Spring Final Review　　　　　　**Calculator Okay**　　　Date_____ Per._____
Part IV: Graphing Lines and Writing Linear Equations　　　**SHOW WORK!!!**

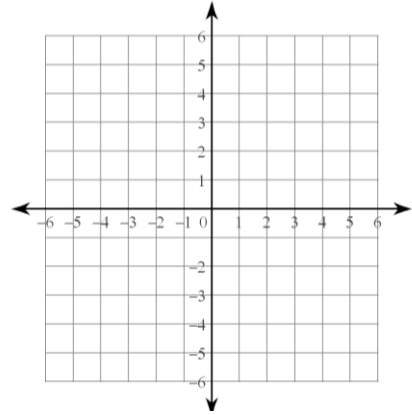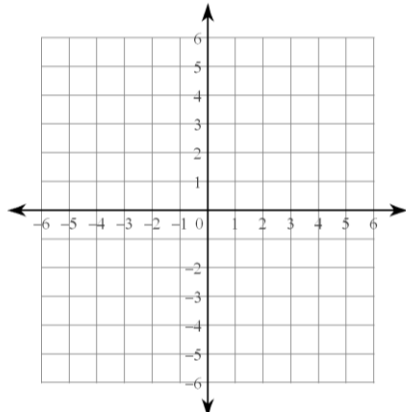**Complete the table and then graph the line.**

1. $y = -2x + 1$

x	y
-2	
0	
2	
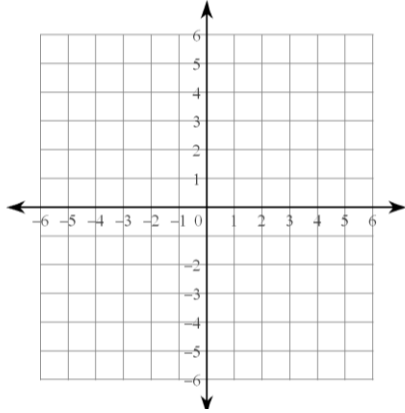
2. $y = \dfrac{3}{2}x$

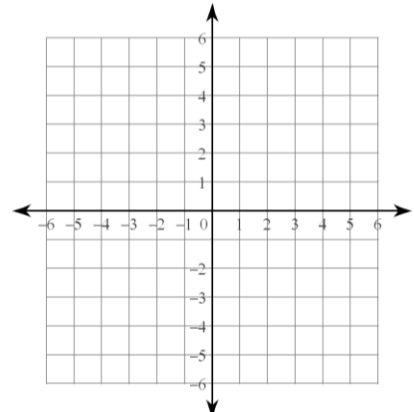| x	y
-4	
0	
2	

3. Graph the line with slope $= -\dfrac{1}{3}$ that passes through the point (2, -4). What is the equation for the line?
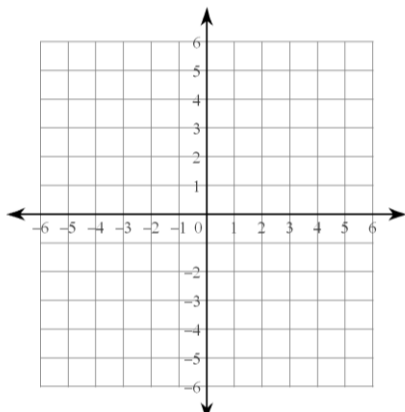
equation:

4. Graph the line with slope $= 0$ that passes through the point (1, -5). What is the equation for the line?
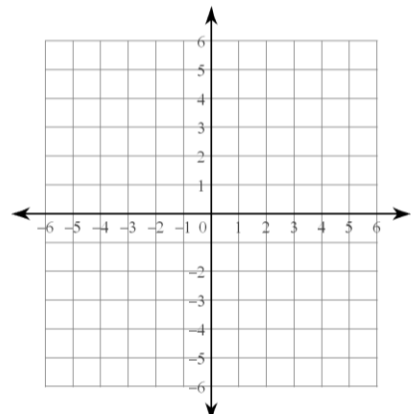
equation:

5. Graph the line with undefined slope that passes through the point (1, -5). What is the equation for the line?

equation:

6. Graph the line $6x - 8y = 24$

7. Write each formula.

Slope	Point-Slope Form of a Linear Equation	Slope Intercept-Form of a Linear Equation

8. Complete the following table by writing the slope and each form of the linear equation that goes through the given points.

| Points	Slope	Point-Slope Form of the Linear Equation	Slope Intercept Form of the Linear Equation
a. $(-3,5),(12,0)$			
b. $(8,2),(6,2)$			

9. Write the point-slope equation of a line with slope $\dfrac{12}{7}$ containing the point $(1,-4)$.

10. Write the slope-intercept equation of a line with slope $\dfrac{5}{8}$ and *y*-intercept -3.

11. Write the slope-intercept equation of a line with slope 0 and *y*-intercept 15.

12. For each point, list the coordinates as an ordered pair and indicate which quadrant contains the point. It is possible that a point might be on an axis instead of inside a quadrant.

Point	Coordinates	Quadrant
A		
B		
C		
D		
E		
F		
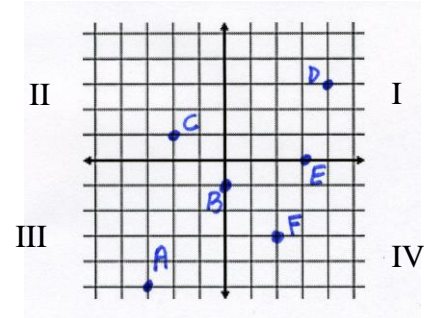
For each graphed line, find the slope, *x*-intercept, and the *y*-intercept. Then write the slope-intercept form of the equation of the line.

13.

Slope = _____

x-int (,)

y-int (,)

equation:

14.

Slope = _____

x-int (,)

y-int (,)

equation:

15.

Slope = _____

x-int (,)

y-int (,)

equation:

16.

Slope = _____

x-int (,)

y-int (,)

equation:

17.

Slope = _____

x-int (,)

y-int (,)

equation:

18.

Slope = _____
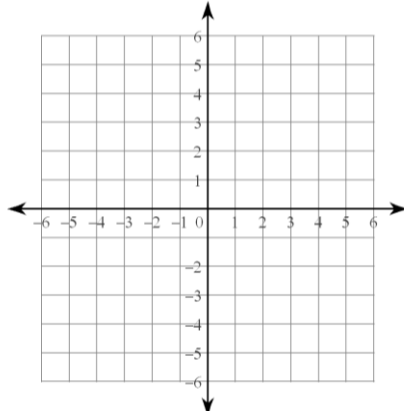
x-int (,)

y-int (,)

equation:

19. Find the *x*-intercept and *y*-intercept for the line. Then graph the line.

$3x + 2y = 6$

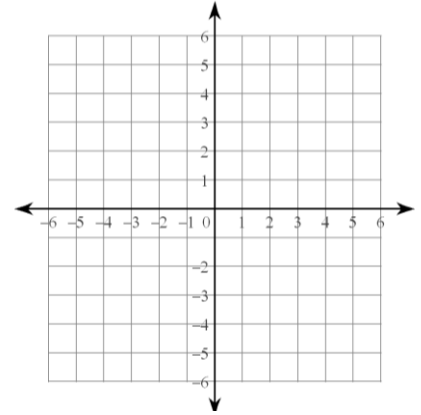*x*-int (,)

y-int (,)

20. Find the *x*-intercept and *y*-intercept for the line. Then graph the line.

$4x - 5y = 20$

x-int (,)

y-int (,)

21. Rewrite in slope-intercept form. Then identify the slope and *y*-intercept for the line.

$3x + 8y = 15$

equation:

Slope = _____

y-int (,)

22. Rewrite in slope-intercept form. Then identify the slope and *y*-intercept for the line.
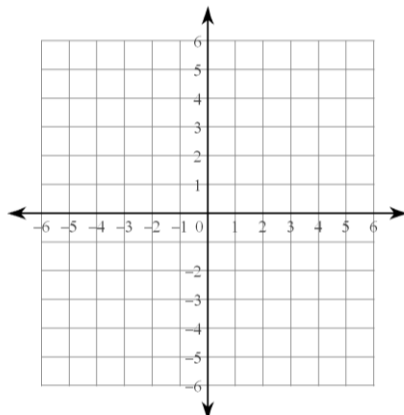
$10x - 2y = 60$

equation:

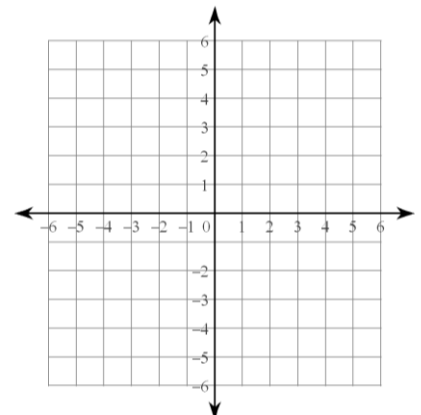Slope = _____

y-int (,)

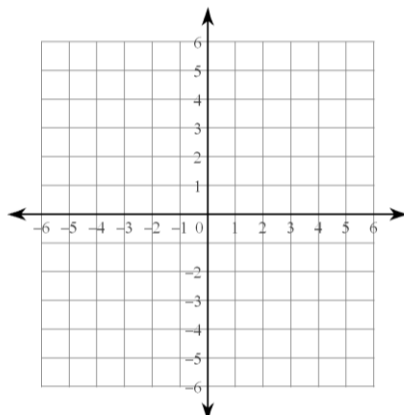23. Graph the line

$y = \dfrac{4}{3}x - 2$

24. Graph the line

$y = -2x + 5$

25. Graph the line

$y = -\dfrac{5}{2}x$

26. Graph the line

$y = x$