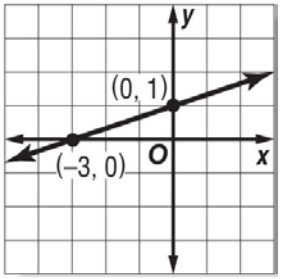
Name:_____

3.3,4.1-4.3,5.6 practice

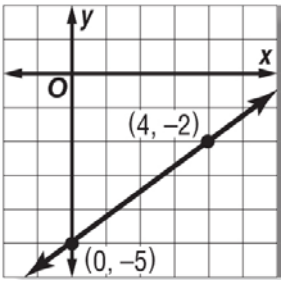
Write an equation of the line that passes through the given point and has the given slope.

1) 

2) (4, –5); slope $-\frac{1}{2}$

3) The cost for 7 dance lessons is $82. The cost for 11 lessons is $122. Write a linear equation to find the total cost C for ℓ lessons. Then use the equation to find the cost of 4 lessons.

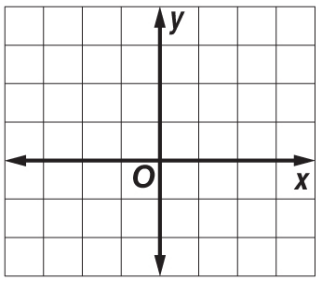
Write an equation in <u>slope-intercept form</u> given the information.

4) 

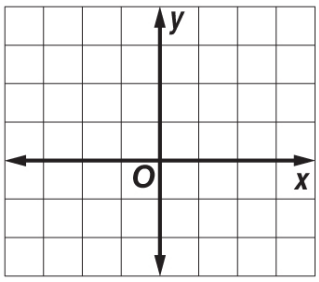
5) slope: –1, y-intercept –7

Graph each equation.

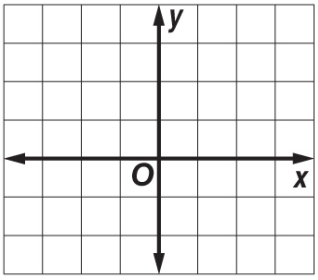
6) $y - 2 = -(x + 3)$



7) $2 = x$



8) $2y = 3x - 6$



9) Write an equation in point-slope form for a horizontal line that passes through (4, –2).

Write each equation in standard form.

10) $y + 2 = -3(x - 1)$

11) $y - 1 = -\frac{1}{3}(x - 6)$

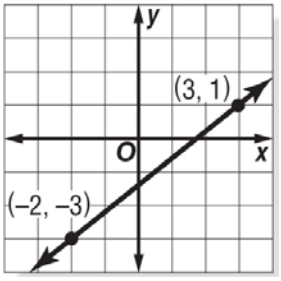
Find the value of *r* so the line that passes through each pair of points has the given slope.

12) $(-2, r)$, $(6, 7)$, $m = \frac{1}{2}$

Find the slope of the line that passes through each pair of points.

13) (3, 9), (–2, 8)

14)



For 15-18, match the inequality to the graph.

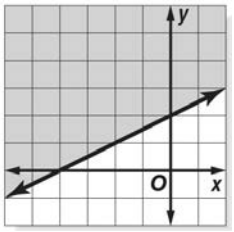
15) $y - 2x < 2$

16) $y \leq -3x$

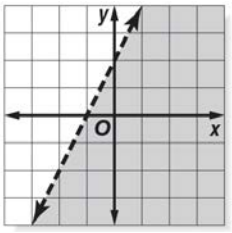
17) $2y - x \geq 4$

18) $x + y > 1$

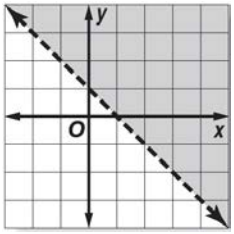
a.



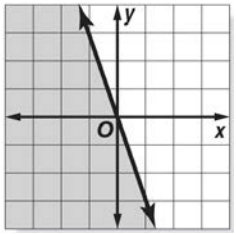
b.



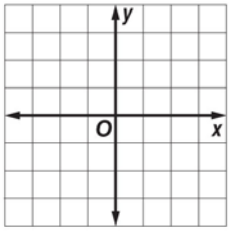
c.



d.



19) Graph $-2y - x > -3$



20) Determine which ordered pairs are part of the solution set for the inequality.

$3x + y \geq 6$, {(4, 3), (–2, 4), (–5, –3), (3, –3)}