Name _____ Date _____ NTI Day #4

Show all steps on your own sheet of paper.

Slope-Intercept Form

Write the equation that describes each line in slope-intercept form.

1. slope = 4; *y*-intercept = –3

   $y =$ _____

2. slope = –2; *y*-intercept = 0

   $y =$ _____

3. slope = $-\frac{1}{3}$; *y*-intercept = 6

   $y =$ _____

4. slope = $\frac{2}{5}$, (10, 3) is on the line.

   Find the *y*-intercept $y = mx + b$

   ____ = (____) ____ + *b*

   ____ = ____ + *b*

   ____ = *b*

   Write the equation: $y =$ _____

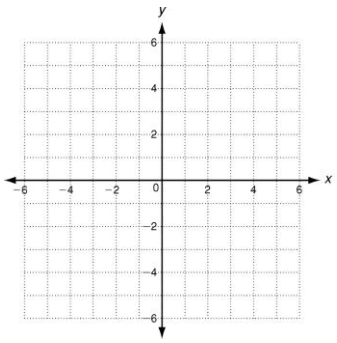
Write each equation in slope-intercept form. Then graph the line described by the equation.

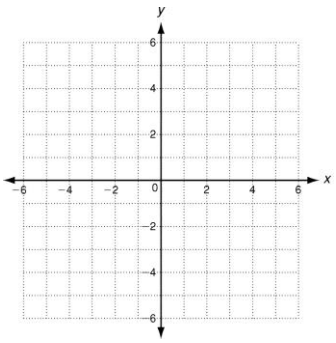
5. $y + x = 3$

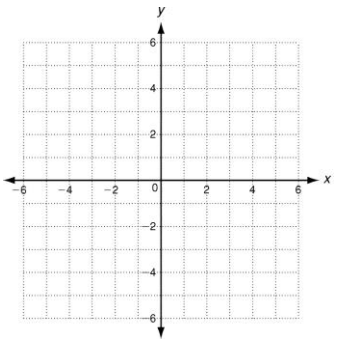
6. $y + 4 = \frac{4}{3}x$

7. $5x - 2y = 10$

_____ _____ _____







8. Daniel works as a volunteer in a homeless shelter. So far, he has worked 22 hours, and he plans to continue working 3 hours per week. His hours worked as a function of time is shown in the graph.

   a. Write an equation that represents the hours Daniel will work as a function of time. _____

   b. Identify the slope and *y*-intercept and describe their meanings. _____

   _____

   c. Find the number of hours worked after 16 weeks.

   _____