Slope Intercept Form Worksheet: **CC Math I Standards Name: _____**

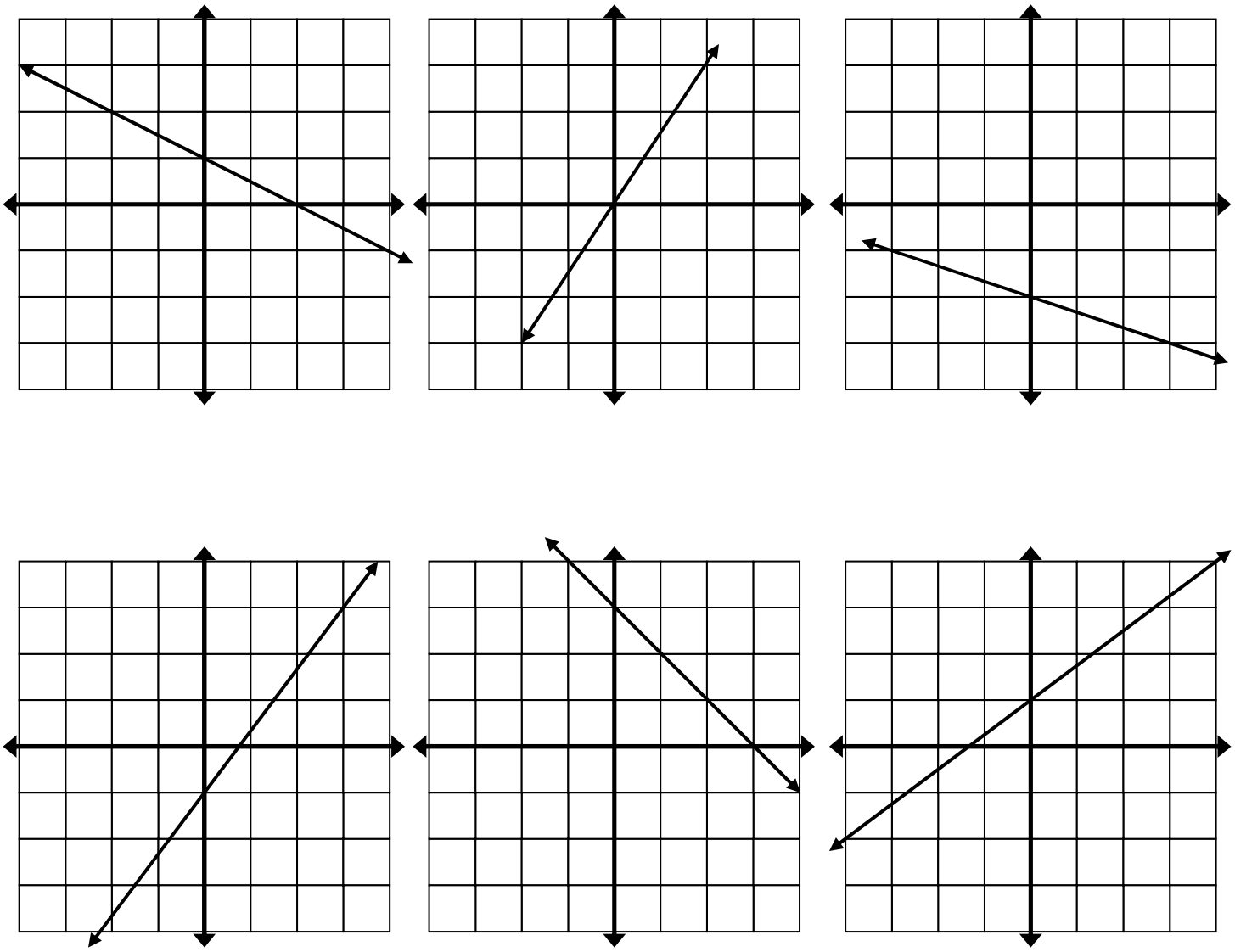
1) **Find the slope of the line through each pair of points.** $Slope = \frac{y_2 - y_1}{x_2 - x_1}$

a. (8, -7) and (5, -3).

b. (-5, 9) and (5, 11).

c. (-8, -4) and (-4, -9).

2) **For each graph: Write the equation of the line in SLOPE-INTERCEPT FORM**



3) **In each linear equation, identify the slope (m) and the y-intercept (b)**

a. $y = 4x - 5$

b. $y = 11 + \frac{2}{3}x$

c. $y = \frac{2}{3} - x$

d. $6 - \frac{9}{2}x = y$

e. $y = \frac{5}{2}x - \frac{19}{8}$

f. $-\frac{5}{4} - \frac{2}{7}x = y$

4) <u>Find the equation of the line in slope-intercept form</u> (y = mx + b)

a. Slope of 2 and y-intercept of -7

d. m = $-\frac{4}{7}$ through (14, 3)

g. m = -1 and (9, 4)

b. b = 4 and m = -5

e. (-5, 6) with slope = 3

h. (4, -6) and no slope

c. Slope = $\frac{3}{5}$ and (0, -2).

f. Slope= $\frac{2}{3}$ through (3, 4)

i. Slope = -7 and (-3, 16)

5) <u>Graph the line for the equation</u>:

5a) $y = \frac{3}{4}x - 3$

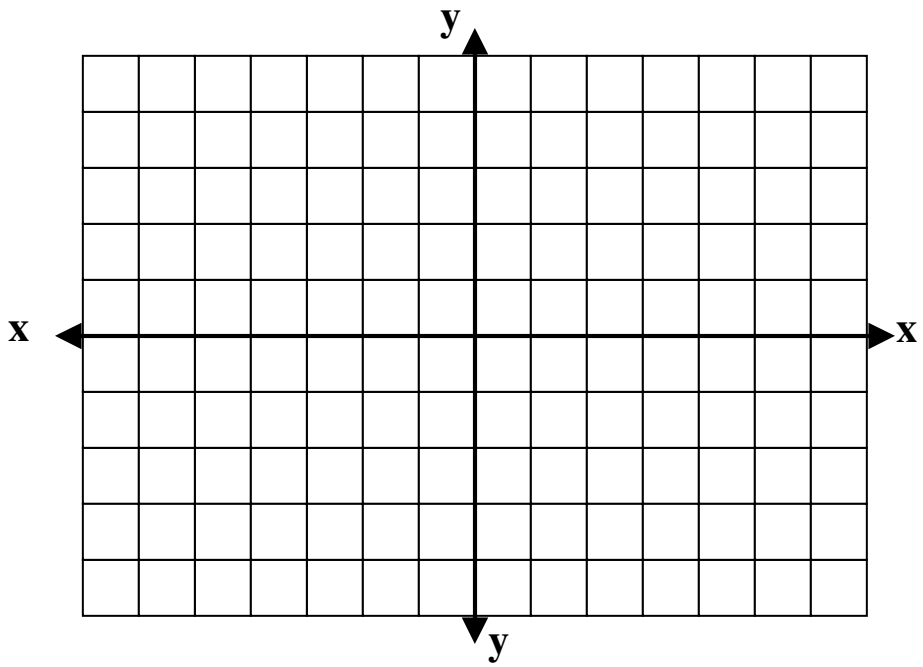
Slope = **Y-Intercept =**

5b) $4 - \frac{5}{3}x = y$

Slope = **Y-Intercept =**

5c) $\frac{2}{5}x = y$

Slope = **Y-Intercept =**



<u>Word Problem #1:</u> At the car rental company, you must play a flat rate of $130 and then a daily fee of $17 per day. Write a linear equation to describe the total cost, y, of renting the car for *x* days. What is the cost of renting a car for 9 days with this company?

<u>Word Problem #2:</u> A membership to the gym costs $25 per person in 1995. The membership cost has increased by an average of $6 per person for each year since 1995. Write a linear equation for the cost of a gym membership for one person since 1995.What is the cost of a gym membership in 2009?