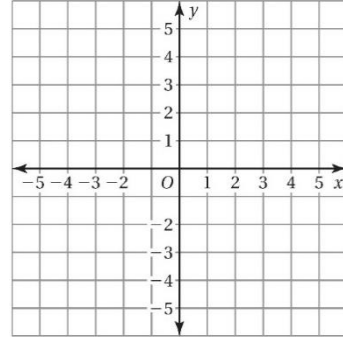
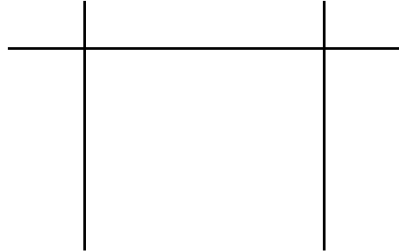


Name: _____ Period: _____

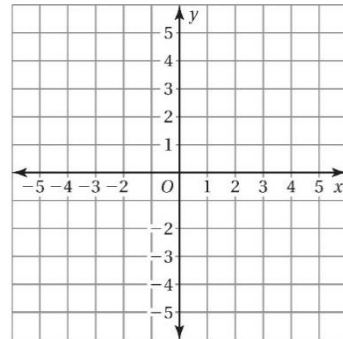
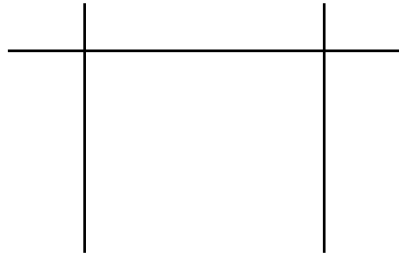
Chapter 4 Review

Graph both linear equations on the coordinate plane on the right. Make sure you use an input/output table with at least 3 ordered pairs for each.

1) $y = 3x - 4$



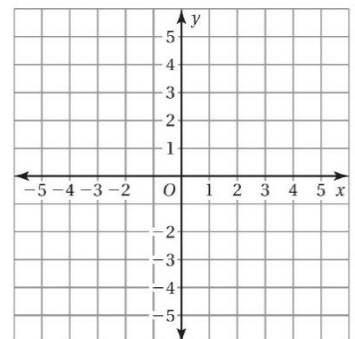
2) $y = \frac{1}{2}x - 3$



Graph both of the equations on the coordinate plane on the right. You may make an input/output table if you wish.

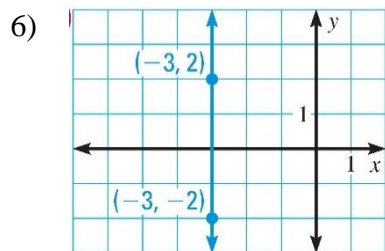
3) $y = -3$

4) $x = 1$



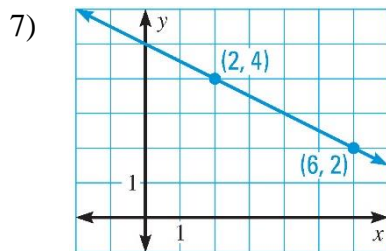
5) The slope of any line can be written as a ratio that represents its _____ over its _____.

Tell whether the slope of the line is positive, negative, zero, or undefined. Then find the slope if it exists.



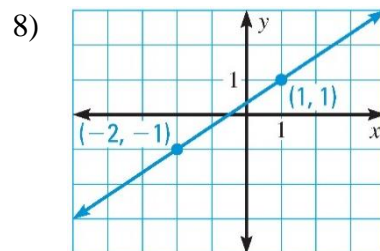
Kind of slope: _____

$m =$ _____



Kind of slope: _____

$m =$ _____



Kind of slope: _____

$m =$ _____

9) The slopes of parallel lines are the _____.

10) Find the slope of the line that passes through the points. Write your answer in simplest form.

a) $(-1, 11)$ and $(2, 10)$ $m =$ _____

b) $(-2, 0)$ and $(4, 9)$ $m =$ _____

c) $(-5, 2)$ and $(-5, 7)$ $m =$ _____

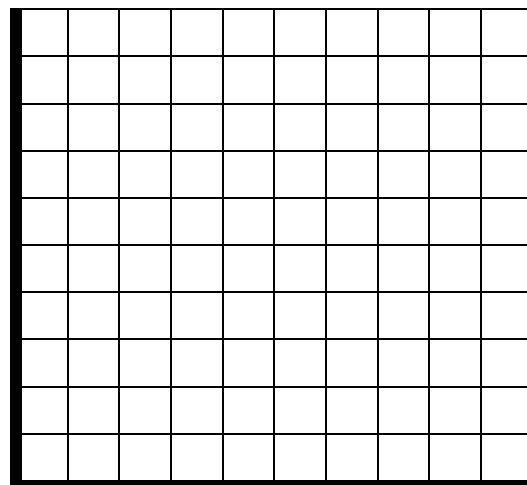
d) $(4, 6)$ and $(-2, 6)$ $m =$ _____

11) A plant is 3 inches tall when you purchase it and grows 2 inches per month. Write an equation that represents the height y (in inches) of a plant that you purchased x months ago.

a) Equation:

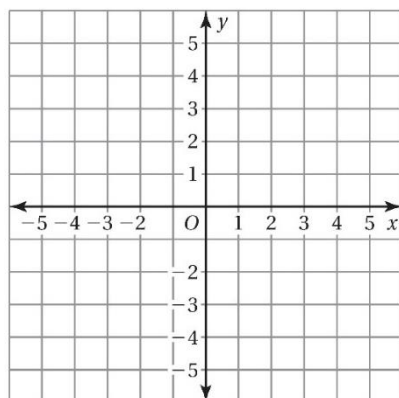
b) Graph this equation and make sure to:

- Label you axis.
- Use at least 4 ordered pairs.

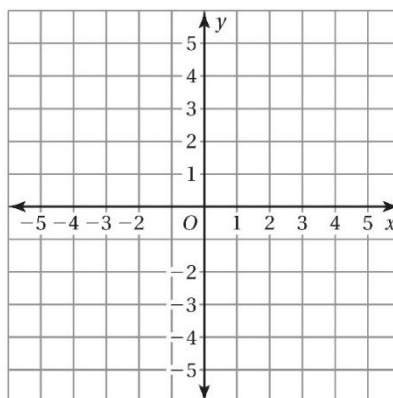


Graph each equation using the slope and the y-intercept only.

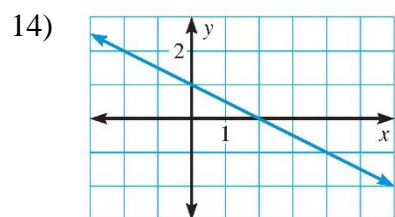
12) Graph $y = -\frac{3}{2}x + 4$



13) Change to slope intercept form and graph $6x - 3y = -9$

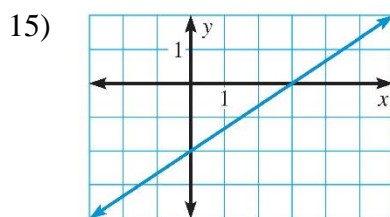


Identify the x -intercept and the y -intercept of the graph.



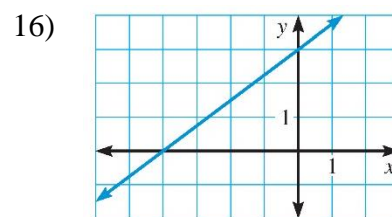
x -intercept : _____

y -intercept : _____



x -intercept : _____

y -intercept : _____



x -intercept : _____

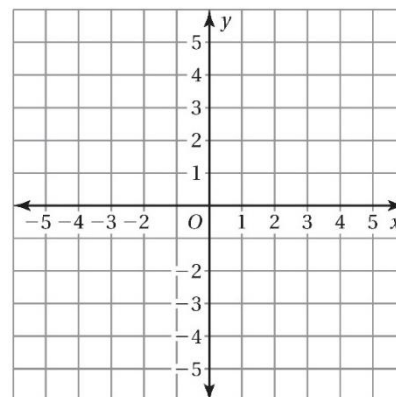
y -intercept : _____

Find the x -intercept and the y -intercept of each equation, and then graph it.

17) $-4x + 5y = 20$

x -intercept : _____

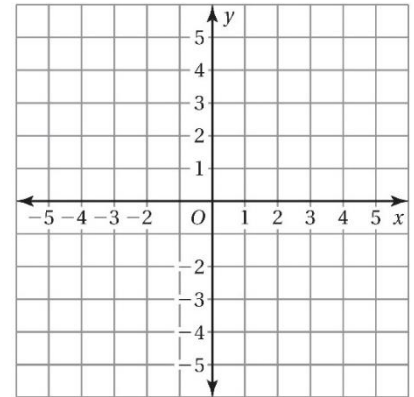
y -intercept : _____



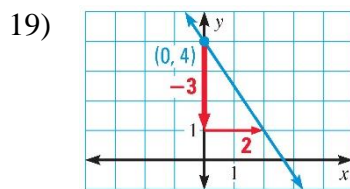
18) $6x - 3y = 12$

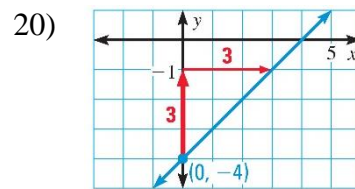
x-intercept : _____

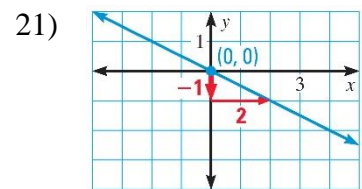
y-intercept : _____



Write an equation of the line shown in slope-intercept form.





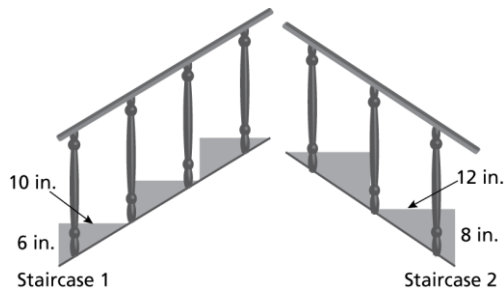


Write an equation of the line that passes through the following points in **slope-intercept** form.

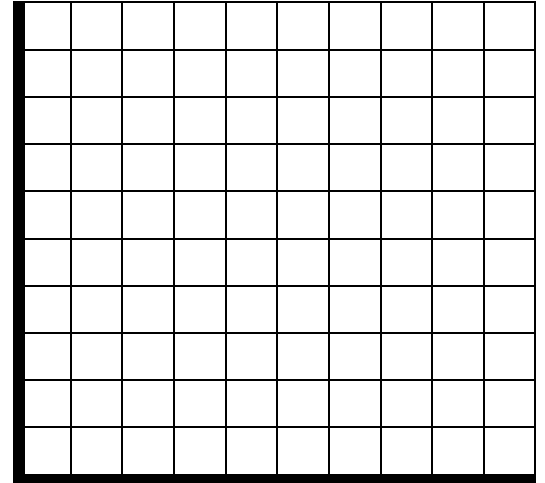
22) $(-4, -1), (0, 5)$

23) $(-2, 1), (0, -4)$

24) Which set of stairs is more difficult to climb? Explain.



- 25) The amount p (in dollars) that you earn by working h hours is represented by the equation $p = 9h$. Graph the equation and interpret the slope.



- 26) The cost c (in dollars) to rent a bicycle is proportional to the number h of hours that you rent the bicycle. It costs \$20 to rent the bicycle for 4 hours.
- Write an equation that represents the situation.
 - Interpret the slope.
 - How much does it cost to rent the bicycle for 6 hours?
- 27) You organize a garage sale. You have \$30 at the beginning of the sale. You earn an average of \$20 per hour. Write an equation that represents the amount of money y you have after x hours.