

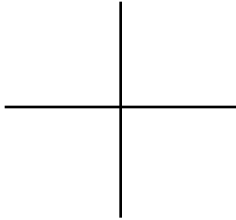
**H. Geom.**

**Lines**

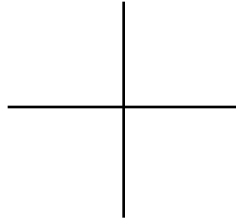
Name \_\_\_\_\_

1. Sketch a graph for each of the equations below.

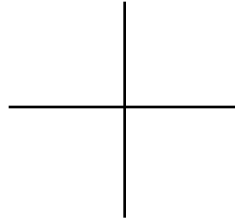
a)  $y = 2x - 3$



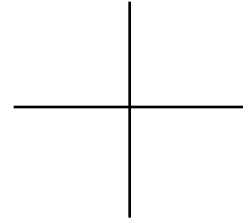
b)  $y = \frac{1}{3}x + 1$



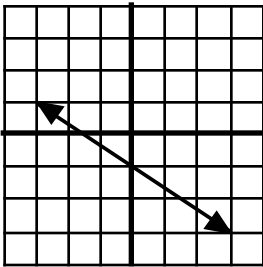
c)  $y = -4x$



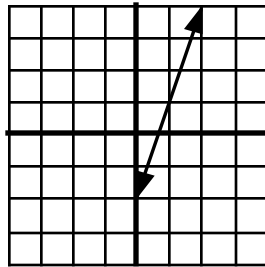
d)  $y = -2$



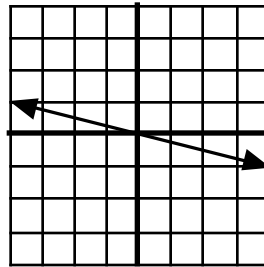
2. Write an equation for each of the graphs shown below.



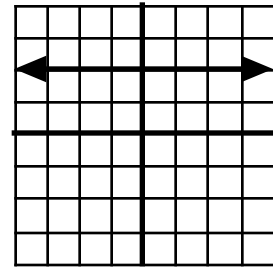
$y =$  \_\_\_\_\_



$y =$  \_\_\_\_\_



$y =$  \_\_\_\_\_



$y =$  \_\_\_\_\_

3. The following questions refer to the lines whose equations are given below:

(a)  $y = \frac{-2}{3}x + 4$  (b)  $y = -x + 5$  (c)  $y = \frac{3}{2}x - 1$  (d)  $y = -2x - 4$  (e)  $y = x - 1$

Which equations are parallel?

Which equations pass through the point (3, 2)?

Which equations have the same y-intercept?

Which equations are perpendicular?

Which equations pass through the third quadrant?

4. Write the equation of a line with a slope of  $\frac{-1}{2}$  which contains the point (6, -3).

5. Find  $k$  if the line through A( $k$ , 3) and B(2, -1) has a slope of  $-\frac{2}{3}$