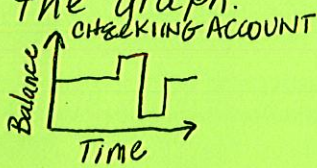


Name: _____

Week of: _____

ALGEBRA SPIRAL REVIEW

Label each section of the graph.



Sketch a graph for the situation.

- your pulse rate as you watch a scary movie

Write a function rule for the tables.

x	y
-1	-4
-2	-8
-3	-12
-4	-16

x	f(x)
1	0.5
2	1.5
3	2.5
4	3.5

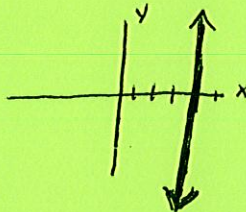
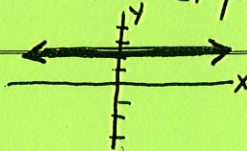
Determine whether each relation is a function using a mapping diagram.

$[(6, -7), (5, -8), (1, 4), (5, 5)]$

Use a vertical line test to determine if each relation is a function.

$[(5, 0), (0, 5), (5, 1), (1, 5)]$

State the slope.



Model each rule with a table.

$$f(x) = -3x + 1$$

$$f(x) = -3x - 2$$

Find the slope.

$(5, 6)(3, 2)$

$(-2, 1)(1, -2)$

$(4, 8)(8, 11)$

Write an equation of a line in slope-intercept form.

$$m = -1, b = -6$$

$$m = -\frac{2}{3}, b = 5$$

Graph the equations.

$$y = -5x + 2$$

$$y = 2x + 5$$

Find the x and y intercepts.

$$-5x + y = 30$$

$$-6x + 3y = -9$$

Graph the equations.

$$x + y = -5$$

$$-2x + y = -6$$

Write each equation in standard form.

$$y = 3x + 1$$

$$y = \frac{2}{3}x + 5$$

$$y = 4x - 7$$

Graph the equations.

$$y - 2 = -\frac{3}{2}(x - 3)$$

$$y - 1 = -3(x + 2)$$

Write an equation in point-slope form.

$$(-2, -7), m = -\frac{3}{2}$$

$$(4, 0), m = 1$$

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

$$(-1, -5)(-7, -6)$$

Are the graphs parallel, perpendicular, or neither.

$$y = -x + 5, y = x + 5$$

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

$$y = 5x, y = -5x + 7$$

Write an equation of a parallel line.

$$y = -3x; (3, 0)$$

$$y = -2x + 3; (-3, 5)$$

$$y = -\frac{7}{2}x + 6; (-4, -6)$$

Write an equation of a perpendicular line.

$$y = 2x + 7; (0, 0)$$

$$y = -\frac{1}{3}x + 2; (4, 2)$$

$$3x + 5y = 7; (-1, 2)$$