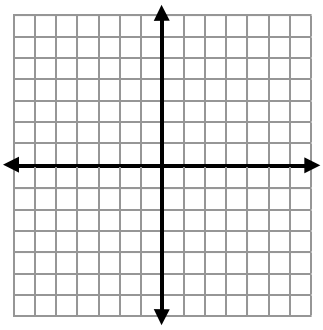
Unit 2 Linear Functions **Name:** _____

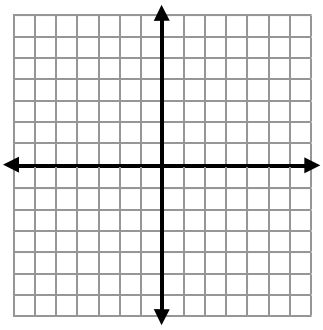
Day 3 Worksheet Slope Intercept Form (PH 6-2) **Date:** _____ **Hour:** _____

Plot the line with the given equation in slope-intercept form.

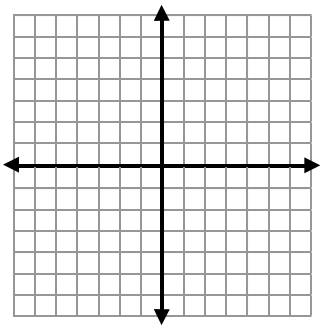
1. $y = \frac{1}{3}x - 2$



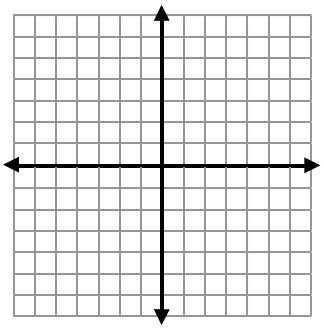
2. $y = -\frac{1}{2}x + 5$



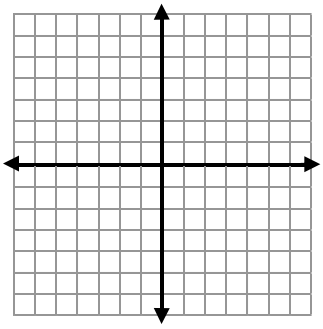
3. $y = 3x - 6$



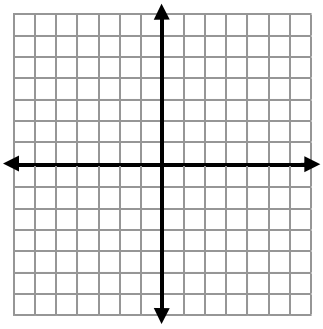
4. $y = -2x$



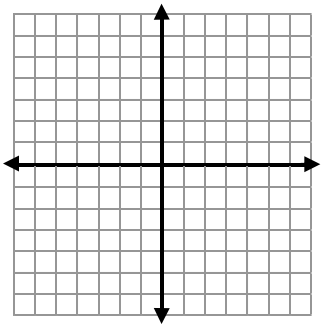
5. $y = \frac{4}{5}x$



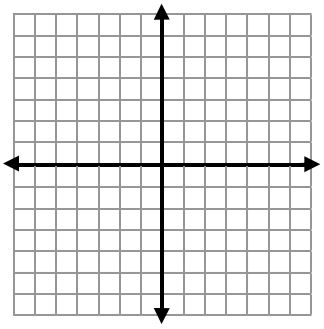
6. $y = -2x - 1$



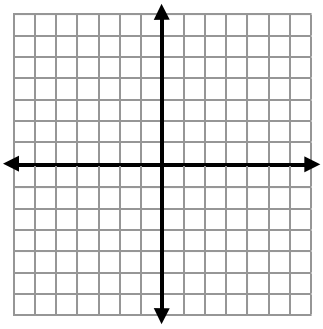
7. $y = -2$



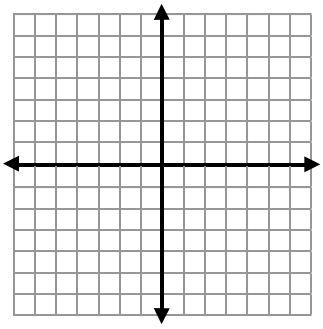
8. $y = \frac{1}{2}x + 5$



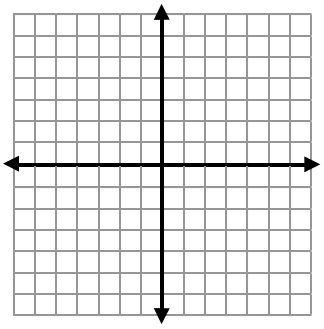
9. $y = x - 3$



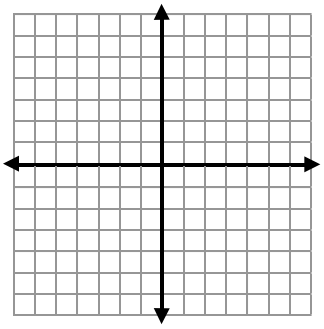
10. $y = -x + 6$



11. $y = -4x$

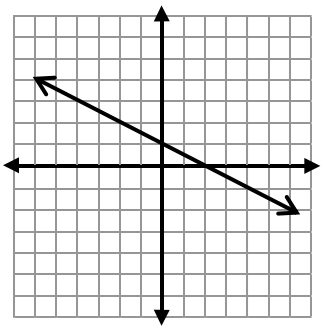


12. $x = 4$

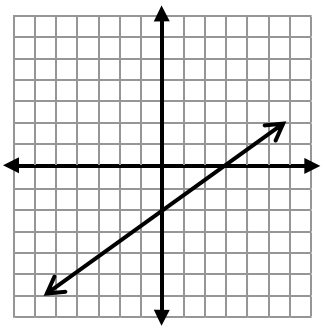


Determine the slope and y-intercept. Then, write an equation for the given line.

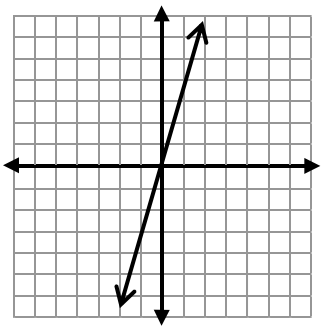
13.



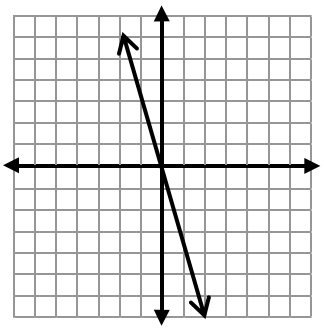
14.



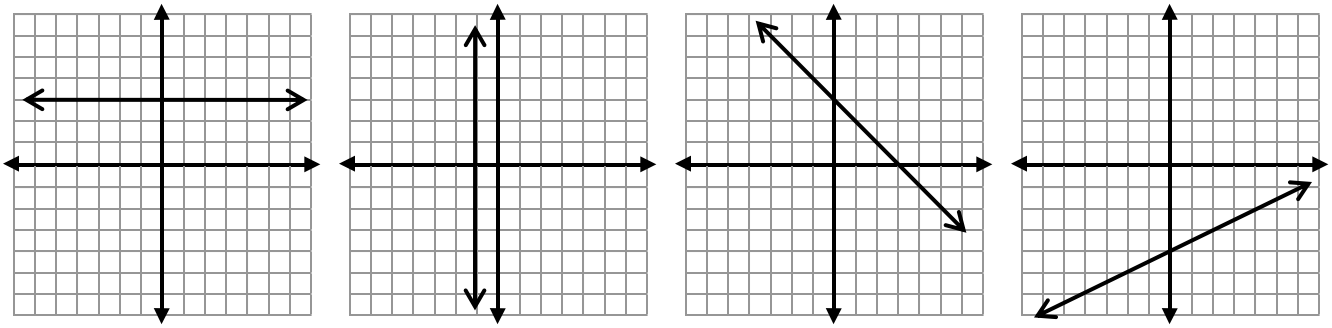
15.



16.



17. 18. 19. 20.



$$m = Slope = \frac{rise \updownarrow}{run \rightarrow} = \frac{y_2 - y_1}{x_2 - x_1}$$

$$Slope - Intercept \ \ Form: y = mx + b$$

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

21. $(0,0),(-2,4)$

22. $(1,-3),(3,-5)$

23. $(3,-2),(4,5)$

24.

Retail Sales A music store is offering a coupon promotion on its CDs. The regular price for CDs is \$14. With the coupon, customers are given \$4 off the total purchase. The equation $t = 14c - 4$, where c is the number of CDs and t is the total cost of the purchase, models this situation.

a. Graph the equation.
b. Find the total cost for a sale of 6 CDs.