

**Slope Intercept Form Worksheet: CC Math I Standards Name: \_\_\_\_\_**

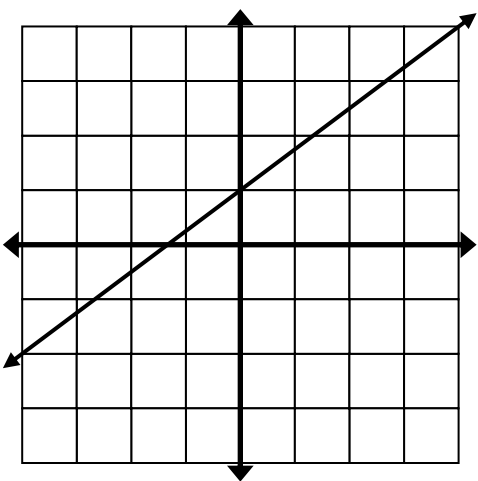
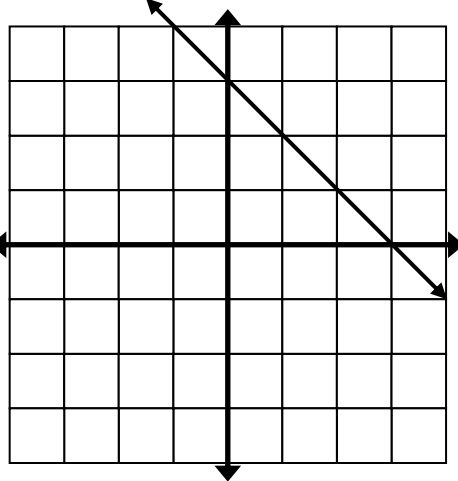
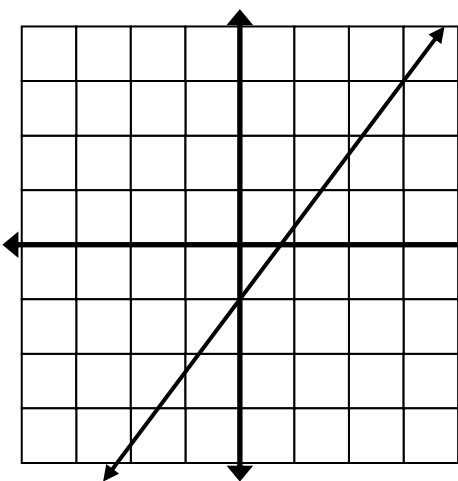
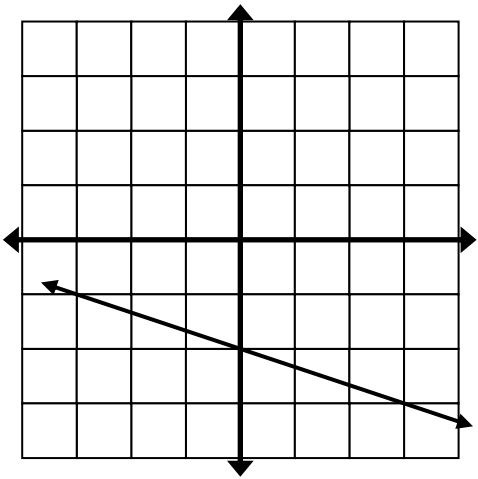
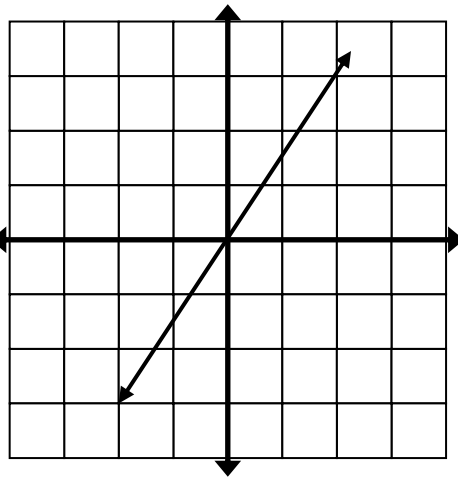
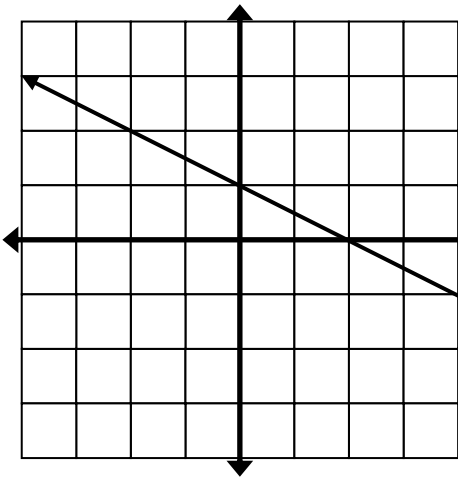
1) Find the slope of the line through each pair of points.  $Slope = \frac{y_2 - y_1}{x_2 - x_1}$

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.  $y = 4x - 5$

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

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

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

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

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

4) Find the equation of the line in slope-intercept form ( $y = mx + b$ )

- 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) Graph the line for the equation:

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

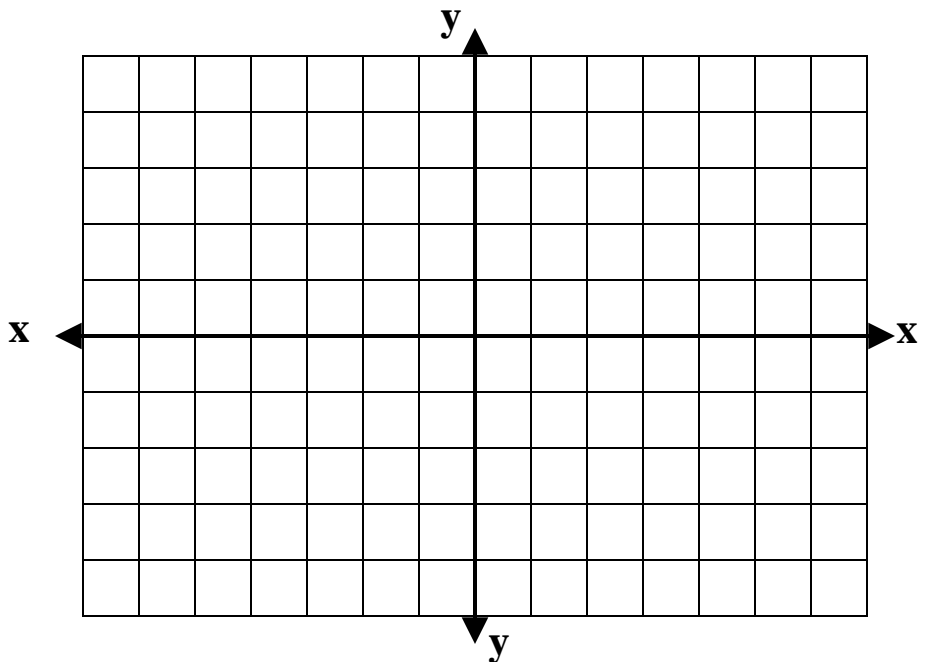
Slope =                      Y-Intercept =

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

Slope =                      Y-Intercept =

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

Slope =                      Y-Intercept =



**Word Problem #1:** At the car rental company, you must pay 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?

**Word Problem #2:** 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?