

Adding & Subtracting Fractions

I. Steps

A. w/ Subtraction: Use Same Change Opposite.

ex: $-\frac{1}{6} - \frac{4}{9}$

$$-\frac{1 \times 3}{6 \times 3} + \left(-\frac{4 \times 2}{9 \times 2} \right)$$

6, 12, 18 9, 18

1) Find the L.C.D. & rewrite the fractions.

$$-\frac{3}{18} + \left(-\frac{8}{18} \right) = \boxed{-\frac{11}{18}}$$

2) Adding? or Subtracting?
 Same Signs Diff. Signs

3) Simplify your answer, if necessary

II. Mixed #'s
 A. Change the mixed #'s
 to improper fractions

ex: $\frac{5}{12} + \left(-2 \frac{1}{8}\right)$

$$\frac{5 \cdot 2}{12 \cdot 2} + \left(\frac{-17 \cdot 3}{8 \cdot 3} \right)$$

12, 24 8, 16, 24

$$\frac{10}{24} + \left(\frac{-51}{24} \right) = \frac{-41}{24}$$

$$\text{ex: } -\frac{2}{3} + \left(1\frac{1}{6}\right) - \frac{5}{8}$$

$$-\frac{1}{8}$$