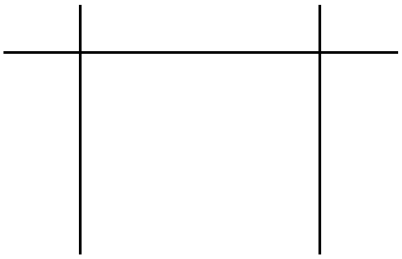
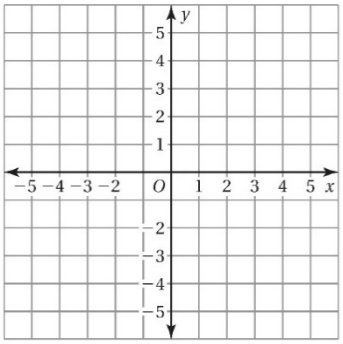
Name: _____ Period: _____

Chapters 4 & 6 Review

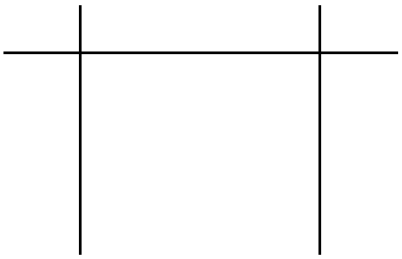
Graph both linear equations on the coordinate plane on the right. Make sure you use an input/output table with at least 3 ordered pairs for each.

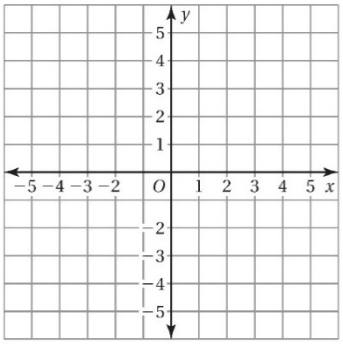
1) $y = 3x - 4$





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

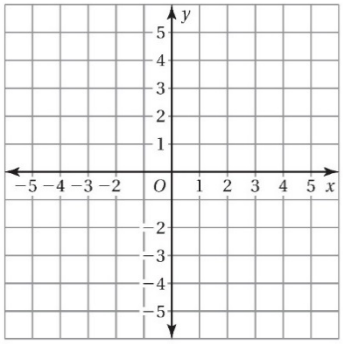




Graph both of the equations on the coordinate plane on the right. You may make an input/output table if you wish.

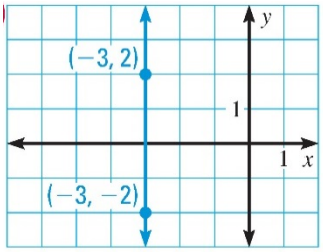
3) $y = -3$

4) $x = 1$



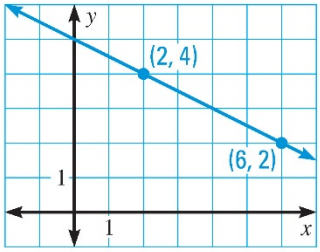
5) The slope of any line can be written as a ratio that represents its _____ over its _____.

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

6) 

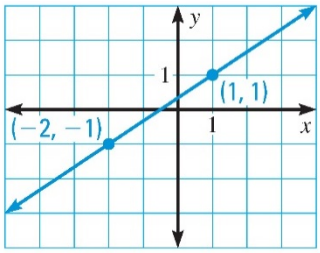
Kind of slope: _____

m = _____

7) 

Kind of slope: _____

m = _____

8) 

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*** = _____

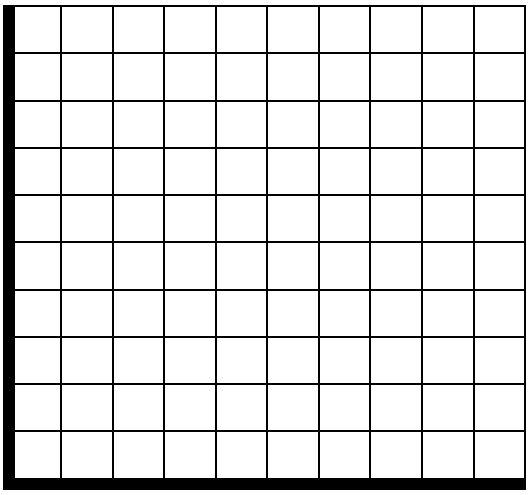
c) (-5, 2) and (-5, 7) ***m*** = _____

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

11) Jenny wanted to buy a bunch of hot cocoas for her friends. The number *y* cocoas you get from *x* dollars is represented by the equation $y = 3x$.

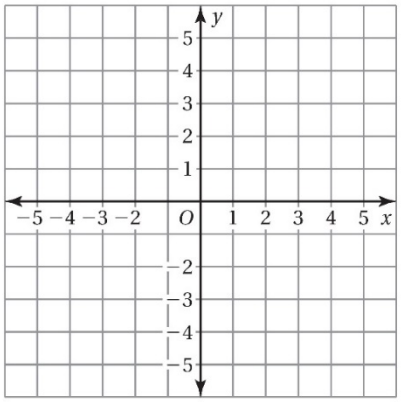
a) Make sure to:
- Label you axis.
- Use at least 4 ordered pairs.

b) Interpret what the slope means in this problem

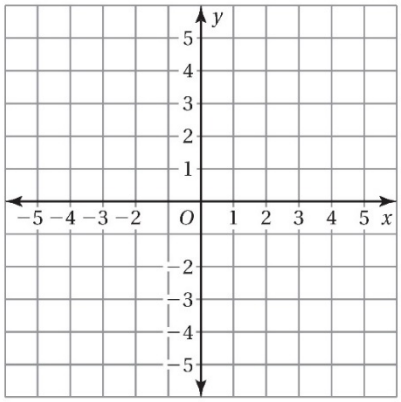


Graph each equation using the slope and the y-intercept only.

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



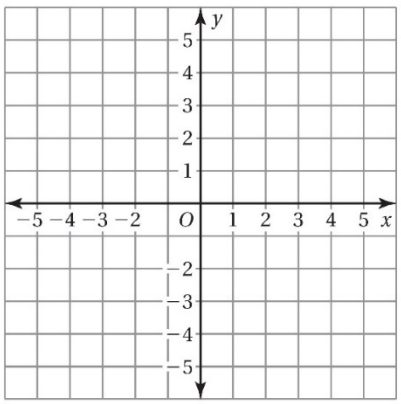
13) $y = -4x + 5$

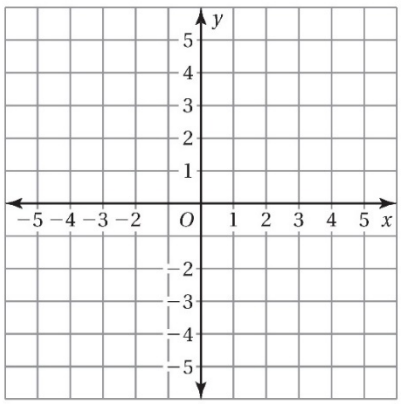


Solve each equation in slope-intercept form. Then graph.

14) $2x + y = 3$

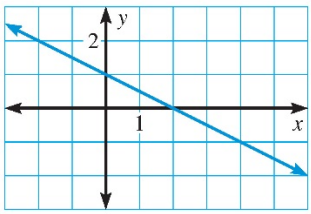
15) $6x - 3y = -9$





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

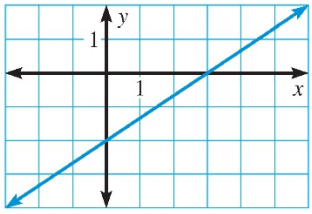
16)



x-intercept : _____

y-intercept : _____

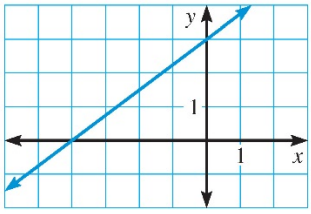
17)



x-intercept : _____

y-intercept : _____

18)

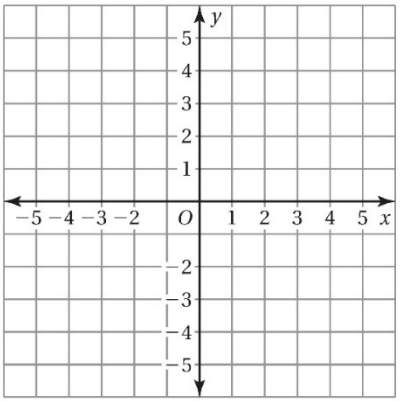


x-intercept : _____

y-intercept : _____

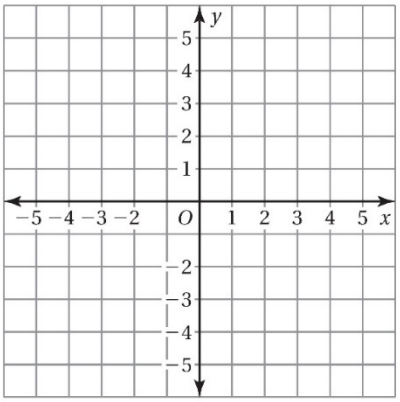
Find the x-intercept and the y-intercept of each equation, and then graph it.

19) $-4x + 5y = 20$



x-intercept : _____ y-intercept : _____

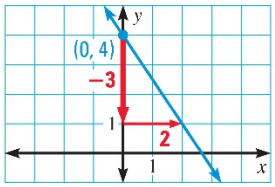
20) $6x - 3y = 12$



x-intercept : _____ y-intercept : _____

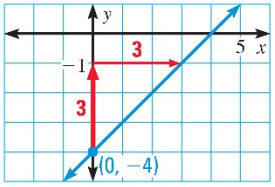
Write an equation of the line shown in slope-intercept form.

21)



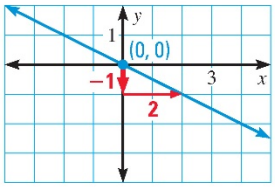
_____

22)



_____

23)



_____

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

24) $(-4, -1), (0, 5)$

25) $(0, -3), (1, -5)$

Write in point-slope form an equation of the line that passes through the given point and has the given slope.

26) $(2, 2)$; $m = -1$

27) $(-3, 5)$; $m = -\frac{5}{7}$

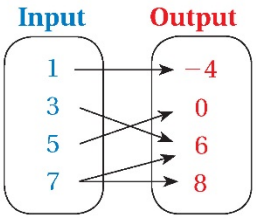
Write in slope-intercept form an equation of the line that passes through the given points.
(Clue: Is the *y*-intercept given?)

28) $(2, 1), (3, 5)$

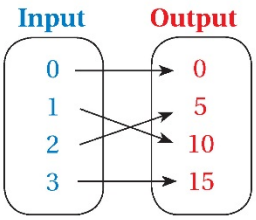
29) $(-1,5), (3,-3)$

Determine whether the relation is a function. **Explain**.

30)

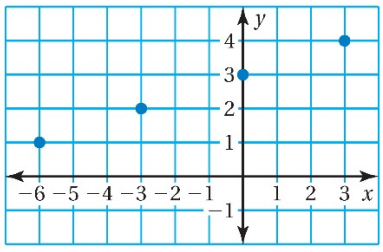


31)



Use the graph or table to write a linear function (equation) that relates *y* to *x*.

32)



33)

x	0	5	10	15
y	50	40	30	20