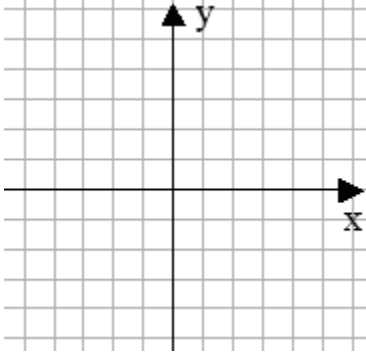


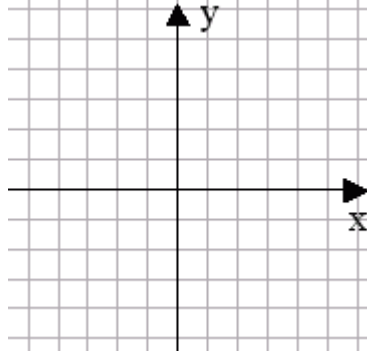
# Explore Graphs of Linear Equations

1. Graph each equation.

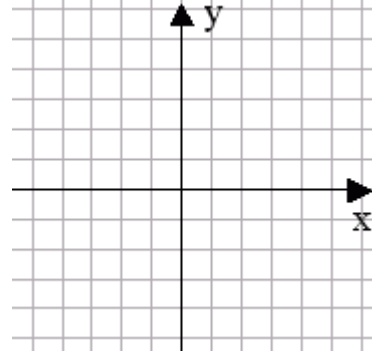
a.  $2y = 2x - 4$



b.  $-x + 4y = -3$



c.  $\frac{1}{2}x = -y + \frac{3}{4}$



2. Graph these equations in the same coordinate plane. Also note where each of them intersects the y-axis.

a)  $y = x$

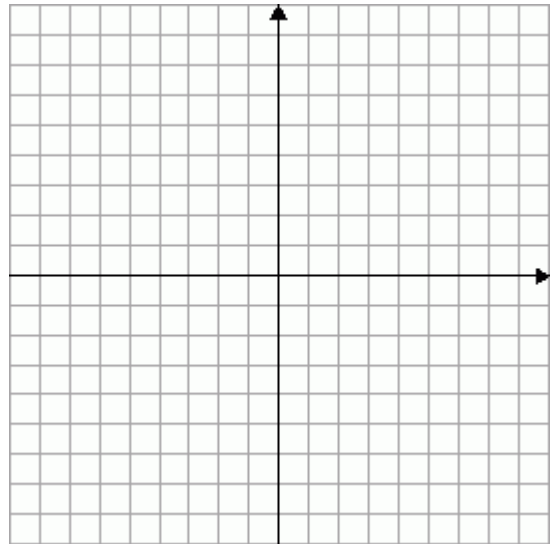
b)  $y = x + 1$

c)  $y = x + 2$

d)  $y = x - 1$

e)  $y = x - 2$

f) Where does the graph of the equation  $y = x - 12$  intersect the y-axis?



3. Graph these equations in the same coordinate plane. Also note where each of them intersects the y-axis.

a)  $y = x$  and  $y = -x$

b)  $y = 2x$  and  $y = -2x$

c)  $y = 3x$  and  $y = -3x$

d)  $y = 4x$  and  $y = -4x$

f) How is the graph of the equation  $y = 10x$  related to the graph of  $y = x$ ?

