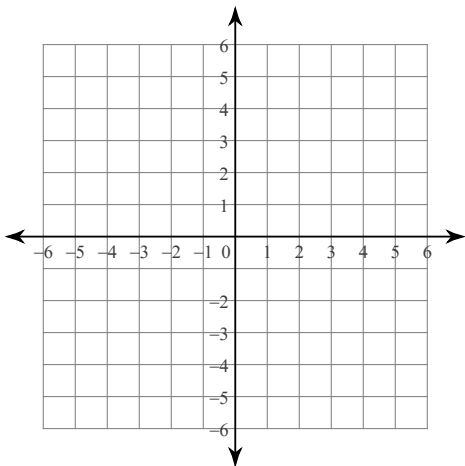


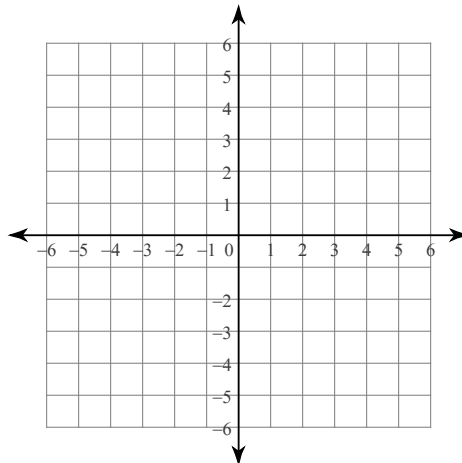
## Chapter 2- Review for Final

Sketch the graph of each line.

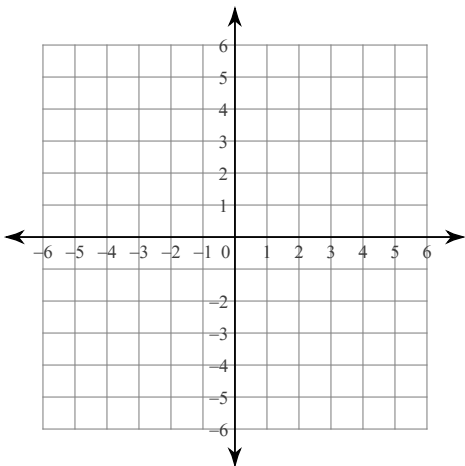
1)  $y = \frac{2}{3}x + 1$



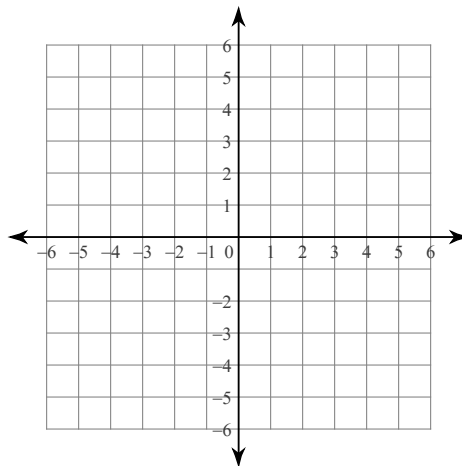
2)  $y = 6x - 5$



3)  $3x + 5y = -5$



4)  $7x - 5y = 25$



Write the slope-intercept form of the equation of each line given the slope and y-intercept.

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

6) Slope = -2, y-intercept = -2

Write the slope-intercept form of the equation of each line.

7)  $5x + 3y = -15$

8)  $8x - 7y = 14$

**Write the slope-intercept form of the equation of the line through the given point with the given slope.**

9) through:  $(5, 3)$ , slope  $= \frac{8}{5}$

10) through:  $(-3, -3)$ , slope  $= -\frac{2}{3}$

**Write the slope-intercept form of the equation of the line through the given points.**

11) through:  $(-1, -4)$  and  $(0, 2)$

12) through:  $(0, -1)$  and  $(-4, -2)$

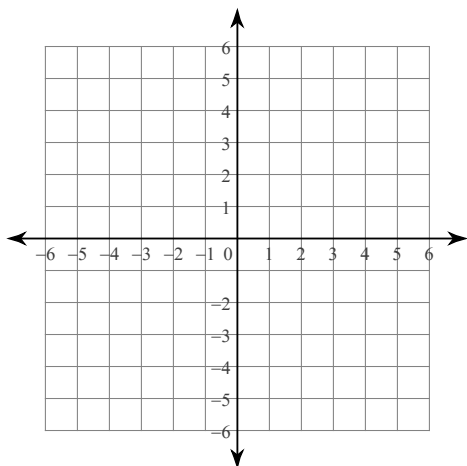
**Write the point-slope form of the equation of the line described.**

13) through:  $(-2, 1)$ , parallel to  $y = \frac{3}{2}x - 5$

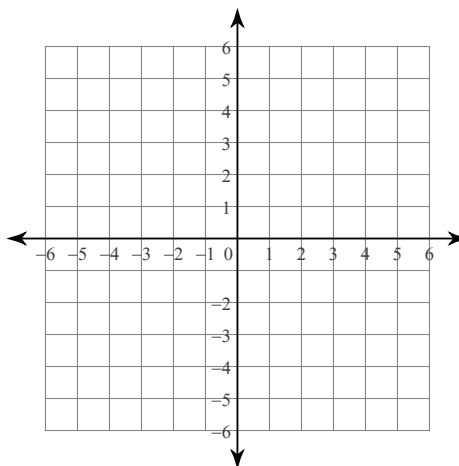
14) through:  $(-2, 5)$ , perp. to  $y = \frac{3}{5}x - 3$

**Graph each equation.**

15)  $y = |x + 2| - 2$

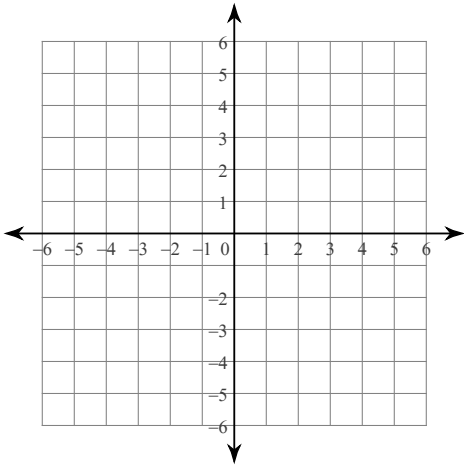


16)  $y = |x + 1| - 3$

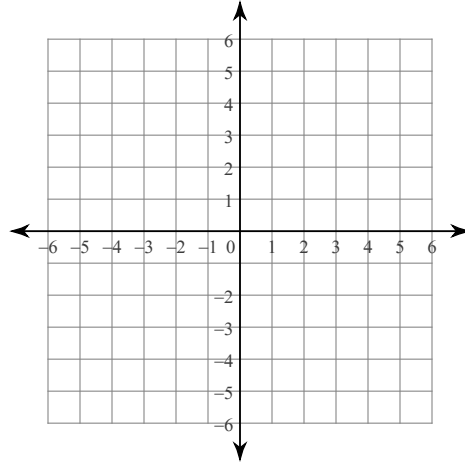


Sketch the graph of each linear inequality.

17)  $y \geq 3x - 1$



18)  $y < -\frac{2}{3}x + 1$



Evaluate each function.

19)  $g(x) = -x^2 + x$ ; Find  $g(5)$

20)  $h(n) = -2n - 4$ ; Find  $h(7)$

Determine if the following relations are functions.

21)  $\{(2, 4), (7, -11), (8, 6), (7, 14)\}$

22)  $\{(1, -3), (4, 9), (-16, -3), (11, 56)\}$

Write an expression to model the following situations.

23) A tree is five feet tall and grows 2 feet each year.

24) Jill has 25 dollars and spends 3 dollars a day on lunch.

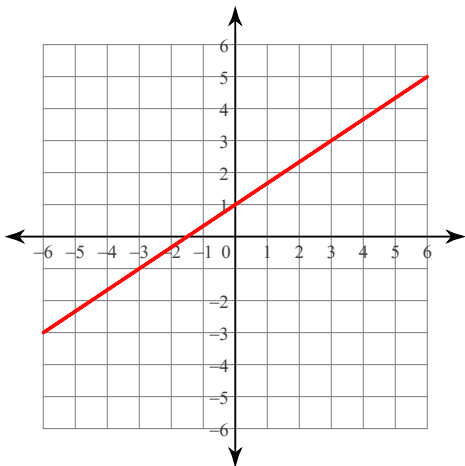
## Chapter 2- Review for Final

Name \_\_\_\_\_

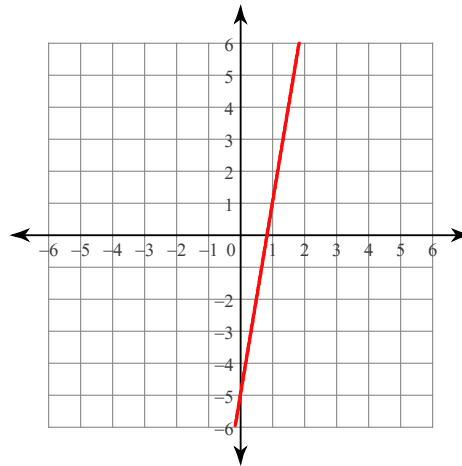
Date \_\_\_\_\_ Period \_\_\_\_\_

Sketch the graph of each line.

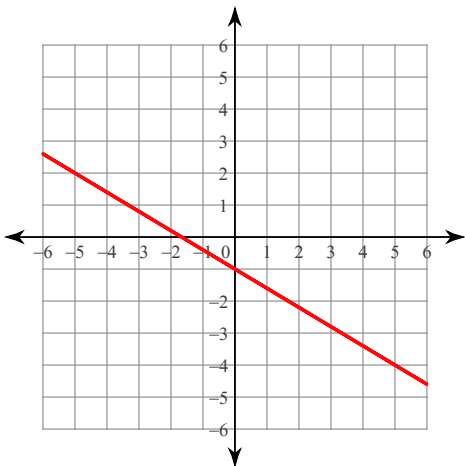
1)  $y = \frac{2}{3}x + 1$



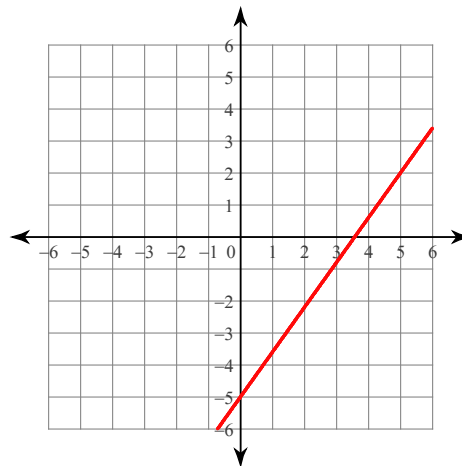
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Write the slope-intercept form of the equation of each line.

7)  $5x + 3y = -15$   $y = -\frac{5}{3}x - 5$

8)  $8x - 7y = 14$   $y = \frac{8}{7}x - 2$

Write the slope-intercept form of the equation of the line through the given point with the given slope.

9) through:  $(5, 3)$ , slope  $= \frac{8}{5}$

$$y = \frac{8}{5}x - 5$$

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Write the slope-intercept form of the equation of the line through the given points.

11) through:  $(-1, -4)$  and  $(0, 2)$

$$y = 6x + 2$$

12) through:  $(0, -1)$  and  $(-4, -2)$   $y = \frac{1}{4}x - 1$

Write the point-slope form of the equation of the line described.

13) through:  $(-2, 1)$ , parallel to  $y = \frac{3}{2}x - 5$

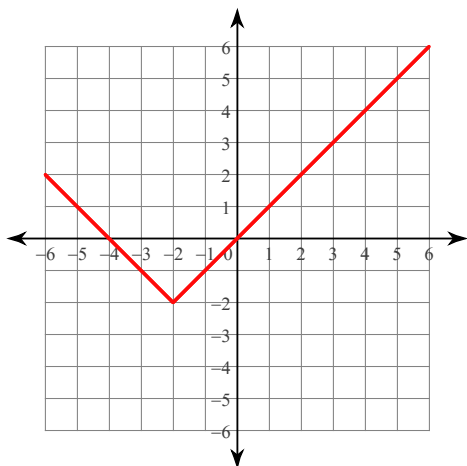
$$y - 1 = \frac{3}{2}(x + 2)$$

14) through:  $(-2, 5)$ , perp. to  $y = \frac{3}{5}x - 3$

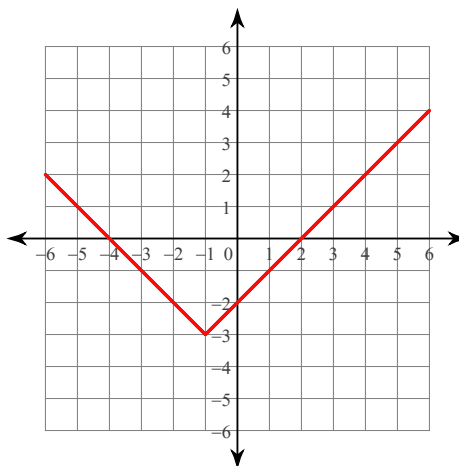
$$y - 5 = -\frac{5}{3}(x + 2)$$

Graph each equation.

15)  $y = |x + 2| - 2$

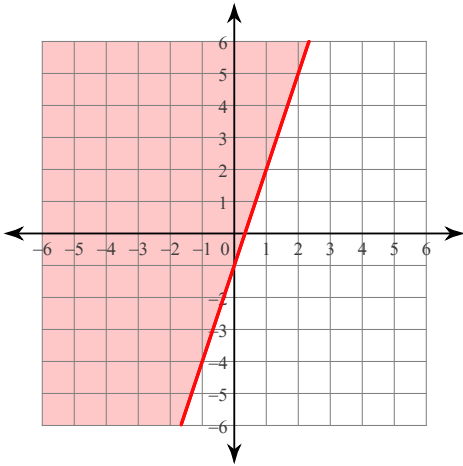


16)  $y = |x + 1| - 3$

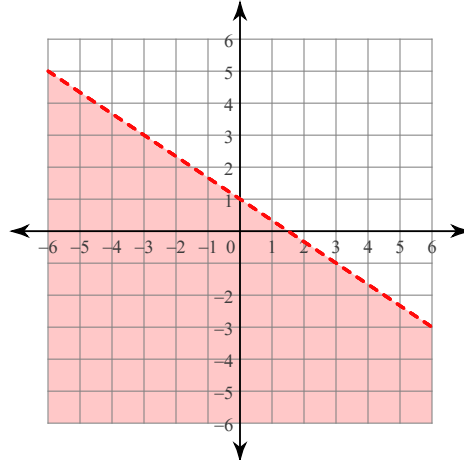


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Evaluate each function.

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-20

20)  $h(n) = -2n - 4$ ; Find  $h(7)$

-18

Determine if the following relations are functions.

21)  $\{(2, 4), (7, -11), (8, 6), (7, 14)\}$

no because the input of 7 has two outputs (-11 and 14)

22)  $\{(1, -3), (4, 9), (-16, -3), (11, 56)\}$

yes because each input (x-value) has only 1 output (y-value)

Write an expression to model the following situations.

23) A tree is five feet tall and grows 2 feet each year.

$5+2x$

24) Jill has 25 dollars and spends 3 dollars a day on lunch.

$25-3x$