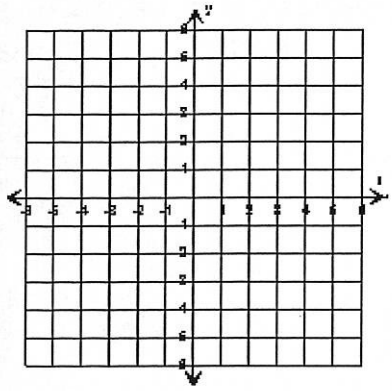
4.4 Graphing Linear Equations

Graph each equation.

- ✓ Choose 4 values to plug into the x-variable (input).
  - Be sure to choose at least one negative, zero, and at least one positive.
- ✓ Plot the 4 points from your table on the graph.
- ✓ Connect the points with a line (across your entire graph).

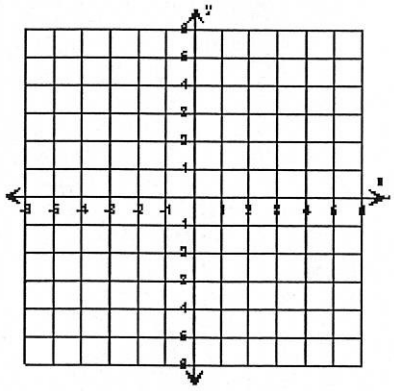
A. $y = x + 2$

x	y



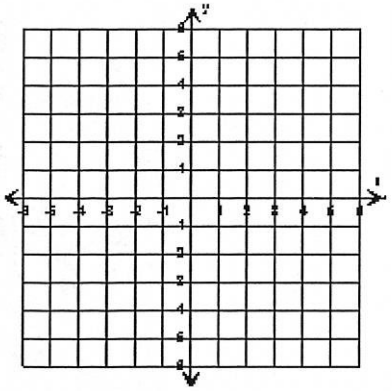
B. $y = -x - 2$

x	y



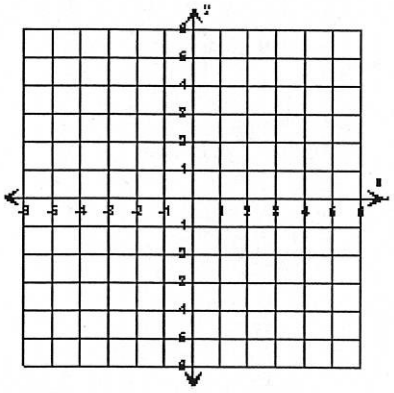
C. $y = \frac{1}{2}x - 1$

x	y



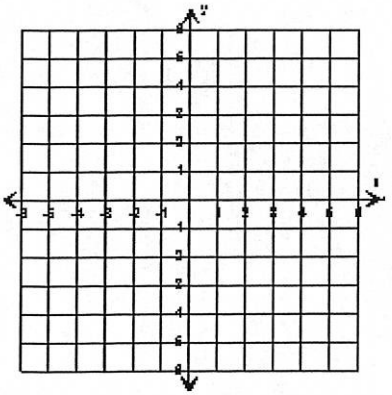
D. $y = -\frac{1}{2}x + 1$

x	y



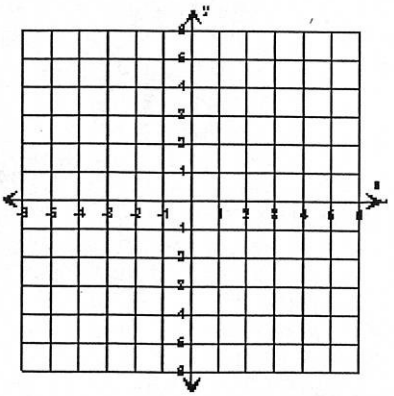
E. $y = 3x + 2$

x	y



F. $y = 3x - 2$

x	y



Now that you have graphed the equations, find the slope of each line and where each line crosse the y-axis and record it in the table below.

	Equation	Slope of the Graph	Point of Intersection on the y-axis
A.	$y = x + 2$		
B.	$y = -x - 2$		
C.	$y = \frac{1}{2}x - 1$		
D.	$y = -\frac{1}{2}x + 1$		
E.	$y = 3x + 2$		
F.	$y = 3x - 2$		