

Objective: TSWBAT add and subtract  
fractions and mixed numbers

To add or subtract fractions and mixed numbers with unlike denominators, first rewrite the fractions using the least common denominator (LCD).

Example 1

$$2\frac{3}{4} - 5\frac{1}{3} \quad 2\frac{3}{4} = \frac{11}{4} = \frac{33}{12}$$

$$5\frac{1}{3} = \frac{16}{3} = \frac{64}{12}$$

$$\frac{33}{12} - \frac{64}{12} = \textcircled{-\frac{31}{12}}$$

$$12 \overline{) 31} \quad \textcircled{-2\frac{7}{12}}$$
$$\underline{24}$$
$$7$$

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②

$$\frac{5}{6} + \left(-\frac{1}{2}\right)$$

$$\frac{5}{6} = \frac{5}{6}$$

$$\left(-\frac{1}{2}\right) = \left(-\frac{3}{6}\right)$$

$$\frac{2}{6} = \frac{1}{3}$$

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③

$$6\frac{1}{4} - 2\frac{3}{8}$$

$$6\frac{1}{4} = \frac{25}{4} = \frac{50}{8}$$

$$- 2\frac{3}{8} = \frac{19}{8} = \frac{19}{8}$$

$$\frac{31}{8} = 3\frac{7}{8}$$

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4

$$1\frac{5}{8} + \left(-2\frac{1}{2}\right) \quad 1\frac{5}{8} = \frac{13}{8} = \frac{13}{8}$$

$$2\frac{1}{2} = \frac{5}{2} = \frac{20}{8}$$

$$\frac{33}{8} = 4\frac{1}{8}$$

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5

$$-10 - \left(3\frac{11}{12}\right) = -13\frac{4}{12}$$

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⑥

$$\frac{1}{2} + d = -3\frac{1}{5} - \frac{1}{2}$$

$$-\frac{1}{2} \quad d = -3\frac{1}{5} - \frac{1}{2} = -\frac{16}{5} - \frac{1}{2} = -\frac{32}{10} - \frac{5}{10}$$
$$-\frac{37}{10} = -3\frac{7}{10}$$

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⑦

$$m - 3\frac{2}{3} = 1\frac{1}{6} + 3\frac{2}{3}$$

$$\begin{array}{r} +3\frac{2}{3} \\ \hline 0 \end{array}$$

$$m = 1\frac{1}{6} + 3\frac{2}{3} = \frac{7}{6} + \frac{11}{3} = \frac{7}{6} + \frac{22}{6}$$

$$\left(\frac{29}{6}\right) = \left(4\frac{5}{6}\right)$$