Chapter 6 Review

Part 1:

Find the slope of the line through each of the points.

a) (6,6) (6,-11)

b) (10, -14), (-2, 2)

c) (-7,-6), (-20,-1)

d) (-20,14), (11, -18)

Part 2:

Write the following equations in slope-intercept form, and then state the slope, y-intercept and x-intercept.

a) y= $\frac{2x}{5}$ -5

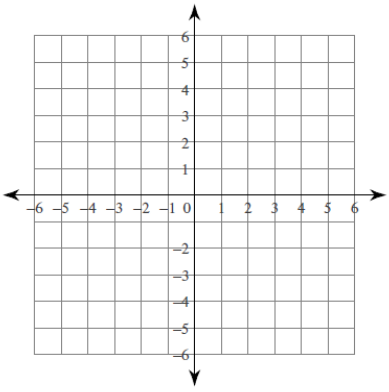
b) y= -3x -5

c) y= 6x - 3

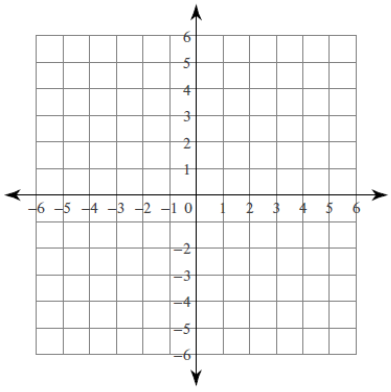
d) y= $\frac{9x}{2}$ -4

Part 3: Graph the following

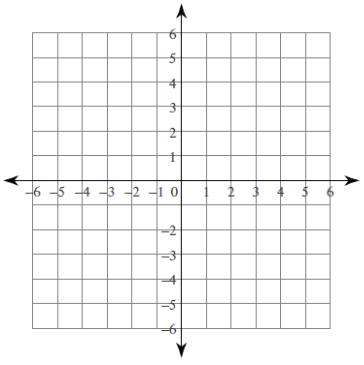
a) $y = \frac{6}{5}x - 2$



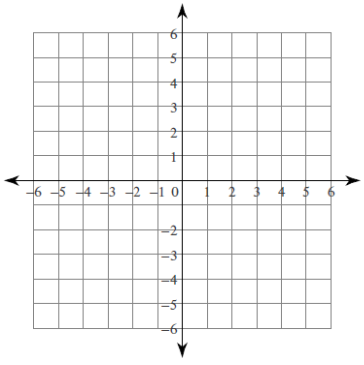
b) 2) $y = \frac{4}{3}x + 1$



c) $9x + y = 5$



d) $2x + y = 5$



Part 4:

Write the general form of the equation of each line given

a) Slope $= -\frac{3}{5}$, y-intercept $= 5$

b) Slope $= 9$, y-intercept $= 4$

c) slope= -2, x-intercept= -6

d) slope= $\frac{1}{2}$, x-intercept= -6

Part 6:
Write the equation of a line in point slope form and in then slope intercept form for each of the following:

a) slope = -5
point= (-4,9)

b) slope = -2/3
point= (5, -1)

c) point= (-6, -1) Point= (2,5)

Part 7:
Which of the following are perpendicular or parallel?

a) y= 3x +6, y = 3x -3

b) y= $\frac{-1}{2}$x -5, y = 2x + 5

c) (5,4) (11, -2) with (7,6) (3,2)

d) (7,6) (3,2) with (7,-3) (11,1)

Part 8:
Write the equation of a line, in point slope form for the following :

a) through: $(2, 0)$, parallel to $y = \frac{2}{3}x$

b) through: $(-2, 4)$, parallel to $y = -\frac{3}{2}x + 3$

c) through: $(2, 4)$, perp. to $y = -\frac{2}{7}x - 5$

d) through: $(5, 0)$, perp. to $y = -x + 5$

Part 9:
Write the equation of a line for the following:

a) Find the equation of a line that passes through (-2,4) and has ae slope perpendicular to y = 2x + 3.

b) Find the equation of a line that passes through the points (1,-3) and (-5,2)

c) Find the equation of a line that passes through the points (2,5) and (-11,-3)

d) Find the equation of a line that has the same x-intercept as this equation 6x +12 = 3y, and also passes through the point (3,-5).

Part 10:
Determine the distance and midpoint for the following lines

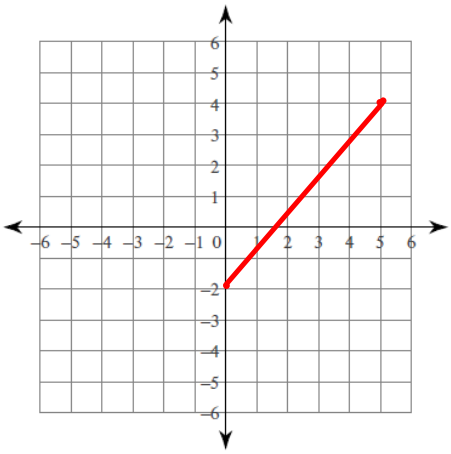
a) (-4,3) (5,6)

b) (0,-9) (-7, 2)

Part 3:
Sketch the graph of the following lines

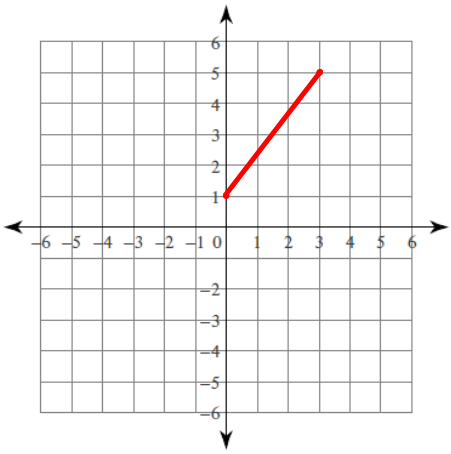
a)

1) $y = \frac{6}{5}x - 2$



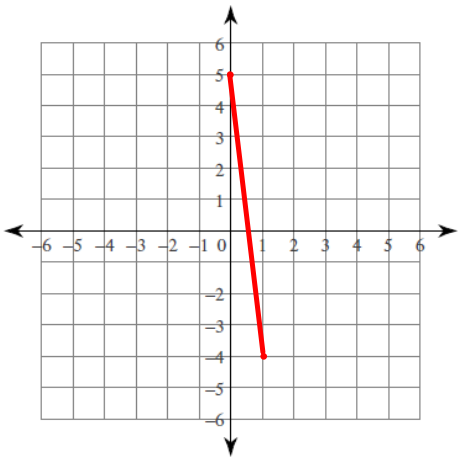
b)

2) $y = \frac{4}{3}x + 1$



y= -9x + 5

c) $9x + y = 5$



y= -2x + 5

d $2x + y = 5$