



## Solving Percent Problems II

### Directions:

**Step 1:** Read through each scenario and decide if the problem is **1-step**, meaning when you solve for  $x$  in your box method, you are done, or **multi-step**, meaning that after you solve for  $x$ , you must add or subtract to get the final answer. Use a color to highlight the 1-step and a different color to highlight the multi-step. Record your colors below.

1-Step color: \_\_\_\_\_

Multi-Step color: \_\_\_\_\_

**Step 2:** For each problem, draw the box, label the percents and numbers, estimate for  $x$ , and then write and solve the proportion. If the problem requires 2-steps, continue solving after you calculate the value of  $x$ .

Example 1: A video game is on sale for 25% off. If the original price is \$49.50, what is the sale price?

Example 2: Steve borrowed \$12,000 for his new car. His loan has an annual simple interest rate of 6%. How much interest will Steve pay on his car for 1 year?

1. A salesperson earns 17% commission on her total sales. If she sold \$1,537 last week, how much did she earn in commission?
  
2. Michaela saw a book on sale for 25% of the original price of \$20.00. If Michaela gets a member discount of 50% off the discounted price, how much will she pay for the book in all?

3. Ramon bought a Japanese maple tree during the 40% off sale. The tree originally cost \$185. If the sales tax on the tree was 6%, how much did Ramon pay?

4. If a watch costs \$40 and you must pay 7.5% sales tax, how much will the tax be?

5. Maya wants to leave a waitperson a 20% tip. If Maya's bill before the tip was \$15, how much should she leave as a tip?

6. What is 11% of 700?

7. 12 is what percent of 60?

8. 90 is 20% of what number?

9. The population in Anna's town was 2,600 last year. This year, the population is 12% greater. What is the population in Anna's town this year?

10. A department store is having a sale in which every item is 38% off its original price. The regular price of a suit is \$112. How much will be taken off the regular price of the suit?