

Problems: *Add or subtract more than two fractions*

Example: *Simplify the following fractions*

$$\frac{1}{4} + 8\frac{7}{20} + 5\frac{6}{8} - \frac{9}{10}$$

$$= \frac{1 \times 10}{4 \times 10} + 8\frac{7 \times 2}{20 \times 2} + 5\frac{6 \times 5}{8 \times 5} - \frac{9 \times 4}{10 \times 4}$$

$$= \frac{10}{40} + 8\frac{14}{40} + 5\frac{30}{40} - \frac{36}{40}$$

$$= (8+5)\frac{10+14+30-36}{40}$$

$$= 13\frac{\overset{9}{\cancel{18}}}{\cancel{40} 20} = 13\frac{9}{20}$$

Find the lcd of 4, 20, 8 and 10 as follows;

4	4, 8, 12, 16, 20, 24, 28, 32, 36, 40
20	20, 40
8	8, 16, 24, 32, 40
10	10, 20, 30, 40

So, lcd = 40

Add or subtract the whole numbers according to the given signs, here we have two mixed numbers adding together, hence we add 8 and 5 to get 13 as new whole number.

Add or subtract all the numerators according to their signs as shown. Write the common denominator.

Problem: *Simplify the following:*

1. $6\frac{8}{12} + 5\frac{4}{9} - 1\frac{5}{6}$