Adding & Subtracting Fractions (with Negatives)

11/1

Adding & Subtracting Fractions

1. Find **Least Common Denominator** (LCD)
2. Re-write fractions with common denominator
   a. Multiply by common factor
3. Follow **integer rules** to add/subtract **numerators**
4. **KEEP** denominator the same
5. Simplify (if possible)

Examples *Keep Negative w/ numerator

① $\frac{9}{10} + \left(-\frac{1}{2}\right)$ ×5

$\frac{9}{10} + \frac{-5}{10}$

$\frac{4}{10} = \frac{4 \div 2}{10 \div 2} = \boxed{\frac{2}{5}}$

② $4\times -\frac{1}{3} + -\frac{1}{4} \times 3$

$\frac{-4}{12} + \frac{-3}{12}$

$\boxed{\frac{-7}{12}}$

③ $\left(-\frac{5}{6}+\frac{2}{3}\right)+\frac{11}{6}$ (×2)

$\left[\frac{-5}{6}+\frac{4}{6}\right]+\frac{11}{6}$

$\frac{-1}{6}+\frac{11}{6}=\frac{10}{6}=1\frac{4}{6}=\frac{4\div2}{6\div2}=\boxed{1\frac{2}{3}}$

④ $\frac{1}{2}-\left(-\frac{2}{5}\right)$ (×5, ×2)

$\frac{5}{10}+\frac{4}{10}$

$\boxed{\frac{9}{10}}$

⑤ $-\frac{2}{3}-\frac{1}{2}$ (×2, ×3)

$\frac{-4}{6}-\frac{3}{6}$

$\frac{-7}{6}=\boxed{-1\frac{1}{6}}$

0

-4

-7

* Negative sign goes w/ the whole #.