

Name _____
Mrs. Roubos

Date _____
8R Period _____

Equation of a line: Day II

Equation of a line

Slope-Intercept Form: $y = mx + b$ where $m = \text{slope}$ & $b = \text{y-intercept}$ (where the line crosses the y-axis)

A) What is the slope & y-intercept of the following?

Ex's 1) $y = 3x + 2$

4) $2y = 6x + 12$

2) $y = -6x - 3$

5) $3x + y = 5$

3) $y = x + 2$

6) $4x + 2y = 10$

B) Create an equation given the slope and y-intercept

1) Slope = -6 , y-intercept = 5

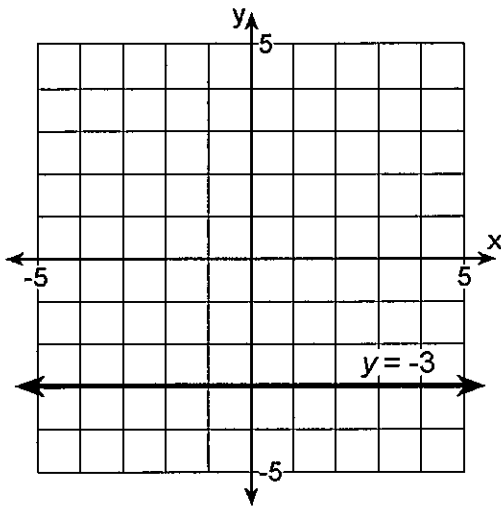
2) Slope = $\frac{1}{2}$, y-intercept = 3

3) Slope = -4 , y-intercept = 3

4) Slope = 7 , y-intercept = -8

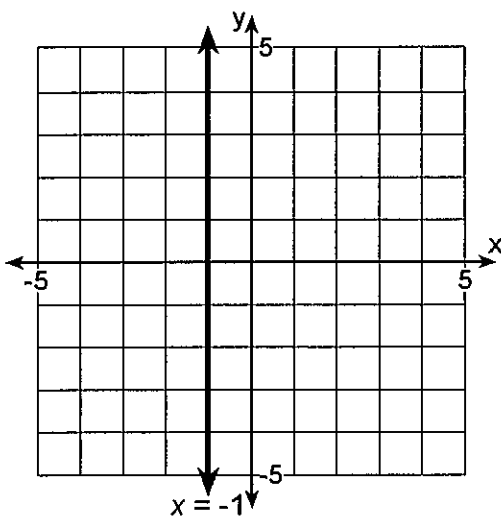
Review

- 1) Determine the slope of the line graphed below.



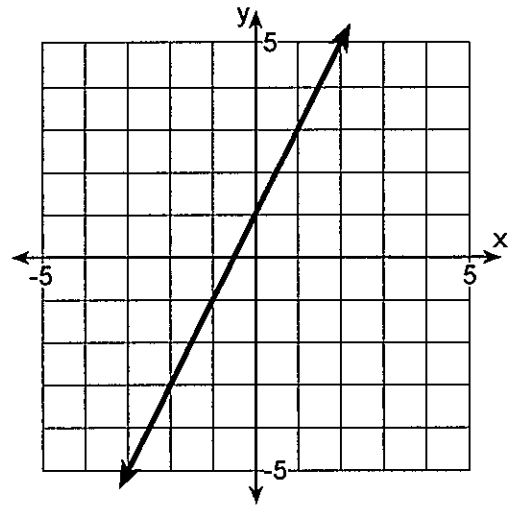
- A) -3
B) 0
C) undefined
D) $\frac{1}{3}$

- 2) Determine the slope of the line graphed below.



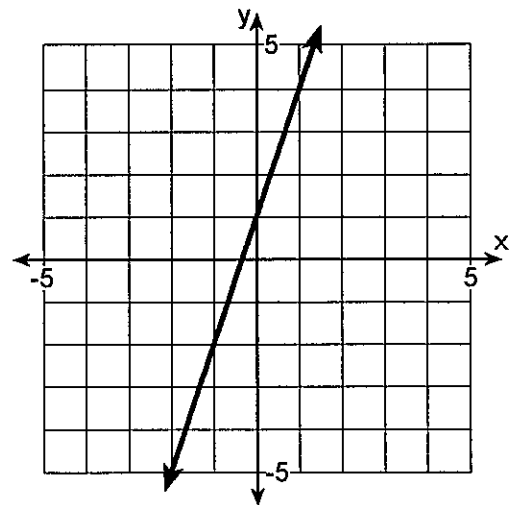
- A) 0
B) -1
C) undefined
D) 1

- 3) Determine the slope of the line graphed below.



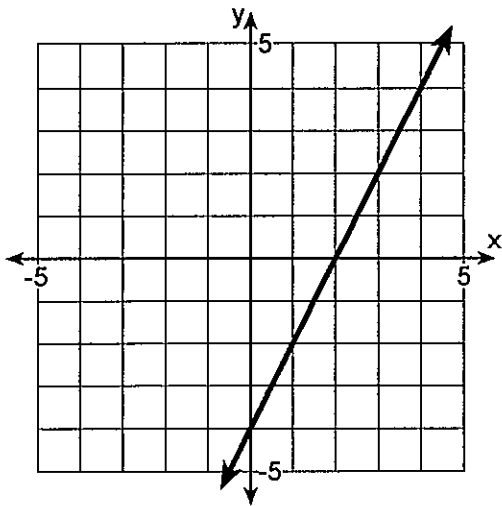
- A) 4
B) -2
C) 2
D) -1

- 4) Determine the y-intercept of the line graphed below.



- A) 1
B) -3
C) 3
D) -1

- 5) Determine the y-intercept of the line graphed below.

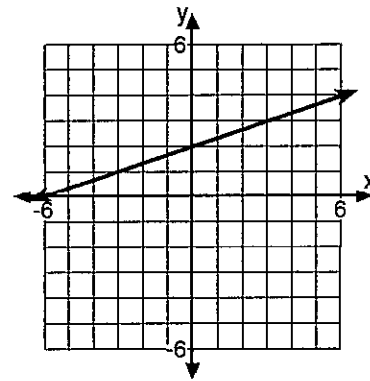


- A) 4
B) -2
C) 2
D) -4

- 6) The graph of which equation has a slope of 3 and a y-intercept of -4?

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

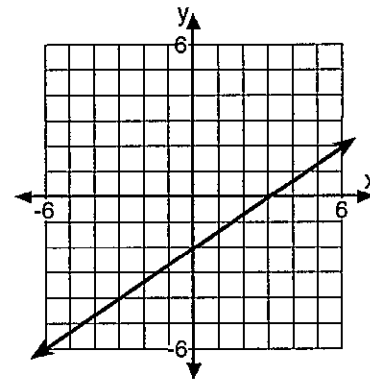
7)



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) $y = 3x + 2$

8)



What is the equation of the given graphed line?

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

Find the slope and the y-intercept of the following:

1) $3y = 6x + 9$

2) $y = 8 + 4x$

3) $6x + y = 3$

4) $-7x + y = -4$

5) $6x + 2y = 12$

6) $-y = 2x - 3$

7) $3y - 4x = 6$