



Name \_\_\_\_\_ Date \_\_\_\_\_

# Adding and Subtracting Fractions with Like Denominators

(pages 238–242)

Fractions with the same denominator are **like fractions**. You add and subtract the numerators of like fractions the same way you add and subtract whole numbers.

<b>Adding Like Fractions</b>	<ul style="list-style-type: none"> <li>To add fractions with like denominators, add the numerators. Use the same denominator in the sum.</li> </ul>
<b>Subtracting Like Fractions</b>	<ul style="list-style-type: none"> <li>To subtract fractions with like denominators, subtract the numerators. Use the same denominator in the difference.</li> </ul>

## EXAMPLES

**A** Find the sum of  $\frac{1}{7}$  and  $\frac{3}{7}$ .

*Estimate.*  $0 + \frac{1}{2} = \frac{1}{2}$

$$\frac{1}{7} + \frac{3}{7} = \frac{1+3}{7}$$

$$= \frac{4}{7} \quad \text{Compared to the estimate, the answer is reasonable.}$$

**B** Find the difference  $\frac{3}{4} - \frac{1}{4}$ .

*Estimate.*  $1 - \frac{1}{2} = \frac{1}{2}$

$$\frac{3}{4} - \frac{1}{4} = \frac{3-1}{4}$$

$$= \frac{2}{4} \text{ or } \frac{1}{2} \quad \text{Compared to the estimate, the answer is reasonable.}$$

## Try These Together

**Add or subtract. Write the answer in simplest form.**

1.  $\frac{2}{3} + \frac{2}{3}$

*HINT: Add the numerators. Write the sum as a mixed number.*

2.  $\frac{5}{8} - \frac{3}{8}$

*HINT: Subtract the numerators. Write the answer in simplest form.*

## PRACTICE

**Add or subtract. Write the answer in simplest form.**

3.  $\frac{1}{3} + \frac{2}{3}$

4.  $\frac{4}{5} + \frac{2}{5}$

5.  $\frac{7}{16} - \frac{3}{16}$

6.  $\frac{9}{10} - \frac{3}{10}$

7.  $\frac{2}{7} + \frac{3}{7}$

8.  $\frac{9}{15} - \frac{6}{15}$

9. How much larger is  $\frac{7}{8}$  than  $\frac{3}{8}$ ?

10. Find the sum of  $\frac{1}{8}$ ,  $\frac{3}{8}$ , and  $\frac{5}{8}$ .



**11. Standardized Test Practice** Find the following total.  $\left(\frac{11}{16} + \frac{5}{16}\right) - \left(\frac{3}{16} + \frac{8}{16}\right)$

**A**  $\frac{7}{16}$

**B**  $\frac{1}{2}$

**C**  $\frac{5}{16}$

**D**  $1\frac{3}{16}$

Answers: 1.  $1\frac{1}{3}$  2.  $\frac{1}{4}$  3.  $1\frac{4}{15}$  4.  $1\frac{5}{8}$  5.  $1\frac{4}{15}$  6.  $\frac{4}{15}$  7.  $\frac{5}{8}$  8.  $\frac{7}{8}$  9.  $\frac{4}{8}$  10.  $1\frac{9}{8}$  11. C