

5.5 Key Concepts 3 Adding or Subtracting Rational Numbers Worked Example

Example: Evaluate $\frac{3}{5} + \left(-1\frac{1}{3}\right)$.

Solution: Change the mixed number to an improper fraction. Find the lowest common denominator. Add or subtract using correct sign rules.

$$\begin{aligned}\frac{3}{5} + \left(-1\frac{1}{3}\right) &= \frac{3}{5} - \frac{4}{3} \\ &= \frac{9}{15} - \frac{20}{15} \\ &= -\frac{11}{15}\end{aligned}$$

Practice:

1. Evaluate $-\frac{4}{9} + \left(-1\frac{2}{3}\right)$.

2. Evaluate $-\frac{4}{7} - \left(-1\frac{3}{14}\right)$.

Answers: 1. $-2\frac{1}{9}$. 2. $\frac{9}{14}$.