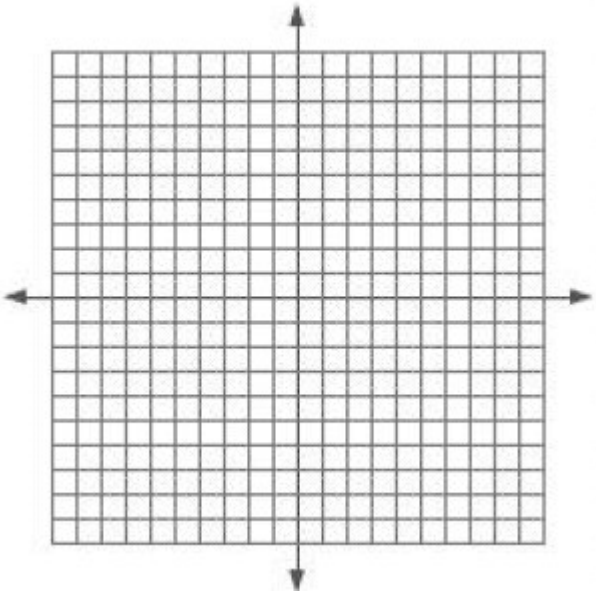MA20SA
COORDINATE GEOMETRY
WORKSHEET 1
PLOTTING LINES

Name: _____
Date: _____

1.   What is the slope and y-intercept of the following equations?
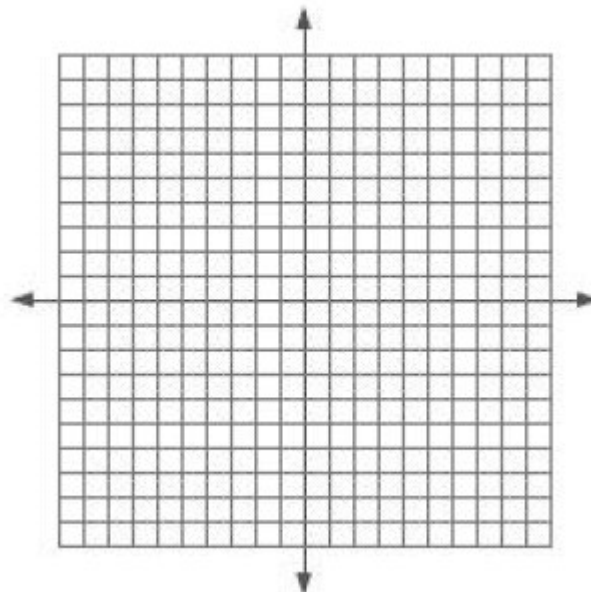
$y = 3x + 2$ Slope (m) = _____ Y-Intercept (b) = _____	$y = 2x - 5$ Slope (m) = _____ Y-Intercept (b) = _____	$y = -3x + 2$ Slope (m) = _____ Y-Intercept (b) = _____
$y = -x + 2$ Slope (m) = _____ Y-Intercept (b) = _____	$y = \dfrac{3}{5}x + 2$ Slope (m) = _____ Y-Intercept (b) = _____	$y = -\dfrac{5x}{8} - 4$ Slope (m) = _____ Y-Intercept (b) = _____

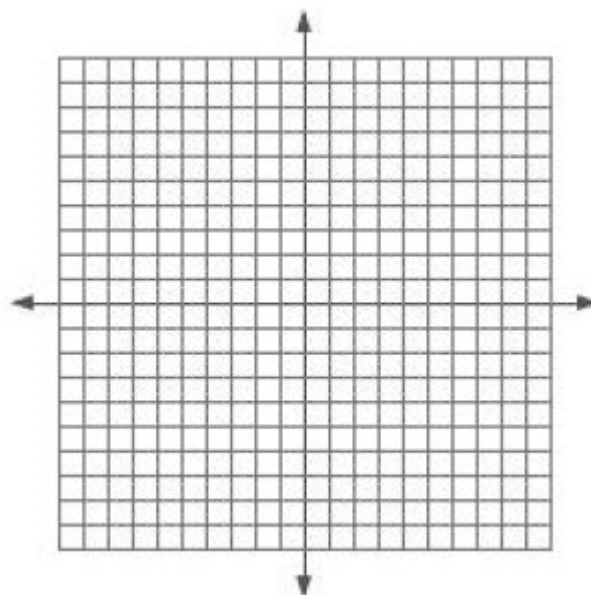2.   Plot the lines given the slope and intercept form.

a. $y = 3x + 2$ $slope = m = \dfrac{rise}{run} = \dfrac{3}{1}$ *for every 1 you run right, you rise 3*	

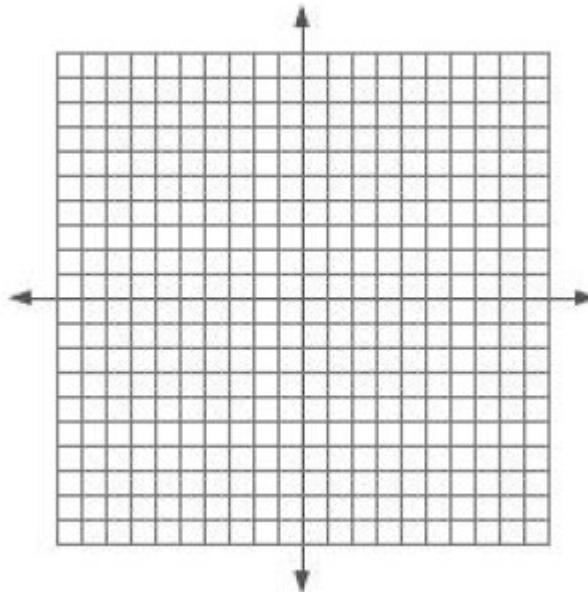b. $y = -3x + 5$

$$slope = m = \frac{rise}{run} = \frac{-3}{1}$$

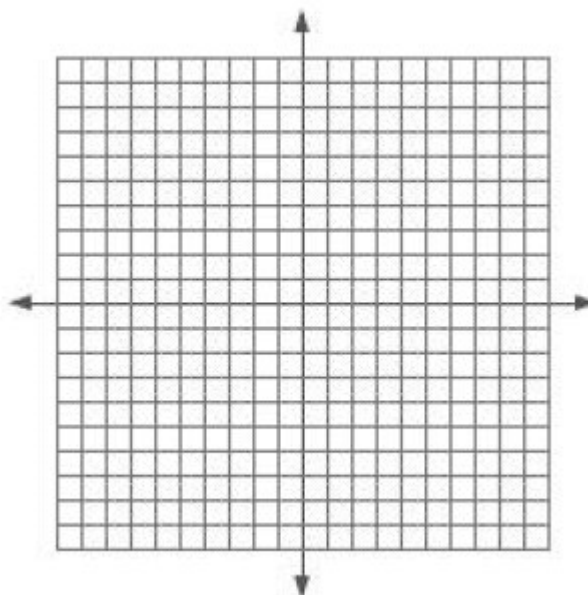*for every 1 you run right, you drop 3*
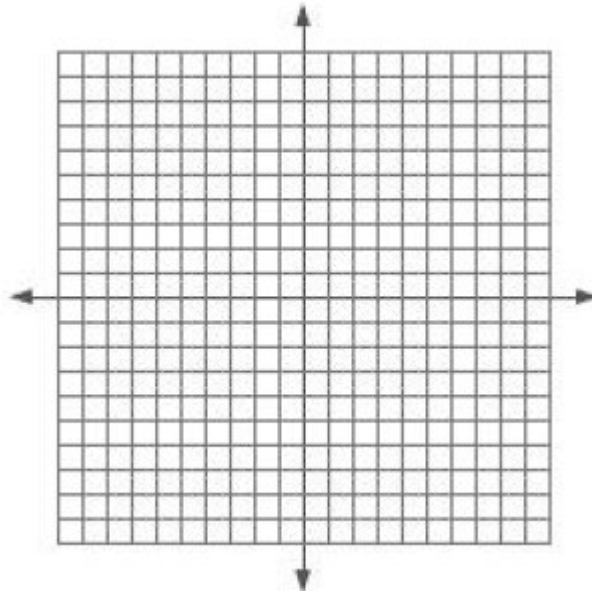
c. $y = \frac{3}{8}x + 4$

d. $y = -\dfrac{3}{5}x + 7$

e. $y = 0.25x - 3$
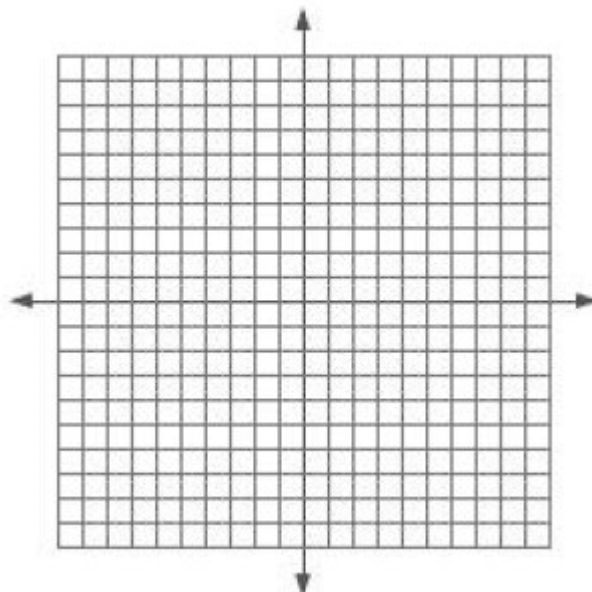*Hint: Slopes are a lot easier as fractions!*

f. $y = -2.6x - 7$

3. Plot the lines given the Standard form

a. $3x - 2y = 6$
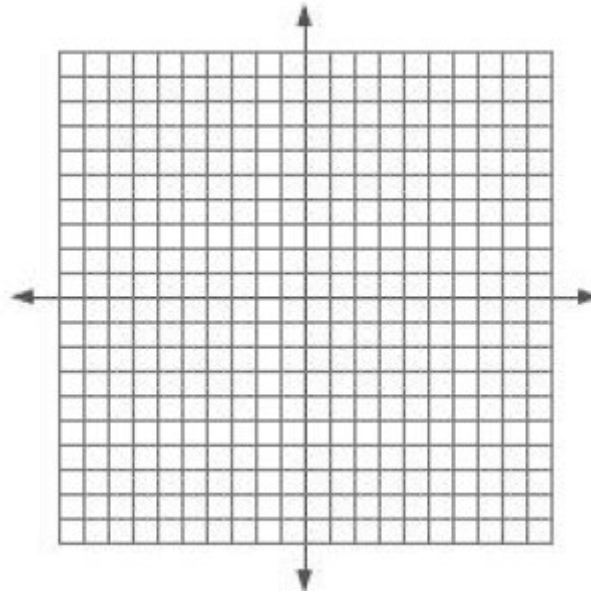
x	y
0	
	0

When x = 0 , y= _____
When y = 0, x = _____

b. $20x + 10y = 100$

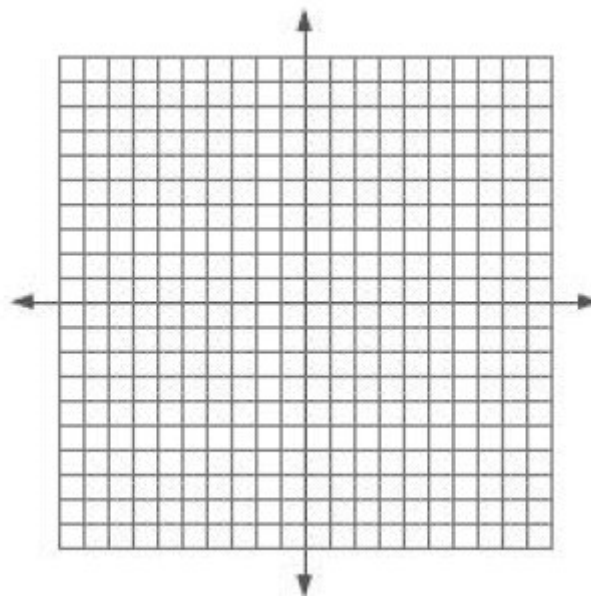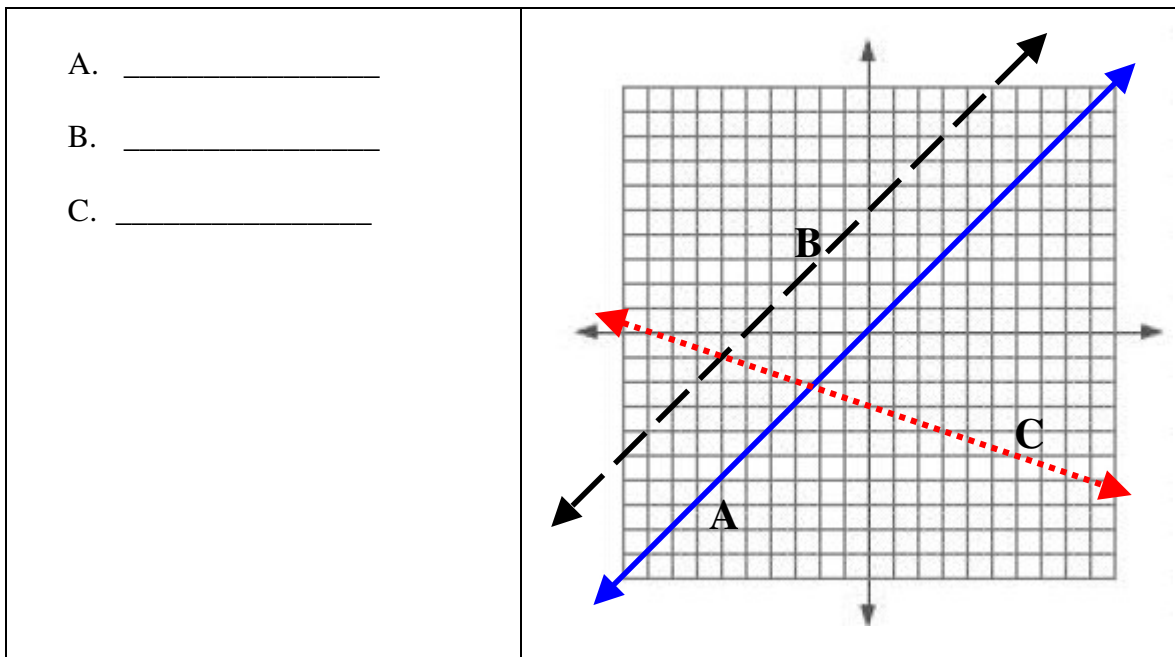| x	y
0	
	0

When x = 0 , y= _____
When y = 0, x = _____

c. $3x + 5y = 75$

4.   What is the equation of each of the labeled lines?

A. _____

B. _____

C. _____

B

C

A

Formulas

Slope = m $= \dfrac{Rise}{Run} = \dfrac{(y_2 - y_1)}{(x_2 - x_1)}$

Slope-Intercept form of a line: $y = mx + b$ where m is slope and b is the y-intercept

Standard form of a line: $Ax + By = C$ where A, B, C are real numbers