

Two

Name _____ Date _____ Class _____

LESSON **6-3** Interactive Study Guide

6-3 Percent of a Number

To find the percent of a number use either a proportion or equivalent decimals. Both methods will result in the same answer. To find 6% of 24, use either method:

Proportion

$$\frac{6}{100} = \frac{n}{24}$$

$$1.44 = n$$

Equivalent Decimal

$$0.06 \cdot 24 = n$$

$$1.44 = n$$

Using Proportions to Find Percents of Numbers

Find 23% of 60.

$$\frac{23}{100} = \frac{\quad}{\quad}$$

$\frac{23}{100}$ is equal to what fraction?

$$23 \cdot \quad = 100 \cdot \quad$$

Write the cross products.

$$\quad = 100n$$

Multiply.

$$\frac{1,380}{\quad} = \frac{100n}{\quad}$$

Divide each side by _____.

$$\quad = n$$

Solve for n .

23% of 60 is _____.

Using Decimal Equivalents to Find Percents of Numbers

Find 22% of 48.

$$22\% \text{ of } 48 = \quad \cdot 48$$

Write 22% as a decimal.

$$= \quad$$

Multiply.

22% of 48 is _____.

Estimate to check whether your answer is reasonable.

Since 25% of 48 = _____, and 22% of 48 is _____, then

_____ reasonable.

Population Application

The total population of Charlottesville, Virginia, is 40,512. The approximate number of people in families is 41% of the total population. What is the approximate number of people in families to the nearest whole number?

Find 41% of _____.

$$\quad \cdot 40,512 = \quad$$

Write 41% as a decimal. Find the product.

The approximate number of people in families in Charlottesville, Virginia, is _____.