

SECTION

5A

Ready to Go On? Skills Intervention

5-1 Ratios

Vocabulary
ratio

A **ratio** is a comparison of two numbers that uses division. A ratio can be written as a fraction, with the word *to*, and with a colon. For example, the ratio $\frac{a}{b}$ is the same as *a to b* and *a : b*.

Writing Ratios

A recipe for a milkshake calls for 4 cups of ice cream and 3 cups of bananas. Write the given ratio in all three forms.

For every _____ cups of ice cream, there are _____ cups of bananas.

	Fraction	In words	With a colon
$\frac{\text{ice cream}}{\text{bananas}}$	= $\frac{4}{3}$	= _____ to _____	= _____ : _____

Writing Ratios in Simplest Form

Grandview Avenue has 126 houses and 28 streetlights. What is the ratio of streetlights to houses written in simplest form?

Ratio of houses to streetlights = $\frac{\text{houses}}{\text{streetlights}}$ = $\frac{\quad}{\quad}$ Write the ratio as a fraction.

$\frac{\quad}{\quad}$ = _____ Simplify the fraction.

The ratio of houses to streetlights on Grandview Avenue is _____.

Comparing Ratios

Compare the ratios of sugar per ounce.

	Apple Juice	Pear Juice
Serving Size	40 oz	25 oz
Potassium	115 mg	150 mg
Sodium	5 mg	10 mg
Sugar	16 mg	10 mg

Apple juice: $\frac{\text{sugar}}{\text{servings}} = \frac{\quad}{\quad} = \frac{\quad}{5}$

Pear juice: $\frac{\text{sugar}}{\text{servings}} = \frac{\quad}{\quad} = \frac{\quad}{5}$

The sugar to serving ratios of apple juice and pear juice are _____.

SECTION

5A

Ready to Go On? Problem Solving Intervention

5-1 Ratios

A ratio compares two quantities by division. A ratio can be written in fraction form and compared with another ratio to see which is greater.

A pet store has 16 dogs, 20 cats, 9 hamsters, and 6 lizards for sale. Tell whether the ratio of cats to dogs or the ratio of hamsters to lizards is greater.

Understand the Problem

1. What is the problem asking you to do?

_____ the ratio of cats to dogs with the ratio of _____
 _____ and tell which ratio is _____.

Make a Plan

2. Complete the table to make it easy to see how many of each animal the store has.
 3. Write the ratios that are to be compared.

dogs	16
_____	_____
_____	_____
_____	_____

$\frac{\text{cats}}{\text{dogs}} = \underline{\quad}$ $\frac{\text{hamsters}}{\text{lizards}} = \underline{\quad}$

Solve

4. Simplify the fractions.

$\frac{\text{cats}}{\text{dogs}} = \frac{20}{\quad} = \underline{\quad}$ $\frac{\text{hamsters}}{\text{lizards}} = \frac{\quad}{\quad} = \underline{\quad}$

5. Write an equivalent fraction for one of the fractions so that both fractions have the same denominator and can be compared.

$\frac{\text{hamsters}}{\text{lizards}} = \frac{\quad}{2} = \frac{4}{\quad}$

6. Compare the ratios. Which ratio is greater?

Check

7. To find the ratios as decimals, divide 20 by 16 for the ratio of cats to dogs and divide 9 by 6 for the ratio of hamsters to lizards. What are the results? Was your answer correct?

