

of another

Exercises 9-7

Find each answer.

1. What percent of 20 is 16?
2. What percent of 200 is 68?
3. What percent of 40 is 28?
4. What percent of 32 is 8?
5. 24 is what percent of 25?
6. 3.5 is what percent of 50?
7. 18 is what percent of 18?
8. What percent of 66 is 44?
9. 12.2 is what percent of 36.6?
10. 12 is what percent of 2400?
11. 80 is what percent of 3200?
12. What percent of 48 is 2.4?
13. Mike got 35 items correct on a 40-item test. What percent of the items did he get correct?
14. The sale price of the luggage Caroline bought was \$160. The sales tax she paid was \$8.80. What was the sales tax rate?
15. The goal of a local charity is to raise \$400,000. At the present time, it has raised \$250,000. What percent of the goal has been reached?
16. A local charity wishes to raise \$500,000. At the end of the fund drive, \$600,000 was raised. What percent of its goal did the charity reach?

$$\frac{90}{100} = \frac{12.5}{500}$$

17. Last November, it snowed on 6 out of 30 days. What percent of the days did it not snow last November?
18. Jenna's March telephone bill showed \$21.50 for local charges and \$8.50 for long distance charges. What percent of her total bill was for long distance charges?
19. **DATA**, pages 338–339 In Grand Rapids, the recommended basement ceiling insulation is what percent of the attic floor insulation?
20. **DATA**, pages 140–141 The maximum speed of a grizzly bear is what percent of the maximum speed of a chicken?

Interest is money paid for the use of money. Money deposited in a bank, on which interest is paid, is called the *principal*. The simple interest formula is $I = Prt$, where I is the interest earned, P is the principal, r is the interest rate per year, and t is the time in years.

Use the formula $I = Prt$.

21. Find I when $P = \$1000$, $r = 5\%$ per year, and $t = 1$ year.
22. Find I when $P = \$500$, $r = 7.2\%$ per year, and $t = 2$ years.
23. Find I when $P = \$2500$, $r = 6\frac{1}{2}\%$ per year, and $t = 3$ years.
24. Find I when $P = \$2000$, $r = 5\%$ per year, and $t = 6$ months.
25. Find r when $I = \$57.50$, $P = \$1250$, and $t = 1$ year.
26. Find t when $I = \$1147.50$, $P = \$6000$, and $r = 8\frac{1}{2}\%$ per year.

SPIRAL REVIEW

27. Replace the $?$ with $>$, $<$, or $=$: $\frac{7}{9} ? \frac{7}{10}$ (Lesson 7-6)
28. What percent of 40 is 48? (Lesson 9-7)
29. Find the LCM: 15 and 40 (Lesson 7-3)
30. Evaluate $-12 + 5n^2$ when $n = -4$. (Lesson 3-6)

Historical Note



Julio Rey Pastor (1888–1962) was named professor of mathematical analysis at the University of Oviedo in his native Spain at the age of twenty-three. Later he founded a mathematics laboratory in Madrid. In 1917 he began teaching half the year in Spain and the other half in Argentina. During this time he established the journal *Spanish American Mathematical Review*.

Research

The first mathematics book in the Americas was printed in 1556. Find out the name of its author and the country where it was printed.