



Name \_\_\_\_\_ Date \_\_\_\_\_

## Percent of Change (Pages 348–351)

An increase or decrease expressed as a percent is called the **percent of change**. When the new number is greater than the original, the percent of change is a **percent of increase**. When the new number is less than the original, the percent of change is a **percent of decrease**.

### Finding Percent of Markup and Discount

- The increase in price that a store adds to its cost is called the **markup**. The percent of markup is a percent of increase. The amount the customer pays is called the **selling price**.
- The amount by which a regular price is reduced is called the **discount**. The percent of the discount is a percent of decrease. Find the sale price by subtracting the discount.

### EXAMPLES

- A** Find the sale price for a \$424 item that is 20% off.

$$\begin{aligned} RB &= P && \text{First find the discount.} \\ 0.20(424) &= P \\ \$84.80 &= P \\ \$424 - \$84.80 &= \$339.20 && \text{Find the sale price.} \end{aligned}$$

- B** A store paid \$18 for an item and used a 30% markup. What was the selling price?

$$\begin{aligned} RB &= P && \text{First find the markup.} \\ 0.30(18) &= P \\ \$5.40 &= P \\ \$18 + \$5.40 &= \$23.40 && \text{Find the selling price.} \end{aligned}$$

### Try These Together

1. Find the percent of change (rounded to the nearest percent) if the original price is \$30 and the new price is \$24.

*HINT: First find the amount of change (\$30 – \$24).*

2. Find the percent of change (rounded to the nearest percent) if the original is 35 and the new is 45.

*HINT: First find the amount of change.*

### PRACTICE

**Find the sale price of each item to the nearest cent.**

3. \$28.00 jeans, 50% off  
4. \$48.95 jacket,  $\frac{1}{5}$  off  
5. \$7.50 paperback, 10% off  
6. \$15.30 watch, 15% off

**Find the selling price for each item given the amount paid by the store and the markup. Round to the nearest cent.**

7. \$9 CD, 60% markup  
8. \$25 DVD, 40% markup  
9. \$400 TV, 45% markup  
10. \$2,400 bedroom set, 20% markup



11. **Standardized Test Practice** What is the sale price of an \$80 CD player on sale at 25% off?

**A** \$20                      **B** \$50                      **C** \$60                      **D** \$320

Answers: 1. 20% 2. 29% 3. \$14.00 4. \$39.16 5. \$6.75 6. \$13.01 7. \$14.40 8. \$35.00 9. \$580.00 10. \$2,880.00 11. C