MUST have

Common Denominator

LCM in denominator

- Change numerator and denominator by **mult. them both** by the same number.
- **Add** the numerators and **Keep** denominators.
- **Simply**, if possible.

*Reduce or change to a mixed #

Example

$$\frac{1}{3}\overset{*2}{+}\frac{5}{6}$$

LCM = 6
3: 3, 6, 9, 12.
6: 6, 12, 18, 24

$$\frac{2}{6}+\frac{5}{6}=\frac{7}{6}=1\frac{1}{6}$$

LCM 3+8: 24
3: 3, 6, 9, 12, 15, 18, 24
8: 8, 16, 24, 32

Example

$$\frac{2\overset{*8}{}}{3\overset{*8}{}}-\frac{3\overset{*3}{}}{8\overset{*3}{}}$$

$$\frac{16}{24}-\frac{9}{24}=\frac{7}{24}$$

$$\frac{1}{8}-\frac{3}{8}=\frac{-2\div 2}{8\div 2}=\frac{-1}{4}$$

MUST have

Common denominator

*** LCM ***

- Change numerator and denominator by **multiplying** by the same number.
- **Subtract** the numerators and **Keep** denominators.
- **Simplify**, if possible.

MUST HAVE ***common denominators*** for fractional part of number.

- ~~Add~~ **Change to improper Fractions**
- ~~Add~~ **Find common denom**
- ~~If the fractional part is an~~ **Change num. + denom.** ~~fraction, change to a~~ **Add num, Keep denom.** ~~and add to the whole number.~~
- **Simplify**, if possible.

*reduce or change to mixed #

Example

$$3\frac{4}{9}+1\frac{5}{6}$$

$$\frac{31\overset{*2}{}}{9\overset{*2}{}}+\frac{11\overset{*3}{}}{6\overset{*3}{}}$$

LCM = 18
9: 9, 18, 27, 36
6: 6, 12, 18, 24

$$\frac{62}{18}+\frac{33}{18}$$

$$\frac{95}{18}=5\frac{5}{18}$$

Example

$$3\frac{4}{9}-1\frac{5}{6}$$

$$\frac{31}{9}-\frac{11}{6}$$

$$\frac{62}{18}-\frac{33}{18}$$

$$\frac{29}{18}=1\frac{11}{18}$$

MUST HAVE ***common denominators*** for fractional part of number.

- Subtract _____
- Subtract whole numbers.
- You may have to "borrow" by taking one away from the first whole number. The new numerator is found by adding the numerator and _____.
- _____, if possible.