

ALEKS® Graphing Quiz 2 #1

Beginning Algebra / Math 100 – Master No Book (Prof. Miller)

Student Name/ID:

Instructor Note:

Directions: Every problem is worth two points. One point is for trying the problem and showing your work and one point is for getting the correct answer. There are an additional five points for demonstrating the study strategy that is posted on the board and talked about at the beginning of class.

1. Write equations for the horizontal and vertical lines passing through the point $(-8, 1)$

horizontal line:

vertical line:

2. Find the slope of the line passing through the points $(-9, -6)$ and $(-4, 5)$

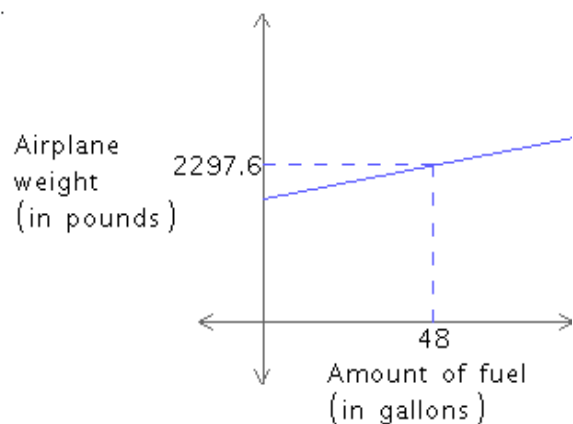
3. Find the slope and the y -intercept of the line.

$$-3x - 4y = -20$$

Write your answers in simplest form.

4. Suppose that the weight (in pounds) of an airplane is a linear function of the total amount of fuel (in gallons) in its tank. When graphed, the function gives a line with a slope of 6.2. See the figure below.

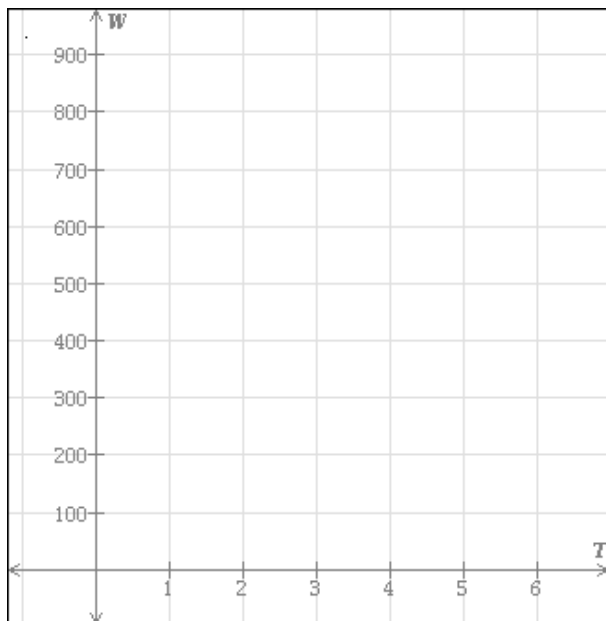
With 48 gallons of fuel in its tank, the airplane has a weight of 2297.6 pounds. What is the weight of the plane with 77 gallons of fuel in its tank?



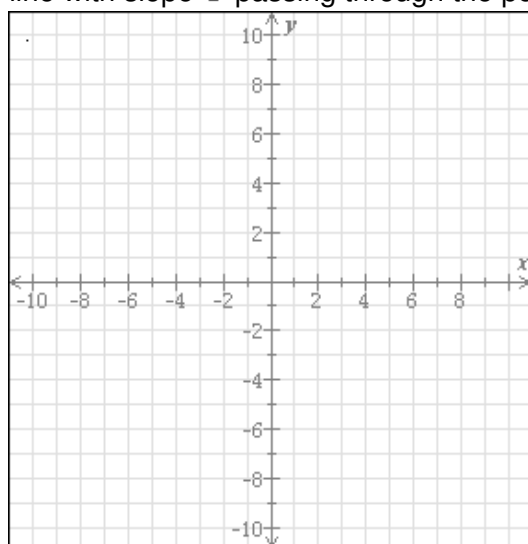
5. Find the slope of the line passing through the points $(-9, -3)$ and $(7, -7)$

6. Owners of a recreation area are filling a small pond with water. They are adding water at a rate of 35 liters per minute. There are 700 liters in the pond to start.

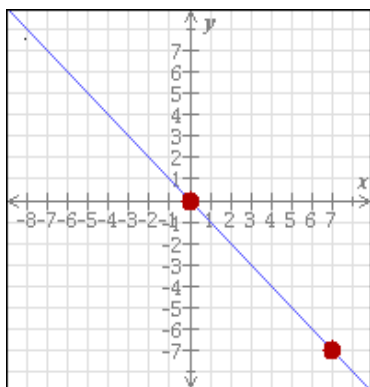
Let W represent the amount of water in the pond (in liters), and let T represent the number of minutes that water has been added. Write an equation relating W to T and then graph your equation using the axes below.



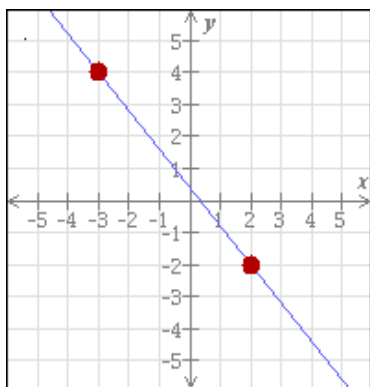
7. Graph the line with slope 3 passing through the point $(2, -1)$



8. Write an equation of the line below.



9. Find the slope of the line graphed below.



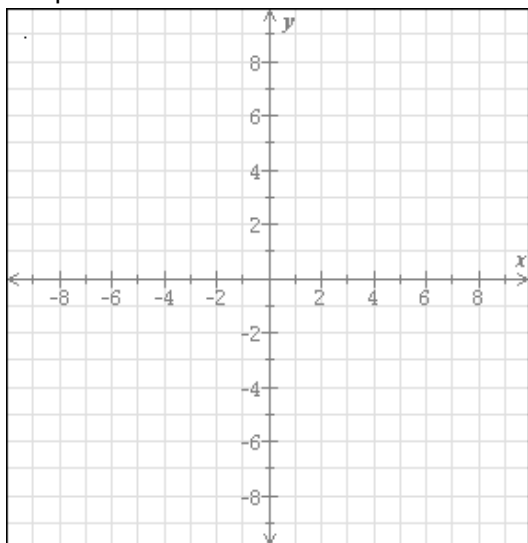
10. Find the x -intercept and y -intercept of the line.

$$6x - 8y = -15$$

x -intercept: _____

y -intercept: _____

11. Graph the line $x = -1$



12. Find the x -intercept and y -intercept of the line.

$$-9x + 8y = 10$$

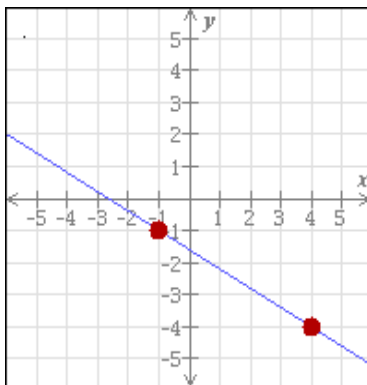
x -intercept: _____

y -intercept: _____

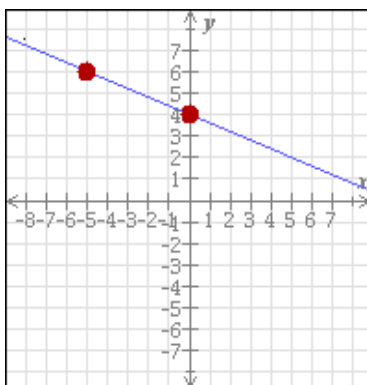
13. A line passes through the point $(-4, -1)$ and has a slope of $-\frac{5}{2}$

Write an equation in slope-intercept form for this line.

14. Find the slope of the line graphed below.



15. Write an equation of the line below.



Graphing Quiz 2 #1 Answers for class Beginning Algebra / Math 100 – Master No Book

1. horizontal line: $y = 1$
vertical line: $x = -8$

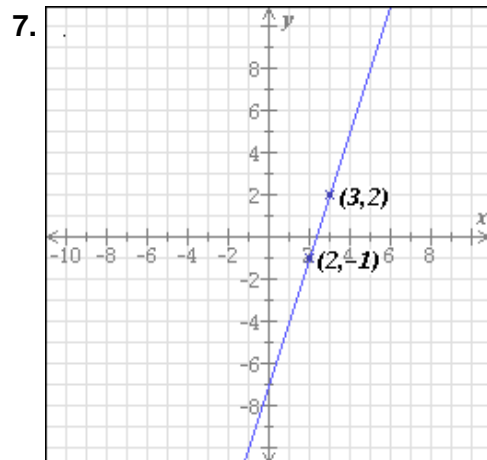
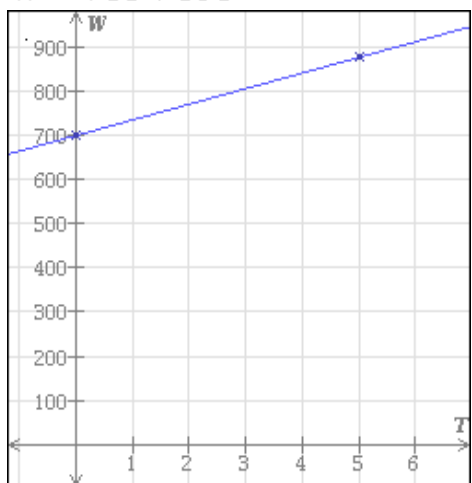
2. $\frac{11}{5}$

3. slope: $-\frac{3}{4}$
 y -intercept: 5

4. 2477.4 pounds

5. $-\frac{1}{4}$

6. $W = 700 + 35T$

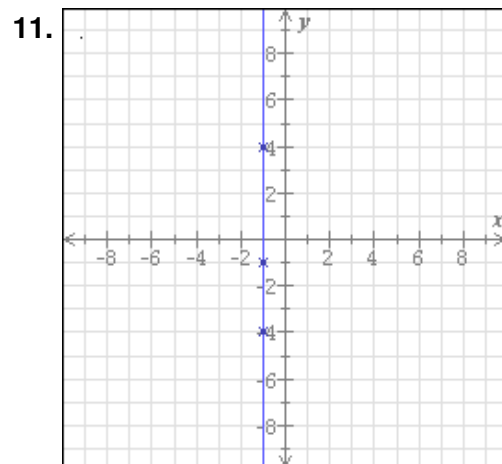


8. $y = -x$

9. $-\frac{6}{5}$

10. x-intercept: $-\frac{5}{2}$

y-intercept: $\frac{15}{8}$



12. x-intercept: $-\frac{10}{9}$

y-intercept: $\frac{5}{4}$

13. $y = -\frac{5}{2}x - 11$

14. $-\frac{3}{5}$

15. $y = -\frac{2}{5}x + 4$