

# HOMWORK!

## I. Linear Equations

Slope-Intercept form of the Equation of a line

$$y = mx + b$$

1. Write the equation of a line with a slope of  $\frac{3}{4}$  and passing through the point  $(8, 3)$ .
2. Write the equation of a line parallel to the line  $3x + 4y = 12$  and passing through the point  $(-12, 5)$ .
3. Write the equation of a line that passes through the points  $(6, 7)$  and  $(-4, 2)$ .

## II. Functions

$$\text{Use } f(x) = 3x + 5 \text{ and } g(x) = x^2 - x - 12$$

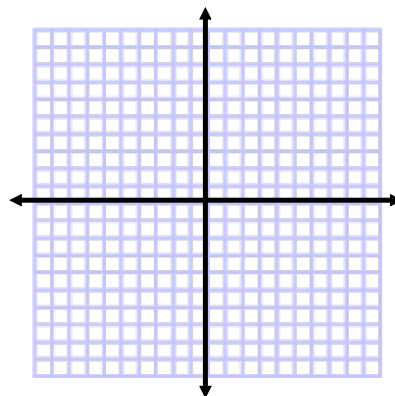
4. Find  $f(x) + g(x)$
5. Find  $f(x) \cdot g(x)$
6. Find  $f(g(x))$
7. Find  $g(f(x))$

### III. Systems of Linear Equations

3 Methods of Solving

1. Graphing
2. Substitution
3. Linear Combinations

8.  $x - 3y = -3$   
 $2x + y = 8$



9.  $-4x - 10y = 12$   
 $x + 5y = 2$

10.  $9x - 7y = 25$   
 $-3x + 2y = -11$