Reteach

Adding and Subtracting Mixed Numbers

You can use what you know about improper fractions to add and subtract mixed numbers.

To find the sum or difference of mixed numbers, first write the mixed numbers as improper fractions.

A. \[3\frac{1}{4} + 2\frac{1}{3}\]
   \[= \frac{13}{4} + \frac{7}{3}\]

B. \[4\frac{1}{2} - 2\frac{2}{3}\]
   \[= \frac{9}{2} - \frac{8}{3}\]

Next, find equivalent fractions with a least common denominator.

A. \[= \frac{39}{12} + \frac{28}{12}\]
   \[= \frac{67}{12}\]

B. \[= \frac{27}{6} - \frac{16}{6}\]
   \[= \frac{11}{6}\]

Then add or subtract the like fractions.

A. \[= \frac{57}{12}\]
   \[= \frac{5}{12}\]

B. \[= \frac{5}{6}\]
   \[= 1\frac{5}{6}\]

Write the answer as a mixed number in simplest form.

A. \[= 5\frac{7}{12}\]
   \[= 5\frac{7}{12}\]

B. \[= 1\frac{5}{6}\]
   \[= 1\frac{5}{6}\]

So, \(3\frac{1}{4} + 2\frac{1}{3} = 5\frac{7}{12}\).

So, \(4\frac{1}{2} - 2\frac{2}{3} = 1\frac{5}{6}\).

Find each sum or difference. Write your answer in simplest form.

1. \[1\frac{1}{4} + 1\frac{1}{2}\]
   \[= \frac{5}{4} + \frac{3}{2}\]
   \[= \frac{5}{4} + \frac{6}{4}\]
   \[= \frac{11}{4}\]

2. \[2\frac{1}{6} + 1\frac{2}{3}\]
   \[= \frac{14}{6} + \frac{5}{3}\]
   \[= \frac{14}{6} + \frac{10}{6}\]
   \[= \frac{24}{6}\]

3. \[2\frac{1}{8} + 4\frac{1}{2}\]
   \[= \frac{17}{8} + \frac{9}{2}\]
   \[= \frac{17}{8} + \frac{18}{8}\]
   \[= \frac{35}{8}\]

4. \[4\frac{1}{3} + 1\frac{1}{2}\]
   \[= \frac{13}{3} + \frac{3}{2}\]
   \[= \frac{13}{3} + \frac{6}{6}\]
   \[= \frac{25}{6}\]

5. \[2\frac{3}{5} + 1\frac{1}{10}\]

6. \[3\frac{1}{6} + 1\frac{1}{12}\]

7. \[2\frac{5}{8} - 1\frac{1}{4}\]

8. \[5\frac{2}{3} - 2\frac{1}{4}\]