10/18 **Literal Equations**

$\hookrightarrow$ "letters"

Inverse Operations (Opposites)

add + , subtract −

mult * , div. ÷

fraction , reciprocal (flip)

EXS: ① $ax + b = c$ Solve for x.

$$\underline{\quad\quad -b \quad\quad -b \quad\quad} \hookrightarrow \text{get } x \text{ by itself.}$$

$$\frac{ax}{a} = \frac{c-b}{a}$$

$$x = \frac{c-b}{a}$$

② $ax + b = c$ Solve for b.

$$\underline{-ax \quad\quad\quad -ax} \hookrightarrow \text{get } b \text{ by itself.}$$

$$b = c - ax$$

③ $3y - x = m$ Solve for y.

$$\underline{\quad\quad +x \quad\quad +x \quad\quad}$$

$$\frac{3y}{3} = \frac{m+x}{3}$$

$$11 = m + x$$

$$y = \frac{m + x}{3}$$

④ $\dfrac{d}{V} = \dfrac{m \cancel{x}}{\cancel{x}_1}$ Solve for m.

$$\frac{d}{V} = m$$

$$m = \frac{d}{V}$$

⑤ $c^2 e = \dfrac{m}{\cancel{c^2}_1} \cdot \dfrac{c^2}{1}$ Solve for m.

$$c^2 e = m$$

$$m = c^2 e$$