

Proportional Relationship



Objective: REVIEW

Day 2

II. Using Proportions to Solve Percent Problems

- **A.** Set up and solve a proportion to solve each problem.
- 1. Mr. Green works as the art teacher at Hamburg Summer Day Camp. Six hundred campers participate in the camp every day. Yesterday Mr. Green helped 6 campers on an art project. What percent of the campers did Mr. Green help yesterday?
- 2. Jonah is saving up to purchase a small flat screen television for his bedroom. He has saved \$80, which is 64% of the total cost of the television. How much does the television cost?
- 3. Ben saved \$75 over the summer from his part-time job. He withdrew 40% of the money to buy new clothes. The rest of the money he kept in his bank account. How much money did Ben spend on new clothes?
- 4. Samantha raises animals and trains them to appear in Hollywood movies. Currently, 23 of her penguins are appearing in a film about global freezing. That is 92% of the penguins Samantha has raised. How many penguins has she raised?
- 5. Mr. Ivey teaches dance at the middle school. 6. Christopher plays quarterback for a His classes are 90 minutes long, and he spends 94% of class time teaching strength and conditioning. How many minutes do Mr. Ivey's students spend on strength and conditioning in each class?
- neighborhood football team. During his team's first game, he executed 60 plays, 42 of which were successful. What percent of Christopher's plays were successful?
- **B.** Set up and solve a proportion to solve each problem.
- 1. What is 78% of 50?

- **2.** What is 54% of 450?
- **3.** The number 110 is what percent of 500?
- **4.** The number 21 is what percent of 75?
- **5.** The number 88 is 44% of what number?
- **6.** The number 57 is 76% of what number?

C. Solve each problem.

- 1. Carlos purchased an antique chair for \$15. He later sold the chair for \$27 to an antique dealer. What was the percent markup of the chair?
- 2. Lamar purchases comic books at garage sales and marks them up 75% before reselling them to comic book dealers. If Lamar purchases a comic book at a garage sale for \$4, how much will he charge the comic book dealer for it?
- **3.** You want to leave a tip for a meal that costs \$17.95. If all you have is \$3.00, what percentage tip will you be able to leave?
- **4.** Jeremy bought a souvenir while on vacation. The item cost \$22, but the total bill was \$23.43. What percent was the sales tax?
- **5.** Shalinda wants to leave an 18% tip for her meal. If her meal cost \$25.10, what should be the total she pays, including the tip?
- **6.** Karen buys a sweatshirt for \$30. The sales tax in her state is 7%. What is the total amount Karen will pay for the sweatshirt, including sales tax?
- 7. If a store marks up the price of an item by 45% and sells it to customers for \$58, what was the original price the store paid for the item?
- **8.** Lin paid \$3.30 in sales tax on an item that cost \$60. What percent sales tax did he pay?
- 9. Yolanda always tips her hair stylist 22% of whatever her services cost. On her most recent trip to her hair stylist, the services Yolanda received cost \$150. What amount should Yolanda tip her hair stylist?
- **10.** The Fishers ate out at a restaurant and paid a total of \$68.22, including the tip. If the Fishers tipped 20%, what was the cost of the meal?