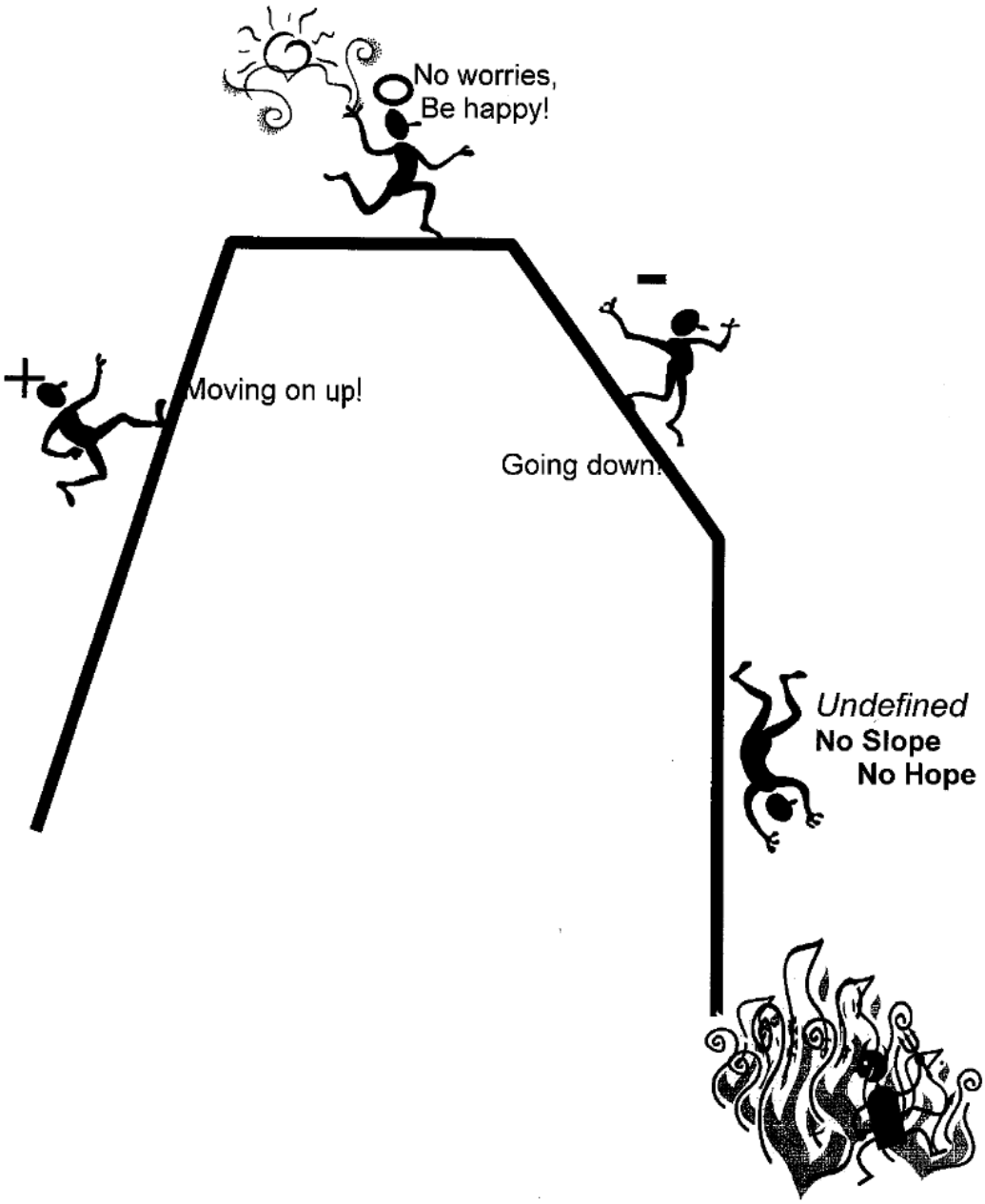
What do lines with positive, negative, zero, and no slope look like?

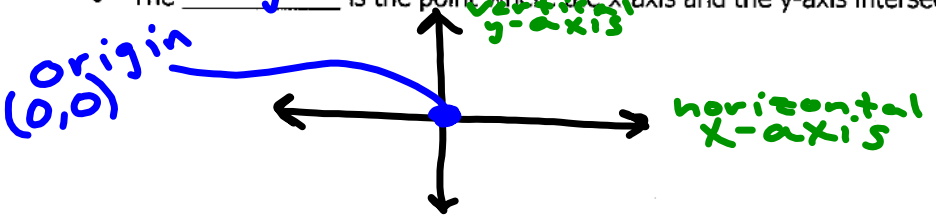


Graphing Name_____

Key Questions: How do I graph an ordered pair in the coordinate plane? Illustrate.

Definitions:

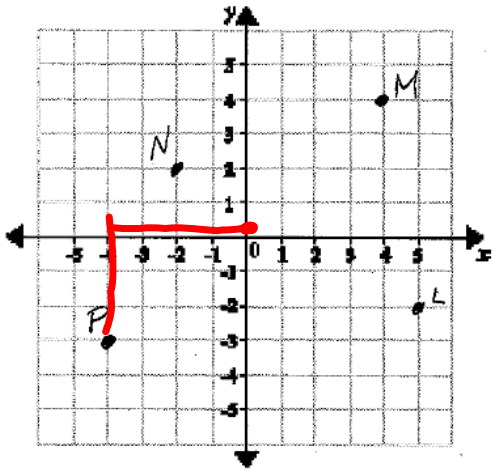
- Like a map, a **coordinate plane** is formed by the intersection of a horizontal and a vertical axis.
- The ~~x-axis~~ is the horizontal axis and the **y-axis** is the vertical axis on the coordinate plane.
- The origin is the point where the x-axis and the y-axis intersect.



- The **x-coordinate** is the 1st number in the ordered pair.
- The **y-coordinate** is the 2nd number in the ordered pair.

(x, y)

Examples: Finding the Coordinates of Points on a Plane



Point M (4, 4)

Point N (-2, 2)

Point L (5, -2)

Point P (-4, -3)

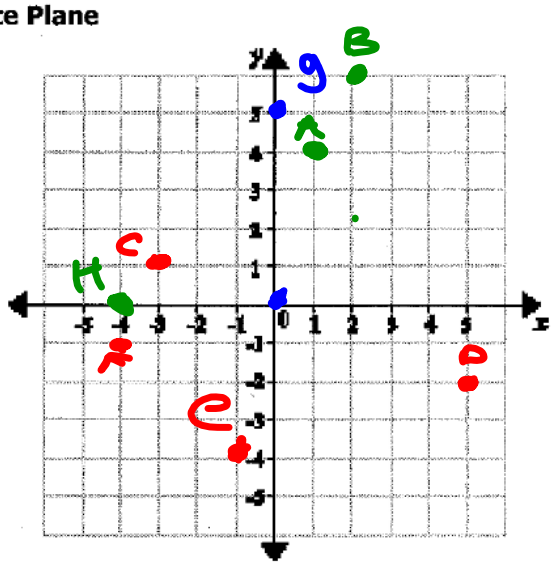
Examples: **Graphing Points on a Coordinate Plane**

A (1, 4) E (-1, -4)

B (2, 6) F (-4, -1)

C (-3, 1) G (0, 5)

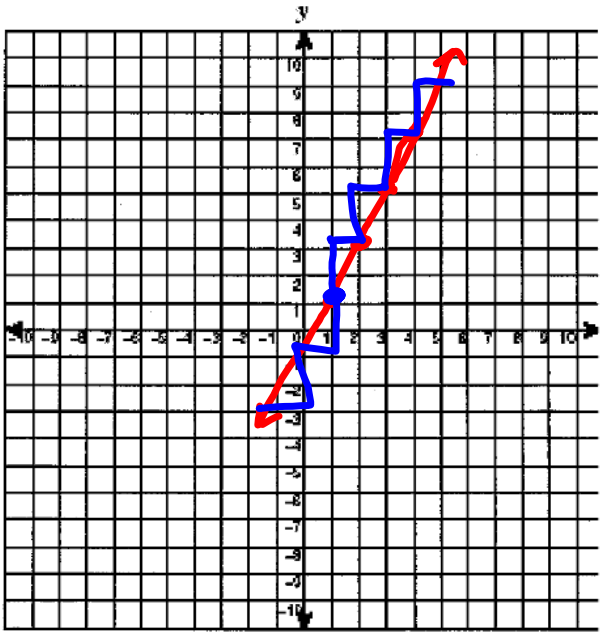
D (5, -2) H (-4, 0)



Examples: **Graphing an Equation**

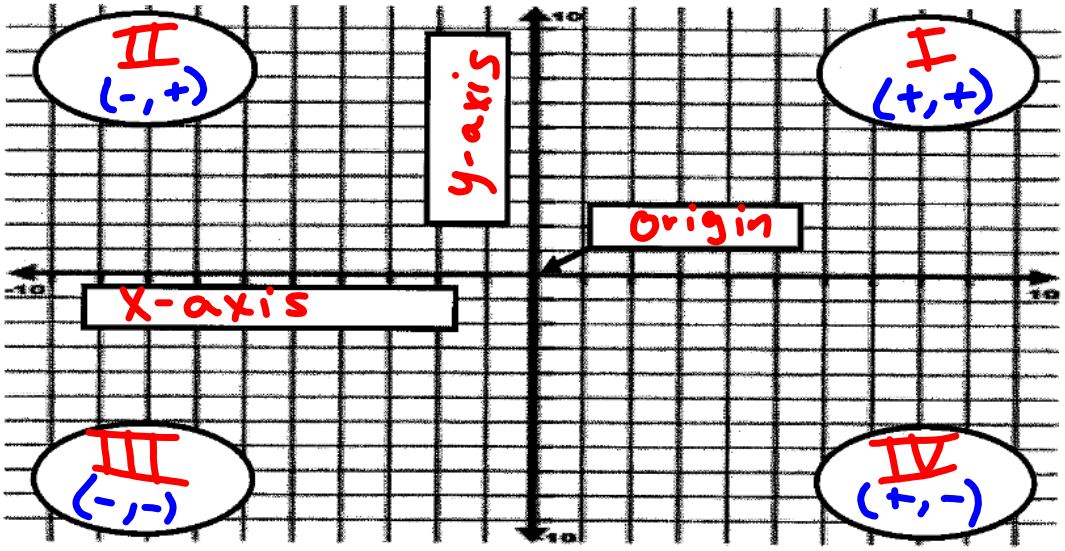
- Graph the equation y = 2x – 1.

x	2x - 1	Y	(x,y)
1	2(1)-1	1	(1,1)
2	2(2)-1	3	(2,3)
3	2(3)-1	5	(3,5)
4	2(4)-1	7	(4,7)



(3)

Graphing Ordered Pairs



(X, Y)

X

0 → Don't Move
+ → move right
− → move left

y

0 → Don't move
+ → move up
− → move down