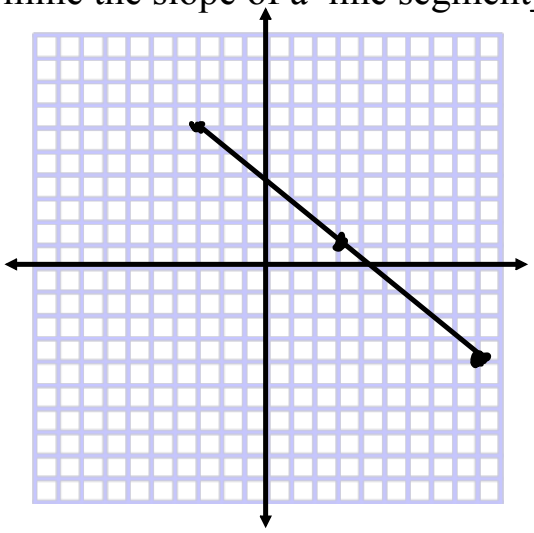
1) Determine the slope of a line segment **perpendicular** to this line



2)a) Determine the slope of a line that is **perpendicular** to the line through S(3,1) and R(8, -5)

b) Determine the slope of a line that is **parallel** to the line through M(-3, -4) and J(11, 2)

3) Slope of a line is $\frac{-1}{4}$

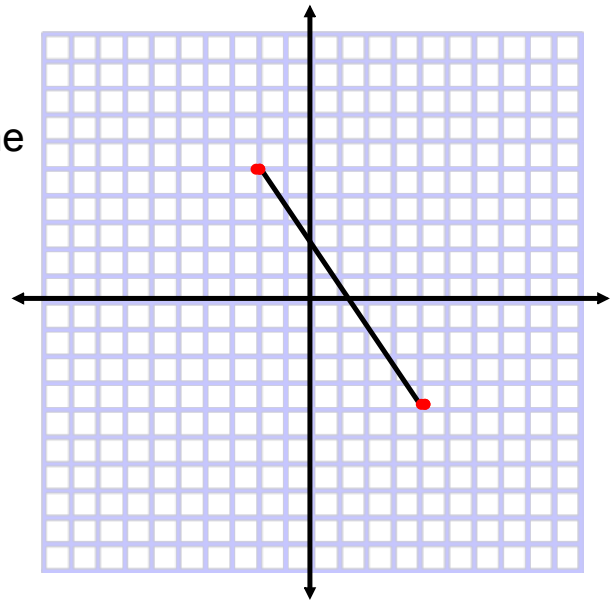
a) What is the slope of the line that is parallel to this line

b) What is the slope of the line that is perpendicularly to this line?

4) A line has ***x*-intercept 2** and ***y*-intercept -7** Determine the slope of a line a) **parallel** to this line. b) **Perpendicular** to this line

5) Draw a graph for $y = \frac{1x}{7} - 2$

6) Write an equation for the line



7) Fred works on appliances. Fred charges a initial fee of $30, plus a hourly fee of $20. Write an equation to represent the total cost, C dollars, for h hours.

8) write the point and slope from the following equations of a line

a) $y - 7 = \frac{-2}{3}(x + 2)$ b) $y + 4 = \frac{3}{4}(x - 10)$ c) $y - 7 = 3(x-9)$

9) Write an equation of a line in point-slope form for the following:

a) slope = $\frac{-2}{7}$, R(6, -1) b) m= 5, P(4, 11)

10) For the above questions (9a,b) convert the point-slope equation to slope-intercept equation

11) Determine the x-intercept for $y-8 = 2(x + 10)$

12) Determine the y-intercept for $y + 5 = 2(x - 6)$

13) Write the following equation in general form: $y = \frac{-2}{3}x - 7$

14) The coordinates of the endpoints of segments are given below. Are the two line segments **parallel, perpendicular, or neither**?
P(4,-3), U(16,5) and K(-5,2), F(7,-1)

15) ***Write an equation*** for the line that passes through W(-7, 12) and N(-4,3).

a) slope-point form

b) slope-intercept form

16) Write this equation in general form:

a) $y = \frac{-4}{5}x + 6$ b) $y-5 = \frac{2}{3}(x+7)$

17) For the following line determine: $3\mathbf{x} + \mathbf{6y - 24 = 0}$

the slope ii) the y- intercept iii) the x-intercept

18) ***Write an equation*** for the line **that passes through Z(–1, 3)** and is:
(leave answer in slope intercept form)

perpendicular to the line $y = \frac{-5}{4}x - 3$

parallel to the **line** $\mathbf{8x + 3y + 10 = 0}$

19) The line AB has a ***slope of -2*** and it passes through the points F(-9,5) and G(-3, k) , determine the value of "k".
(SHOW ALL WORK)