

3:05 | Fractions and Grouping Symbols

Name: _____

Class: _____

Examples

$$\begin{aligned}
 1 \quad & \frac{x+1}{3} + \frac{x-2}{3} \\
 &= \frac{(x+1) + (x-2)}{3} \\
 &= \frac{2x-1}{3}
 \end{aligned}$$

$$\begin{aligned}
 2 \quad & \frac{m+3}{3} - \frac{2m-1}{4} \\
 &= \frac{4(m+3)}{12} - \frac{3(2m-1)}{12} \\
 &= \frac{4(m+3) - 3(2m-1)}{12} \\
 &= \frac{4m+12-6m+3}{12} \\
 &= \frac{-2m+15}{12}
 \end{aligned}$$

Exercise

Simplify each of the following.

1 a $\frac{m}{4} + \frac{m-3}{4}$

b $\frac{2m-1}{5} + \frac{1-3m}{5}$

c $\frac{m-3}{2} + \frac{3m-4}{2}$

2 a $\frac{x+1}{4} + \frac{x+2}{3}$

b $\frac{2x-1}{4} + \frac{x-5}{3}$

c $\frac{2a+3}{5} + \frac{a-5}{4}$

3 a $\frac{y+1}{3} - \frac{y}{3}$

b $\frac{2a}{5} - \frac{a+1}{5}$

c $\frac{m-4}{3} - \frac{3m+2}{3}$

4 a $\frac{3a+2}{2} - \frac{a+2}{3}$

b $\frac{3m-5}{3} - \frac{m-1}{2}$

c $\frac{1-4x}{3} - \frac{3x-2}{4}$

5 a $\frac{m-1}{4} + \frac{m-2}{3} + \frac{m-5}{2}$

b $\frac{x+y-4}{2} - \frac{x-y-2}{3}$

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1 a $\frac{2m-3}{4}$

b $\frac{-m}{5}$

c $\frac{4m-7}{2}$

2 a $\frac{7x+11}{12}$

b $\frac{10x-23}{12}$

c $\frac{13a-13}{20}$

3 a $\frac{1}{3}$

b $\frac{a-1}{5}$

c $\frac{-2m-6}{3}$

4 a $\frac{7a+2}{6}$

b $\frac{3m-7}{6}$

c $\frac{10-25x}{12}$

5 a $\frac{13m-41}{12}$

b $\frac{x+5y-8}{6}$

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