Name Date

Practice A

6.4

Answer the question. Explain the method you chose.

1. 24 is what percent of 60? 2. 8 is 40% of what number?

Write and solve an equation to answer the question.

3. What number is 70% of 120? 4. 30 is what percent of 120?

5. 112 is 56% of what number? 6. 128 is what percent of 80?

7. What number is 140% of 45? 8. 15 is 6% of what number?

9. There are 35 competitors in a marathon. Sixty percent of these finished the race in under four hours. How many competitors finished the race in under four hours?

10. Your class is going on a field trip. Twenty-four students have turned in their permission slips so far. This is 80% of the students in the class. How many students are in the class?

11. You take a test with 32 questions on it. You answer 24 questions correctly. What percent of the questions do you answer correctly?

12. You have *r* rare coins, consisting of *p* pennies and *n* nickels.

a. *p* is 20% of 190. How many pennies do you have?

b. 190 is 200% of *r*. How many rare coins do you have?

c. *n* is 60% of *r*. How many nickels do you have?

|  |  |
| --- | --- |
| **Item** | **Price** |
| top | *p* |
| earrings | $ 3.00 T |
| socks | $ 2.00 |
| granola bar | $ 0.50 T |
| **Subtotal** | $13.00 |
| **Tax** | $ 0.21 |
| **Total** | $13.21 |

13. The table shows the sales receipt for your purchase.

a. The items with a “T” next to the price are subject to   
sales tax. What percent sales tax did you pay?

b. Calculate the price of the top.

c. The price you paid for the top was 60% of the original   
price. What was the original price of the top?

Tell whether the following statement is *true* or *false*.

Explain your reasoning.

14. 120% of a whole number is always greater than the number.

15. You can find 0.5% of a number by multiplying the number by 

Name Date

Practice B

6.4

Answer the question. Explain the method you chose.

1. 27 is what percent of 90? 2. 7 is 5% of what number?

Write and solve an equation to answer the question.

3. 27 is 0.5% of what number? 4. What number is 125% of 240?

5. 1.4% of what number is 28? 6. 27 is what percent of 72?

7. During a given month, there was a total of 23.6 inches of rain. This was 250% of the average rainfall for that month. What is the average rainfall for that month?

8. To maintain an acceptable level of chlorine in your pool, you add 1.4 gallons of chlorine. This is 0.007% of the amount of water in your pool. How many gallons of water are in your pool?

9. You must attend a minimum of 85% of the practices in order to play in the playoffs. You have made 37 of the 42 practices. Will you be able to play in   
the playoffs?

|  |  |
| --- | --- |
| **Choice** | **Percent** |
| Chicken Nuggets | 25% |
| Spaghetti | ? |
| Pizza | 45% |
| Fish Sticks | ? |

10. You are in charge of the seventh grade graduation   
dinner. The table shows the results of a survey of   
students’ meal preferences.

a. 144 students chose pizza. How many students   
responded to the survey?

b. How many students chose chicken nuggets?

c. The number of students choosing fish sticks was 50% of the number of students choosing spaghetti. How many students chose fish sticks?

d. How many students chose spaghetti?

11. What is 15% of 40% of $180?

12. There are 15 copies of a popular CD left to be sold in a store. This is between 1% and 1.5% of the original number of copies of the CD in   
the store. The original number of CDs was between what two numbers?

13. Tell whether the statement is *true* or *false*. Explain your reasoning.

If *A* is 45% of *B*, then the ratio *A* : *B* is 9 : 20.

Find the percent to the nearest hundredth.

14. 16 is what percent of 38? 15. 50 is what percent of 38?