Name: _____

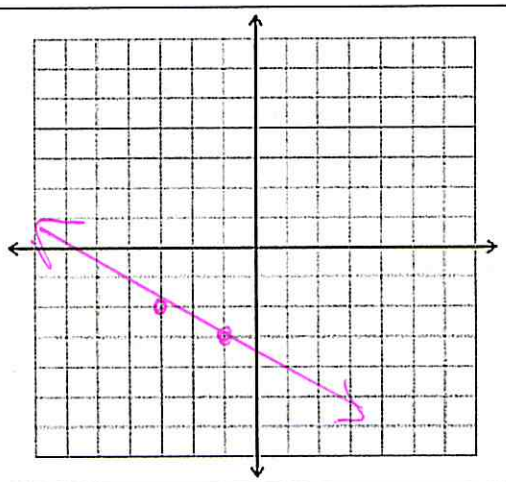
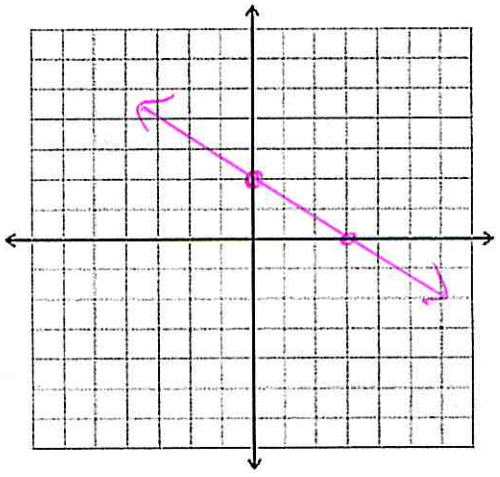
Hour: _____

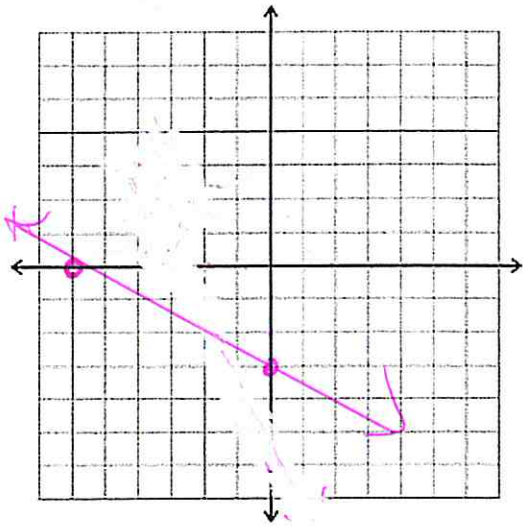
Unit 6 REVIEW

Identify each of the equations as being in standard form, point slope form or slope intercept form.

1. $y = 3x + 2$	2. $y - 1 = 2(x + 3)$	3. $8x - 2y = 16$
slope intercept	point slope	standard
4. $y - 3 = -2(x + 3)$	5. $y = -8x + 5$	6. $-4x - 6y = 12$
point slope	slope intercept	standard

7. Write an equation of a line with slope -3 and passes through the point (-1,7).	Solution: $y-7=-3(x+1)$
8. Identify the slope and a point from the given equation. $y - 2 = (x - 3)$	Solution: $m=1$, point $=(3,2)$
9. Identify the slope and a point from the given equation. $y + 3 = -2(x - 3)$	Solution: $m=-2$ point $(3,-3)$
10. **The ninth grade class holds a car wash to raise money to send Mrs. Talley to try out for The Voice. A wash costs $5 per car and $6 per truck. Write an equation in standard form to relate the number of cars and trucks the students must wash to raise $3000.00.**	Solution: $5x+6y=3000$

11. Kevin runs at an average rate of 6 miles per hour. He walks at a rate of 3 miles per hour. Write an equation in standard form to relate the times he could spend walking and running to travel a distance of 24 miles.	Solution: $6x + 3y = 24$
12. Graph $y + 2 = -1/2(x + 3)$	
13. Find the x and y intercepts $2x + 3y = 6$ then graph the equation.	x -intercept: 3 y-intercept: 2 
14. Find the x and y intercepts of $3x + 5y = 15$	x intercept 5 y intercept 3



x-intercept: -6

Y-intercept: -3

Table

x	y
0	-3
-6	0
-2	-2
2	-4
4	-5

Standard Form

Ax + By = C

Let's use

3x + 6 y = -18

Is the ordered pair (0, -5) a solution? If not, give an ordered pair that is a solution.

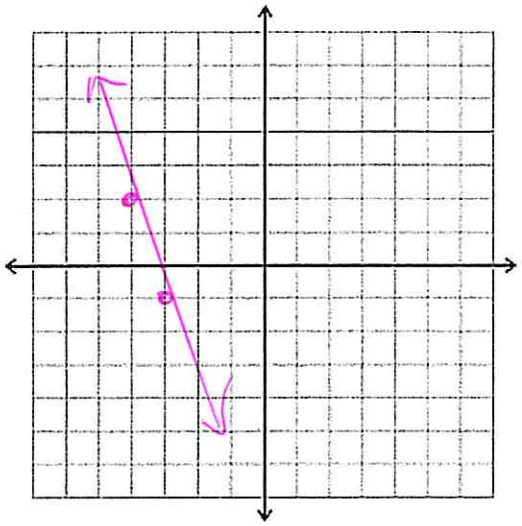
NO

Does the given line pass through the origin? Explain.

NO.

Convert the equation to slope intercept form

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



Point (x,y): (-4, 2)

Slope (m) -3

Table

x	y
0	-10
1	13
-1	-7
2	-16
-3	-1

Independent Variable X

Dependent Variable Y

Point Slope Form

$y - y_1 = m(x - x_1)$

Let's use

$Y - 2 = -3(x + 4)$

Is the ordered pair (0, -5) a solution? If not, give an ordered pair that is a solution.

NO

Does the given line pass through the origin? Explain.

NO

Convert to slope intercept form.

$y = -3x + -10$