

Name: _____

Period: _____

4.4 – Graphing and Writing Linear Equations

Match the equation with its graph. Identify the slope and y -intercept.

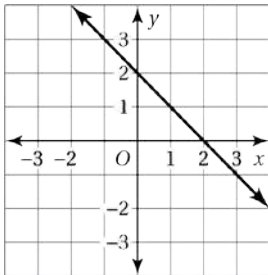
1) $y = 2x - 1$

$m =$ _____

$b =$ _____

Graph: _____

A.



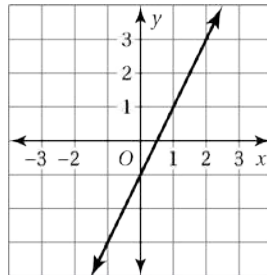
2) $y = -x + 2$

$m =$ _____

$b =$ _____

Graph: _____

B.



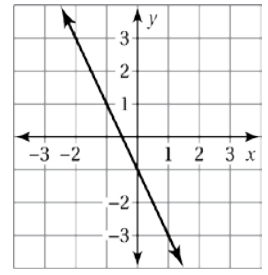
3) $y = -2x - 1$

$m =$ _____

$b =$ _____

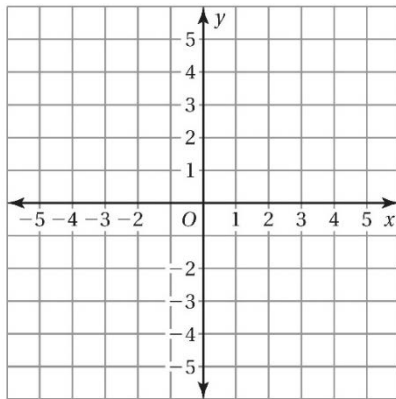
Graph: _____

C.

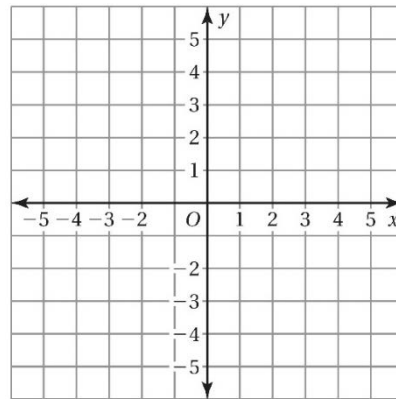


Graph (on a separate piece of graph paper) each equation using the slope and the y -intercept only.

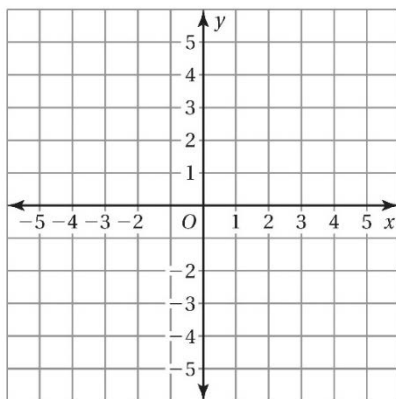
4) $y = x + 4$



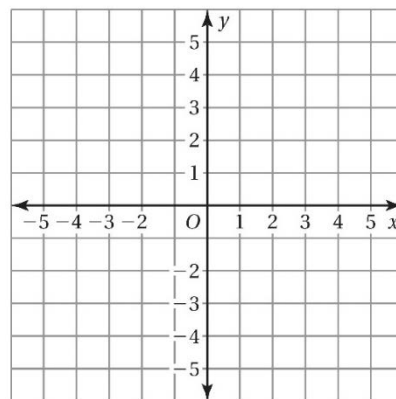
5) $y = -x + 2$



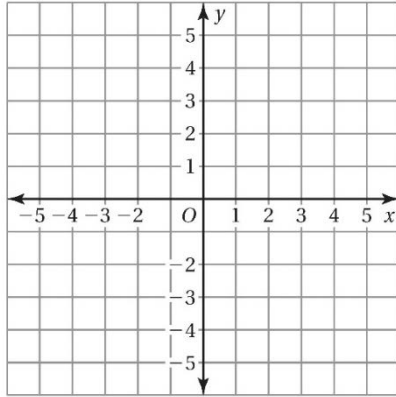
6) $y = 2x$



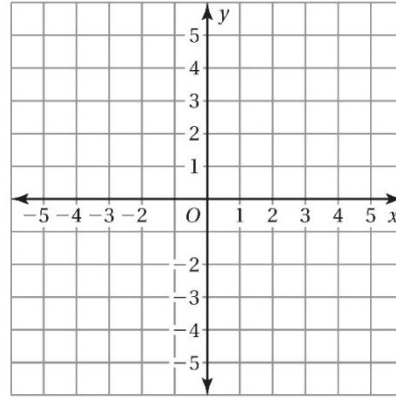
7) $y = \frac{2}{3}x - 1$



8) $y = \frac{4}{5}x + 1$

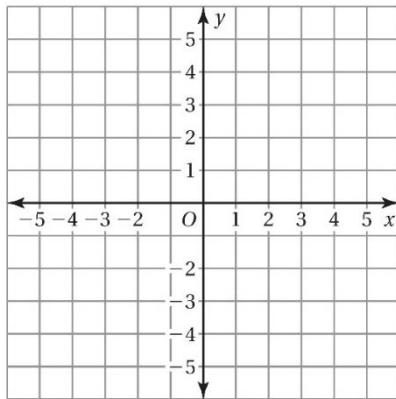


9) $y = 3$

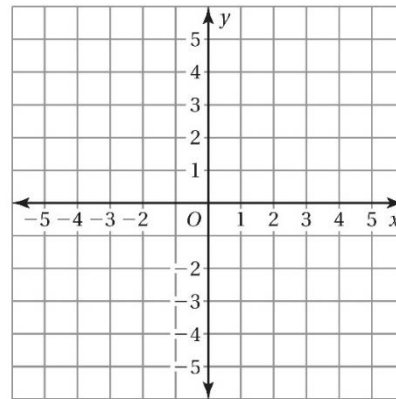


Solve each equation in slope-intercept form. Then graph.

10) $y - 3x = -3$

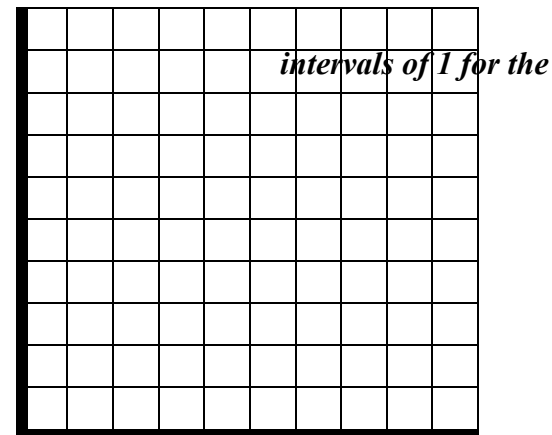


11) $2x + 4y = 4$



12) The total cost y (in dollars) for entrance into a fair when you go on x rides is represented by the equation $y = 3x + 6$.

- Graph the equation *using intervals of 3 for the y-axis and*
- Interpret the slope.
- Interpret the y-intercept.

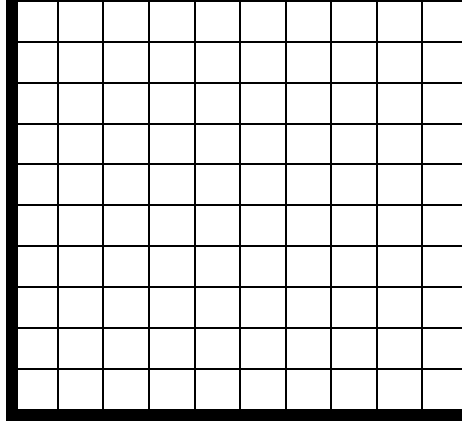


13) There is a \$5 monthly membership fee to download music. There is a

\$1 fee for each song downloaded.

- a. Write an equation in slope-intercept form that models the cost of downloading x songs per month.

- b. Graph the equation *using intervals of 2 for the y-axis and intervals of 1 for the x-axis*.



- c. What is the cost of downloading 15 songs?