

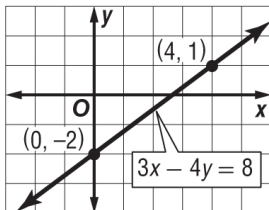
4-1 Notes: Graphing Equations in Slope-Intercept Form

Slope-Intercept Form

Slope-Intercept Form	
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Example 1: Write an equation in slope-intercept form for the line with a slope of -4 and a y -intercept of 3 .

Example 2: Graph $3x - 4y = 8$. It is important to be able to re-arrange linear equations into slope-intercept form.



Check graph using intercepts

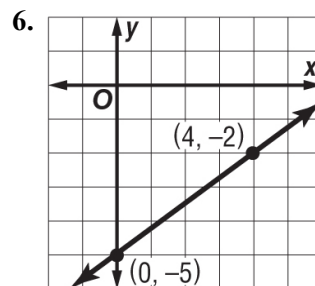
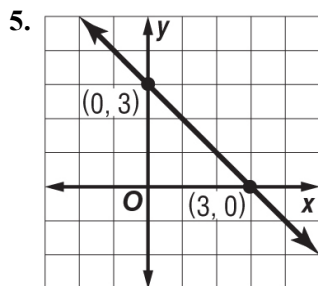
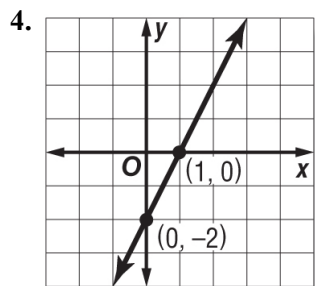
Exercises: Write an equation of a line in slope-intercept form with the given slope and y -intercept.

1. slope: 8 , y -intercept -3

2. slope: -2 , y -intercept -1

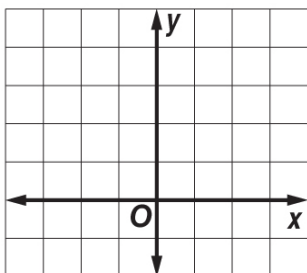
3. slope: -1 , y -intercept -7

Write an equation in slope-intercept form for each graph shown.

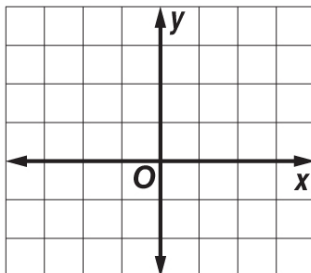


Graph each equation.

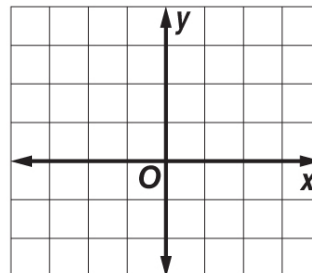
7. $y = 2x + 1$



8. $y = -3x + 2$



9. $y = -x - 1$

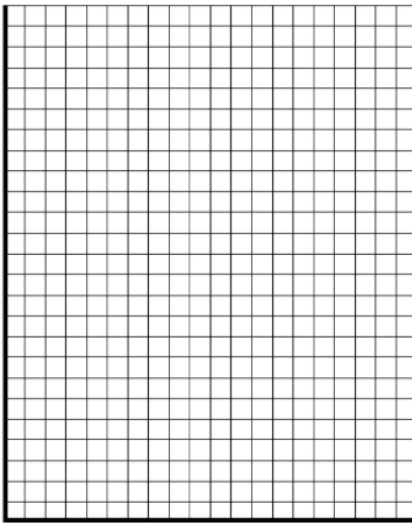


Modeling Real-World Data

Example: MEDIA Since 1999, the number of music cassettes sold has decreased by an average rate of 27 million per year. There were 124 million music cassettes sold in 1999.

a. Write a linear equation to find the average number of music cassettes sold in any year after 1999.

b. Graph the equation.



c. Find the approximate number of music cassettes sold in 2003.

Solve the following equations for Slope-Intercept Form. Identify the slope and y-intercept.

EX 1: $2x + 4y = 12$

EX 2: $4x - y = 12$

EX 3: $6 - 2y = x$

Note: