

## Literal Equations

**Literal equation** - two or more variables in the equation

**Formula** - an equation that states a rule for a relationship among quantities (one kind of literal equation)

Steps to solve:

- 1) Identify the variable you are being asked to solve for in the equation *(which variable needs to be isolated)*
- 2) Use inverse operations to isolate that variable

Ex:  $d = rt$

solve for  $t$

$$\frac{d}{r} = \frac{rt}{r}$$

$$t = \frac{d}{r}$$

Ex:  $F = \frac{9}{5}C + 32$

solve for  $C$

$$\frac{5}{9}(F - 32) = \frac{5}{9}(\frac{9}{5}C)$$

$$C = \frac{5}{9}(F - 32)$$

Function form: solve for  $y$ ; so you have  $y =$  the rest of the equation

Ex: Rewrite  $3x + 2y = 8$  so  $y$  is a function of  $x$ . *(solve for  $y$ )*

$$2y = \frac{-3x + 8}{2}$$

$$y = \frac{3}{2}x + 4$$