

SECTION

6B

Ready to Go On? Skills Intervention

6-6 Percent of Change

The **percent of change** is the percent that an amount is increased or decreased. When an amount is decreased, like in a sale, it is a **percent of decrease**. When an amount is increased, like in a markup, it is a **percent of increase**.

Vocabulary

percent of change
percent of decrease
percent of increase

$$\text{percent of change} = \frac{\text{amount of change}}{\text{original amount}}$$

Finding Percent of Change

A. Find the percent of change if 36 is decreased to 30.

$$36 - 30 = \underline{\quad}$$

Find the amount of change.

$$\text{percent of change} = \frac{6}{\underline{\quad}}$$

Using the amount of change as the numerator, what is the denominator?

$$\approx \underline{\quad}$$

Divide.

$$\approx \underline{\quad}$$

Write the quotient as an equivalent percent.

B. Find the percent of change if 30 is increased to 40.

$$40 - 30 = \underline{\quad}$$

Find the amount of change.

$$\text{percent of change} = \frac{10}{\underline{\quad}}$$

Using the amount of change as the numerator, what is the denominator?

$$\approx \underline{\quad}$$

Divide.

$$\approx \underline{\quad}$$

Write the quotient as an equivalent percent.

Using Percent of Change

Tires-4-All is having a 45% off sale on all tires. The average tire sells for \$61.99. Find the amount of the discount and the sale price of one tire.

Find the amount of discount.

$$\underline{\quad} \cdot \underline{\quad} = n$$

Write an equation.

$$\underline{\quad} \cdot 61.99 = n$$

Write the percent as a decimal.

$$\underline{\quad} = n$$

Find the product.

$$\underline{\quad} \approx n$$

Round your answer to the nearest cent.

The discount is about _____

Find the sale price.

$$\$61.99 - \$\underline{\quad} = \$\underline{\quad}$$

What amount do you subtract from \$61.99?

The sale price is about _____.

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Ready to Go On? Problem Solving Intervention

6-6 Percent of Change

Percent changes do not always work the way you expect—until you think about it.

The owner of Pet-Ville decides to raise her prices today and then lower them tomorrow by the same percent. Will the prices end up being the same? Why or why not?

Understand the Problem

1. If the owner raises her prices by 20%, by what percent would she lower them? _____

Make a Plan

2. Complete the equations to see what happens if she raises and then lowers the price of a \$100 kitty condo by 20% percent.

Amount of increase = _____ % of _____ = _____

Price after increase = _____ + \$100 = _____

Amount of decrease = _____ of _____ = _____

Price after decrease = _____ - _____ = _____

Solve

3. Complete the table to show what happens to the price of a \$100 kitty condo with different percents.

Percent Change	10%	20%	40%	50%	100%
Amount of increase	\$10				
Price after increase					
Amount of decrease					
Price after decrease					

4. If the owner raises and then lowers prices by the same percent, will the price end up the same? Explain.

Check

5. Why does it make sense that the price ends up lower than the original price?
