

# Adding and Subtracting Fractions and Mixed Numbers

## Steps to Add and Subtract Fractions

### 1. Rename fractions with a common denominator.

\*Whatever you multiply the denominator by you must multiply the numerator by to keep the fractions equivalent!

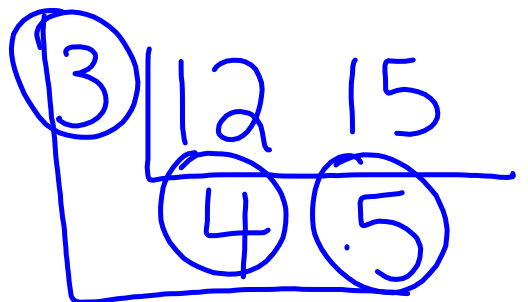
### 2. Add/Subtract numerators and whole numbers

### 3. Denominator stays the same

### 4. Simplify (if needed)

multiply top  
and bottom  
by the same  
#.

$$\frac{7}{12} + \frac{8}{15}$$
$$\frac{7 \cdot 5}{12 \cdot 5} = \frac{35}{60}$$
$$\frac{8 \cdot 4}{15 \cdot 4} = \frac{32}{60}$$



$$3 \cdot 4 \cdot 5 = 60$$

↑  
Common denominator

$$\frac{35}{60} + \frac{32}{60} = \frac{67}{60}$$

← can't leave improper (Divide)

$$60 \overline{) 67} \\ \underline{60} \\ 7$$

7
60

$$5 \frac{9 \cdot 3}{11 \cdot 3} + 5 \frac{1 \cdot 11}{3 \cdot 11}$$

$$\underline{5} \frac{27}{33} + \underline{5} \frac{11}{33}$$

$$10 \frac{38}{33}$$



11	5
11	33

$$33 \overline{) 38} \begin{array}{r} 1 \\ \underline{33} \\ 5 \end{array} \frac{5}{33}$$