

Adding Fractions

- Must have common denominators in order to add
- To add fractions with a common denominator, you only add the numerators. The denominator is UNCHANGED.

$$\text{Ex: } \frac{2}{7} + \frac{3}{7} = \frac{5}{7} \text{ ;} \quad \text{NOT } \frac{5}{14} \text{ ;}$$

- Reduce your final answer, if you can
- If your answer is an improper fraction, change it to a mixed number.

Subtracting Fractions

- Must have common denominators in order to subtract.
- To subtract fractions with a common denominator, you only subtract the numerators. The denominator is UNCHANGED.

$$\text{Ex: } \frac{5}{7} - \frac{2}{7} = \frac{3}{7} \text{ ;} \quad \text{NOT } \frac{3}{0} \text{ ;}$$

- Reduce your final answer if possible.
- Change an improper fraction to a mixed number.

Adding & Subtracting Fractions with Different Denominators

- Find a common denominator for the fractions. The best way is to find the least common multiple of the denominators. If you can't find the LCM, multiply the denominators together (you will have to reduce your answer later).
- Once you have found a common denominator, add or subtract as normal.

$$\text{Ex: } \frac{5}{6} = \frac{15}{18}$$

$$+ \frac{1}{9} = \frac{2}{18}$$

$$\frac{17}{18}$$

$$\frac{5}{6} = \frac{45}{54}$$

$$- \frac{1}{9} = \frac{6}{54}$$

$$\frac{39}{54} \div 3 = \frac{13}{18}$$