Pretest

Use the percent proportion or percent equation to solve each problem.

1. 30 is 40% of what number?

1.

2. What percent of 50 is 36?

2.

3. What is 15% of 28?

3.

4. 16 is 25% of what number?

- 4.
- What fraction would you use to find $33\frac{1}{3}\%$ of 51 mentally? $33\frac{1}{3}\% = \frac{1}{3}$
 - 3 of 51=17
- 5. ______
- **6.** Nine out of 43 campers at a summer camp prefer swimming more than any other activity. What percent of campers prefer swimming? Round your answer to the nearest tenth.
- 6. ____

Solve each problem.

- 7. An LCD television is on sale for \$500. This price is 75% of its original price. What was the original price of the television?
- 7. _____
- **8.** A computer mouse costs \$29. If a 6.25% sales tax is added, what is the total cost?
- 8. _____
- (9.) Find the percent of change from 24°F to 39°F. Then state whether the percent of change is an *increase* or a *decrease*.
- 9. _____
- 10. Manuel purchases a suit for \$130. Sales tax is 7% on all purchases. How much sales tax does Manual pay?
- 10. _____
- 11. A pair of roller blades has an original price of \$260. The roller blades are on sale for 55% off the original price. Find the sale price of the roller blades.
- 11. _____
- **12.** Find the selling price if a store pays \$48 for a painting and the markup is 65%.
- 12. _____
- \$218 each month for the next 48 months. Find the simple interest rate for his loan, to the nearest tenth of a percent.
- 12

130

Math Accelerated • Chapter 6 Percents

13. Eli borrowed \$9,500 to buy a jet ski. He will pay \$218 each month for the next 48 months. Find the simple interest rate for his loan, to the nearest tenth of a percent.

P = 9,500 $\frac{964}{9500(4)} = \frac{964}{38000} = 2.5\%$

-> PRINCIPAL × RATE × TIME = INTEREST P= 5,000 R = 4.5%

964 ÷ 38000 = 0.025368

5000 (0.045)(2) = 450

$$2x3x4=24$$
 $2x^{2}x4=24$ $x=\frac{24}{2x4}$

9. Find the percent of change from 24°F to 39°F. Then state whether the percent of change is an *increase* or a *decrease*.

1) FIND THE DIFFERENCE 39-24=15

DIVIDE THE DIFFERENCE 15 = 0.625 = 62.5% BY THE STARTING, AMOUNT 24 8

62,5% INCREASE

FIND THE PERCENT OF CHANGE FROM 39°F TO 24°F

15 = 0.3846 = 38.5%

THE PERCENT OF CHANGE FROM 39°F TO 24°F

TO ECREASE

13. Eli borrowed \$9,500 to buy a jet ski. He will pay \$218 each month for the next 48 months. Find the simple interest rate for his loan, to the nearest tenth of a percent.

PRINCIPAL X RATEX TIME = INTEREST → 9,500

 $2 \times 3 \times 4 = 24$ $\frac{24}{2 \times 4} = \frac{24}{2 \times 4} = \frac{$

 $\frac{964}{9500(4)} = 0.0253$ $\frac{964}{38000} = 0.0253$

2.5%

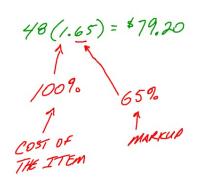
9. Find the percent of change from 24°F to 39°F. Then state whether the percent of change is an increase or a decrease.

- 2 DIVIDE THE AMOUNT OF CHANGE BY THE ORIGINAL AMOUNT $\frac{15}{24} = \frac{5}{8} = 62.5\%$ $39^{\circ}F \rightarrow 24^{\circ}F$ (1) 39-24=15 24-39<-15(2) 15 = 38.5% DECREASE 39
 - 62.5% INCREASE

12. Find the selling price if a store pays \$48 for a painting and the markup is 65%.

\$48 (0.65) = \$31.20 \$48 + \$31.20 =

12. _____



11. A pair of roller blades has an original price of \$260. The roller blades are on sale for 55% off the original price. Find the sale price of the roller blades.

DISCOUNT

IF YOU SAVE 55%.
WHAT DO PAY 45%.