

Lesson 4 Reteach

Add and Subtract Unlike Fractions

To add or subtract fractions with different denominators,

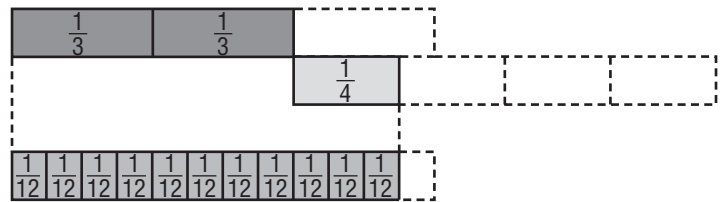
- Rename the fractions using the least common denominator (LCD).
- Add or subtract as with like fractions.
- If necessary, simplify the sum or difference.

Example

Find $\frac{2}{3} + \frac{1}{4}$.

Method 1 Use a model.

$$\begin{array}{r} \frac{2}{3} \\ + \frac{1}{4} \\ \hline \frac{11}{12} \end{array}$$



Method 2 Use the LCD.

$$\begin{aligned} \frac{2}{3} + \frac{1}{4} &= \frac{2}{3} \cdot \frac{4}{4} + \frac{1}{4} \cdot \frac{3}{3} \\ &= \frac{8}{12} + \frac{3}{12} \text{ or } \frac{11}{12} \end{aligned}$$

Rename using the LCD, 12.

Add the fractions.

Exercises

Add or subtract. Write in simplest form.

1. $\frac{1}{2} + \frac{3}{4} = 1\frac{1}{4}$

2. $\frac{3}{8} - \frac{1}{2} = -\frac{1}{8}$

3. $\frac{7}{15} + \left(-\frac{5}{6}\right) = -\frac{11}{30}$

4. $\frac{2}{5} - \frac{1}{3} = \frac{1}{15}$

5. $\frac{5}{9} + \left(-\frac{5}{12}\right) = \frac{5}{36}$

6. $\frac{11}{12} - \frac{3}{4} = \frac{1}{6}$

7. $\frac{7}{8} - \left(-\frac{1}{3}\right) = 1\frac{5}{24}$

8. $\frac{7}{9} - \frac{1}{2} = \frac{5}{18}$

9. $\frac{3}{10} + \frac{7}{12} = \frac{53}{60}$

10. $\frac{3}{5} + \frac{2}{3} = 1\frac{4}{15}$