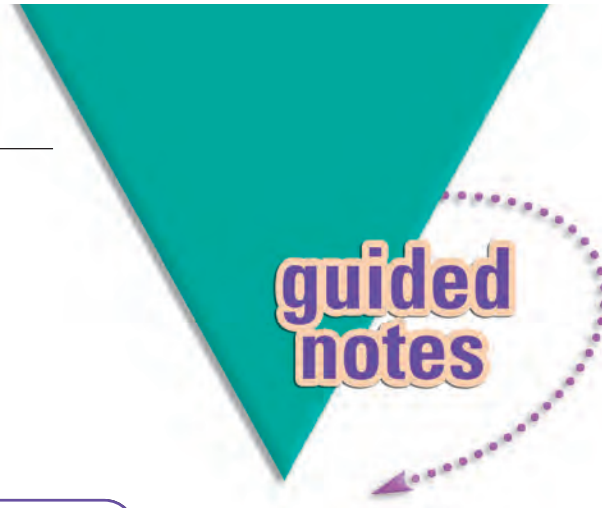


NAME _____

Module 4 Solving Problems Using Linear Equations of One Variable
Lesson 2 Solving Consumer/Business Problems Using Equations of One Variable



**guided
notes**

Lesson Objectives

- Write and solve equations of one variable to solve consumer and business problems.
- Solve consecutive integer problems.
- Solve consumer and business problems using percents.

Plan for Solving a Problem

- Information **given** _____
- What are we trying **to find** _____
- Choose a **variable** _____
- Write an **equation** _____
- **Solve** _____ the equation
- Determine the **answer** _____
- **Check** _____ the answer

- 1 Ferd ordered custom lunch boxes for the members of the Sci-Fi Fan Club. He paid a \$30 set-up fee for the order and \$4 for each lunch box. The total cost was \$102. Use this information to determine how many lunch boxes Ferd ordered. **Ferd ordered 18 lunch boxes.** _____

Consecutive integers are **numbers in counting order** _____.

- 2 The sum of two consecutive even integers is 62. What are the two integers?
The integers are 30 and 32. _____

Commission _____ is a paid percentage of the value of a person's sales.

- 3 A worker paid 7.5%, or \$187.50, of her income in taxes last month. How much did she earn last month before the taxes were paid? _____

The worker earned \$2,500. _____

- 4 Jamal earns \$500 in base pay each month as a waiter in a restaurant. He also earns about 15% of the total of his customers' bills in tips. If Jamal earned a total of \$770 last month, what was the approximate total of his customers' bills? **The total of Jamal's customers' bills was \$1,800.** _____

The price store owners pay for an item is called the **wholesale price** _____.

Markup _____ is the price charged minus the wholesale price.

- 5 Ingrid paid \$81 for a sweater including an 8% sales tax. What was the price of the sweater without the sales tax? **The sweater was \$75.** _____