

Name _____

Mrs. Roubos

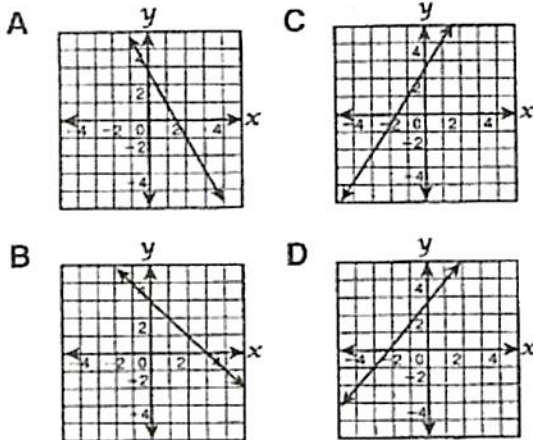
Date _____

8R Period _____

Take Home Quiz #9
Show all work where possible!

Due: _____

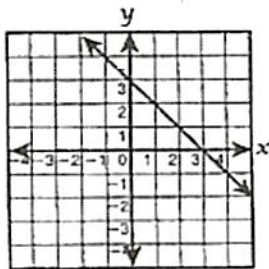
1) Which graph corresponds to the equation $y = -2x + 3$?



2) In the linear equation $y = 4x - 6$, the value 4 represent which of the following?

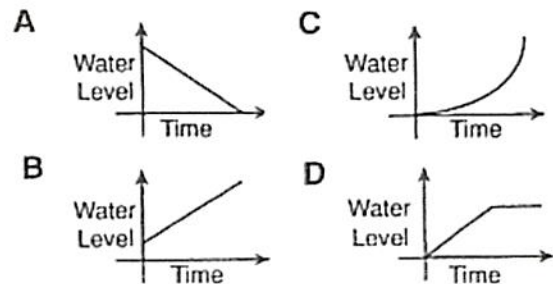
- A) The slope of the line.
- B) The y-coordinate of the y-intercept.
- C) The x-coordinate of the y-intercept.
- D) The quadrant in which the line lies.

3) At what point does the line in the following graph cross the y-axis?



- A) (0,4)
- B) (4,0)
- C) (0,3)
- D) (3,0)

4) Choose the graph below that shows the level of water in a sink as it is drained.



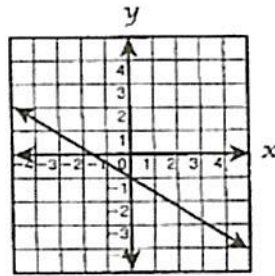
5) Is $y = x$, linear or nonlinear?

6) Is $y = x^2$, linear or non-linear?

7) What is another name for slope?
(Hint: It's 3 words)

8) What is another name for the y-intercept?
(Hint: It's 2 words)

Use the graph for questions 9 and 10



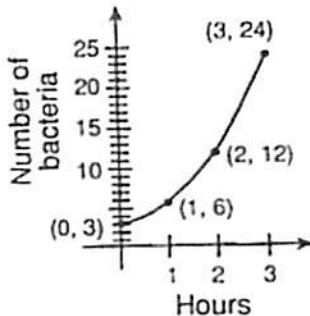
9) Describe the slope of the line.

- A) The slope is positive.
- B) The slope is negative.
- C) The slope is 0.
- D) The slope is undefined.

10) At what point does the line cross the y-axis?

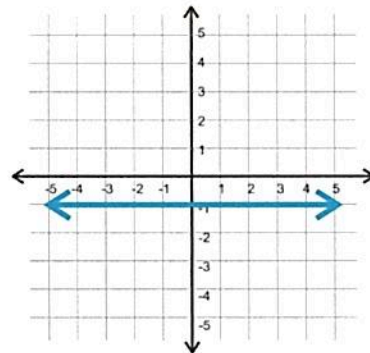
- A) $(-\frac{3}{2}, 0)$
- B) $(0, -1)$
- C) $(0, -\frac{3}{2})$
- D) $(-1, 0)$

11) Every hour, a lab student checked the number of bacteria in a culture. The graph of her data is shown. Which of the following statements is true?



- A) The rate of change is constant.
- B) The graph shows a linear function.
- C) The slope of the line is 6.
- D) The rate of change is not constant.

12) Describe the slope of the line in the following graph?



- A) The slope is positive.
- B) The slope is negative.
- C) The slope is 0.
- D) The slope is undefined.

13) Which of the following could describe the graph of a line with an undefined slope?

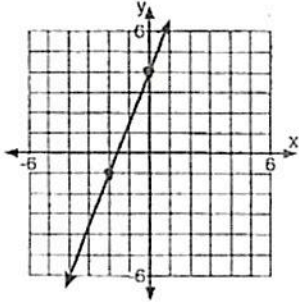
- A) The line is rising from left to right.
- B) The line is falling from left to right.
- C) The line is horizontal.
- D) The line is vertical.

14) Determine the slope and y-intercept of the line $y = 3x - 6$

Slope: _____

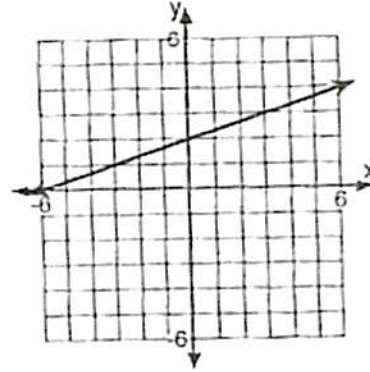
y-intercept: _____

15) What is the y-intercept of the given graphed line?



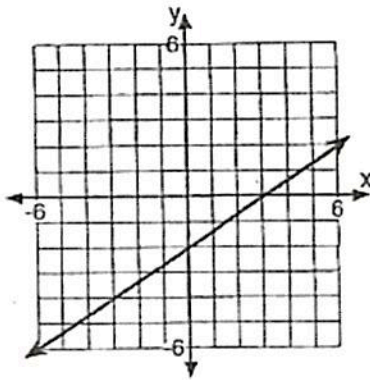
- A) 4 B) -4
C) 2 D) -2

16) Which equation correctly describes the given graphed line?



- A) $y = \frac{1}{3}x + 2$ B) $y = -\frac{1}{3}x + 2$
C) $y = 3x + 2$ D) $y = -3x + 2$

17) What is the equation of the given graphed line?



- A) $y = -\frac{3}{2}x - 2$ B) $y = -\frac{2}{3}x - 2$
C) $y = \frac{2}{3}x - 2$ D) $y = -\frac{3}{2}x - 2$

18) Write an equation of a line whose slope is 2 and whose y-intercept is -3.

19) Determine the slope and y-intercept of the line $y = 2x + 1$?

Slope: _____

y-intercept: _____

20) The graph of which equation is a slope of 3 and a y-intercept of -4?

- A) $y = -4x + 3$ B) $y = 3x + 4$
C) $y = 3x - 4$ D) $y = -4x + 3$

21) The graph of which equation is a slope of -2 and a y-intercept of 3?

- A) $y = -2x + 3$ B) $y = 3x + 2$
C) $y = -2x - 3$ D) $y = 3x - 2$

22) Find the slope of the given equation:
 $y - 4x = 7$

23) What is the slope of the given equation :
 $2y = 3x + 6$