Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ IS 259

Date \_\_\_\_\_\_\_\_\_\_\_ Class \_\_\_\_\_\_\_\_ Grade 8 Math Quiz 14

***SHOW ALL YOUR WORK. ANSWER ALL QUESTIONS ON GRAPH PAPER!!!!!!!!!! USE PENCIL***

 *Match the following equation with its matching table and graph (choices a – f)*

1. y = 2x – 2 **Graph**: \_\_\_\_\_\_\_\_ 2. y = - 2 x **Graph:** \_\_\_\_\_\_\_ 3. y = x + 3 **Graph:** \_\_\_\_\_\_\_

 **Table:** \_\_\_\_\_\_\_\_ **Table:** \_\_\_\_\_\_\_ **Table:** \_\_\_\_\_\_\_

a) b) c)



d) e) f)

For the following questions, find the slope using two points.

m = $\frac{y\_{2 -} y\_{1}}{x\_{2} - x\_{1}}$

4. ( -2 , -4) and ( 1, -1) 6. ( 0, -2) and (3, -3)

5. ( - 1 , 6) and ( 2, -12 ) 7. (0, 5) and (3, 8)

You **MUST** do the following problem:

8. Pick **ONE** pair of points from one of the questions 4 – 7 above.

 a) Graph the 2 points

 b) draw a line connecting them

 c) draw arrows at each end of the line

 d) label the line with its equation.

For the following questions, write an **equation** that matches the table.

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9. 10.

11. 12.

12. and 13. *Choose* ***two*** *of the tables above and graph the two lines on the* ***SAME*** *set of axes. Make sure you draw arrows and label the lines with their equations*.

*Use the following graph to answer the next few questions:*

 14. What is the slope of the line ?

 15. What point is the y – intercept?

 16. The general form of a line is given by y = mx + b

 What do  ***m*** and ***b*** stand for?

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

17. What is the equation of the line in the graph?

Graph the following two linear functions on the same set of axes. Use values -3 < x < 3.

y = 2 x + 1

y = 2x - 6

18. How are these two lines similar? How are they different?

19. Make a deduction about lines with the same slope. How will two lines with the same slope appear graphically?