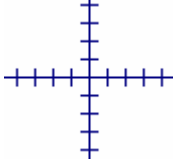


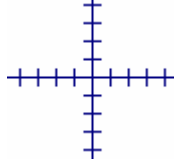
Chapter 4 Review
Day 3

1) Sketch a line with

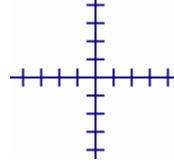
a) a positive slope



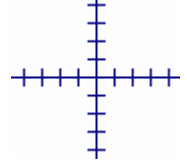
b) a negative slope



c) a slope of zero

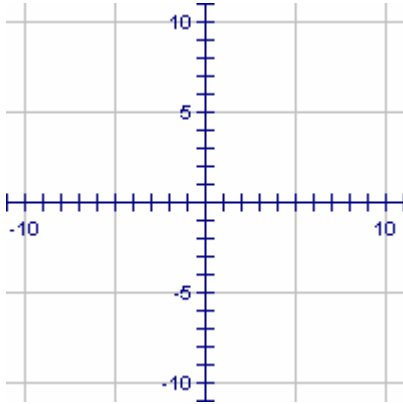


d) No slope

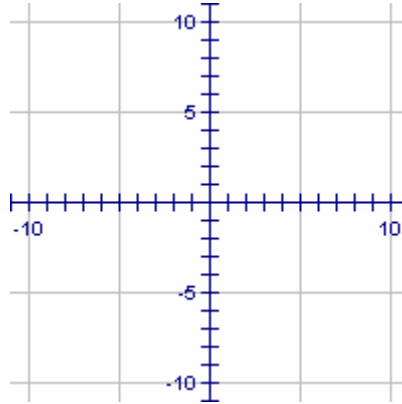


2) On the axes below, graph the line given

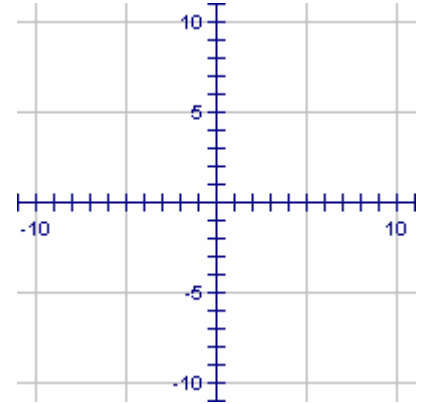
a) $y = 3 - \frac{4}{7}x$



b) $y = -3 - 2(x - 5)$



c) $y = 4$



3) The following equations are either written in slope-intercept form, point-slope form, or neither. Circle the form each is written in.

a) $y = -8 + 4x$	Slope-intercept	Point-slope	Neither
b) $y = -3 + \frac{1}{2}x$	Slope-intercept	Point-slope	Neither
c) $y = -\frac{3}{2}x + 9$	Slope-intercept	Point-slope	Neither
d) $y = 5 + \frac{7}{3}(x + 9)$	Slope-intercept	Point-slope	Neither
e) $y = -3 + 8(x - 1)$	Slope-intercept	Point-slope	Neither
f) $2x + 4y = 9$	Slope-intercept	Point-slope	Neither

4) Consider the equation $y = -3 - 2(x - 5)$. Showing your work appropriately, find the following.

a) If $x = 3$, then $y = ?$

b) If $y = 3$, then $x = ?$

c) Check your graph for number (2b) to confirm that your answers for part (4a) and (4b).

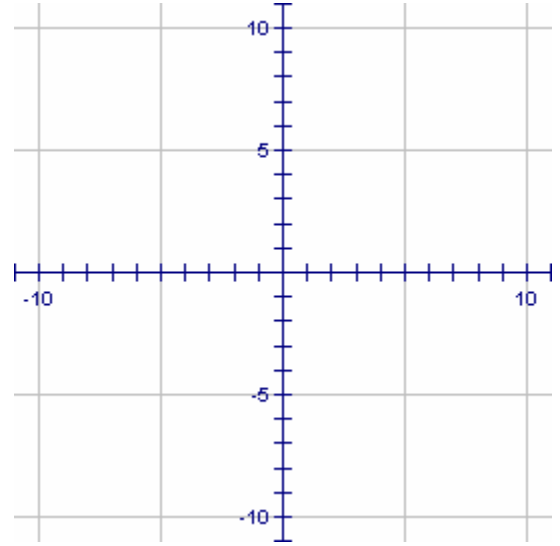
5) A line has a slope of $\frac{1}{3}$ and passes through the point (1,6).

- a) Graph the line on the axes at the right.
- b) Write the equation of the line in point-slope form.

c) Rewrite the equation in part (a) in slope-intercept form.

d) Using your answer from part (c) what is the y -intercept of the line?

e) Confirm that your answer to part (d) by looking at your graph.



6) The equation $2x + 3y = 12$ is an equation of a line written in another form, called “standard form”.

a) If $x = 0$, then find what value y must be. Then plot that point.

b) What special point is your answer for question (a)?

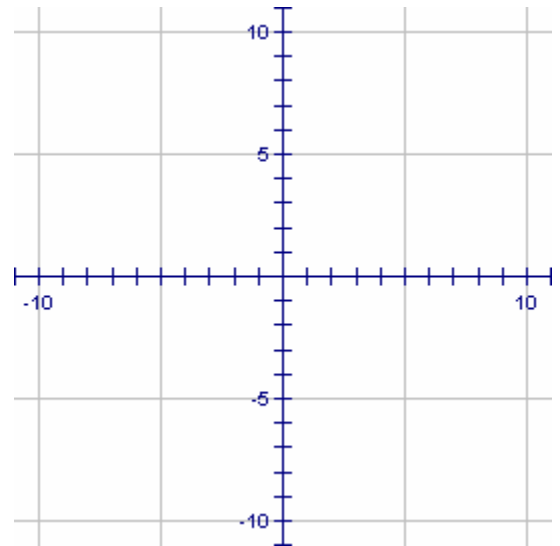
c) If $y = 0$, then find what value x must be. Then plot that point.

d) What special point is your answer for question (c)?

e) Draw the line that passes through the two points that you have plotted.

f) Calculate the slope of the line.

g) Write the equation of the line.



7) Challenge Problem: The graph at the right shows the average height (in centimeters) for kids aged 2 years to 10 years.

- a) Find the y -intercept of the line of fit.
- b) What is special about the y -intercept with regard to kids' heights?

