

Lesson 4 Reteach

Add and Subtract Unlike Fractions

To add or subtract fractions with different denominators,

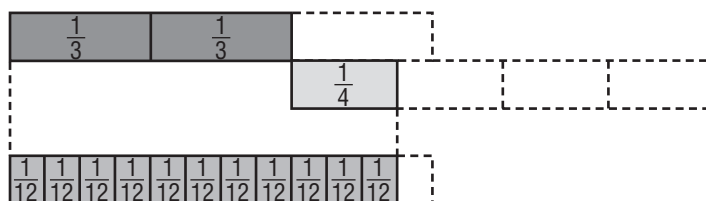
- Rename the fractions using the least common denominator (LCD).
- Add or subtract as with like fractions.
- If necessary, simplify the sum or difference.

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

Lesson 4 Skills Practice

Add and Subtract Unlike Fractions

Add or subtract. Write in simplest form.

1. $\frac{8}{15} - \frac{1}{5}$ $\frac{1}{3}$

2. $\frac{5}{6} + \frac{5}{12}$ $1\frac{1}{4}$

3. $\frac{3}{5} - \frac{3}{10}$ $\frac{3}{10}$

4. $\frac{7}{16} + \frac{3}{8}$ $\frac{13}{16}$

5. $\frac{19}{20} - \frac{3}{10}$ $\frac{13}{20}$

6. $\frac{4}{9} - \frac{1}{12}$ $\frac{13}{36}$

7. $\frac{2}{3} + \frac{3}{7}$ $1\frac{2}{21}$

8. $\frac{3}{4} + \frac{1}{7}$ $\frac{25}{28}$

9. $\frac{7}{8} - \frac{2}{3}$ $\frac{5}{24}$

10. $\frac{8}{9} - \frac{5}{6}$ $\frac{1}{18}$

11. $\frac{5}{12} - \frac{3}{10}$ $\frac{7}{60}$

12. $\frac{7}{9} + \frac{2}{3}$ $1\frac{4}{9}$

13. $\frac{3}{5} + \frac{4}{7}$ $1\frac{6}{35}$

14. $\frac{11}{12} - \frac{1}{2}$ $\frac{5}{12}$

15. $\frac{3}{4} - \left(-\frac{1}{2}\right)$ $1\frac{1}{4}$

16. $-\frac{5}{6} + \frac{1}{4}$ $-\frac{7}{12}$

17. $-\frac{2}{3} - \left(-\frac{3}{4}\right)$ $\frac{1}{12}$

18. $\frac{7}{8} + \frac{1}{12}$ $\frac{23}{24}$

19. $-\frac{3}{10} + \frac{5}{20}$ $-\frac{1}{20}$

20. $\frac{7}{12} - \left(-\frac{1}{3}\right)$ $\frac{11}{12}$