

Lesson 6-7

Example 1

Find the percent of increase.

Original amount: 90

New amount: 153

Solution

Use the percent of increase formula.

$$r = \frac{\text{amount of increase}}{\text{original number}} \cdot 100$$

$$r = \frac{153 - 90}{90} \cdot 100$$

$$r = \frac{63}{90} \cdot 100$$

$$r = 0.7 \cdot 100$$

$$r = 70$$

The percent of increase from 90 to 153 is 70%.

Example 2

Find the amount of decrease.

Original amount: \$375

New amount: \$348

Solution

Use the percent of decrease formula.

$$r = \frac{\text{amount of decrease}}{\text{original number}} \cdot 100$$

$$r = \frac{375 - 348}{375} \cdot 100$$

$$r = \frac{27}{375} \cdot 100$$

$$r = 0.072 \cdot 100$$

$$r = 7.2$$

The percent of decrease from \$375 to \$348 is 7.2%.

Example 3

EDUCATION On her first 100-point math test, Becky got a score of 72. On her second test, she got a score of 90. Find the percent of increase in her score.

Solution

Use the percent of increase formula.

$$r = \frac{\text{amount of increase}}{\text{original number}} \cdot 100$$

$$r = \frac{90 - 72}{72} \cdot 100$$

$$r = \frac{18}{72} \cdot 100$$

$$r = 0.25 \cdot 100$$

$$r = 25$$

The percent of increase from 72 to 90 is 25%.

Example 4

RETAIL Seetha bought a notebook computer for \$1550. Two years later, a comparable computer sold for \$806. Find the percent of decrease.

Solution

Use the percent of decrease formula.

$$r = \frac{\text{amount of decrease}}{\text{original number}} \cdot 100$$

$$r = \frac{1550 - 806}{1550} \cdot 100$$

$$r = \frac{744}{1550} \cdot 100$$

$$r = 0.48 \cdot 100$$

$$r = 48$$

The percent of decrease in the computer price is 48%.