Each year, she receives a bonus equal to 42% of her weekly salary. About how much is Mary's bonus?

**Subtopic 3**     **Determine the Percent of a Number and Solve Problems**

Markup is an amount _____ to the cost to produce an item in order to determine the _____ _____.

A _____ is an amount taken off a regular price.

**4**   Drew buys a burger for $8.50 and a milkshake for $3.50. He wants to leave a 15% tip. How much gratuity should Drew leave?