

Adding and Subtracting Fractions with Like Denominators

MAIN IDEA

- Add and subtract fractions with like denominators.

BUILD YOUR VOCABULARY (page 115)

Fractions with the same are called like fractions.

KEY CONCEPTS

Adding Like Fractions To add fractions with the same denominators, add the numerators. Use the same denominator in the sum.

Subtracting Like Fractions To subtract fractions with the same denominators, subtract the numerators. Use the same denominator in the difference.

EXAMPLE Add Like Fractions

- 1 Find the sum of $\frac{3}{10}$ and $\frac{9}{10}$.

Estimate + =

$$\frac{3}{10} + \frac{9}{10} = \frac{\text{ } \quad \text{ }}{10}$$

Add the numerators.

$$= \text{ } \quad \text{ }$$

Simplify.

$$= \text{ } \quad \text{ or } \quad \text{ } \quad \text{ }$$

Write the improper fraction as a mixed number.

EXAMPLE Subtract Like Fractions

- 1 Find $\frac{10}{12} - \frac{1}{12}$. Write in simplest form.

$$\frac{10}{12} - \frac{1}{12} = \frac{\text{ } \quad \text{ }}{12}$$

Subtract the numerators.

$$= \text{ } \quad \text{ or } \quad \text{ } \quad \text{ }$$

Simplify.

Check Your Progress

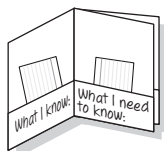
Add or subtract. Write in simplest form.

a. $\frac{3}{8} + \frac{7}{8}$

b. $\frac{17}{18} - \frac{5}{18}$

FOLDABLES**ORGANIZE IT**

Use the note cards in your Foldable to record what you learn about adding and subtracting fractions with like denominators. As you learn the concepts, move the note cards from the *Need to Know* pocket to the *Know* pocket in your Foldable.

**EXAMPLE**

- 3 SWIMMING** During swimming practice at the lap pool, Darcy swam $\frac{21}{25}$ of a mile, and Rene swam $\frac{16}{25}$ of a mile. How much farther did Darcy swim than Rene?

$$\frac{21}{25} - \frac{16}{25} = \frac{\boxed{}}{25}$$

Subtract the numerators.

$$= \boxed{} \text{ or } \boxed{}$$

Simplify.

Darcy swam $\boxed{}$ mile more than Rene.

Check *21 twenty-fifths minus 16 twenty-fifths equals 5 twenty-fifths. ✓*

Check Your Progress

SEWING One pattern for a skirt required $\frac{15}{16}$ yards of fabric for the lining and a second pattern required $\frac{11}{16}$ yards of fabric for the lining. How much more fabric was required for the first pattern?

HOMEWORK ASSIGNMENT

Page(s):

Exercises: