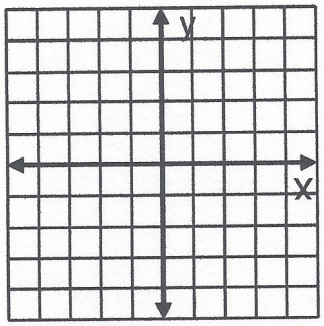
Worksheet 1

Horizontal Lines

On the following graph, graph a point with a y-coordinate of 2.
Graph several more.
What is the equation of this line? _____

What is the y-intercept of this line? _____

_____

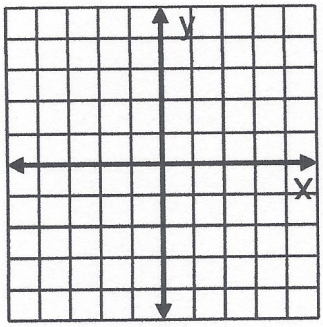


Vertical Lines

On the following graph, graph a point with a x-coordinate of 3.
Graph several more.
What is the equation of this line? _____

What is the x-intercept of this line? _____

_____



Horizontal Lines: The graph of $y = c$, where c is a constant, is the horizontal line passing through the point $(0, c)$.

Vertical Lines: The graph of $x = c$, where c is a constant, is the vertical line passing through the point $(c, 0)$.

Undefined and zero slopes are easily confused. To remember which one is which we will use the made up words HOY and VUX.

H-Y

H: HORIZONTAL _____ lines

O: Slope of _____

Y: equations are written as y = 6, y = 2, y = -1, etc.

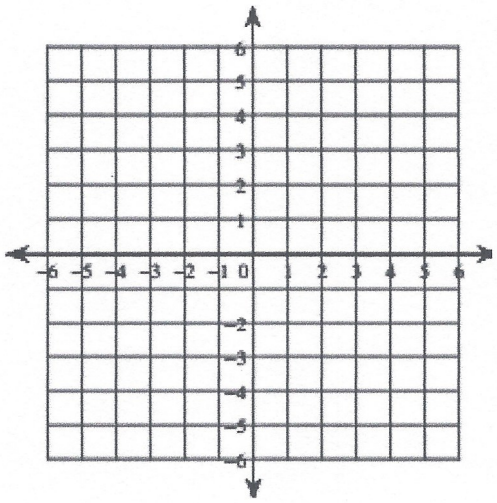
V-X

V: VERTICAL _____ lines

V: have _____ slopes

X: equations are written as x = 3, x = -4, x = 0, etc.

Example 1: On the graph below graph the linear equations $x = -3$ and $x = 2$.



Example 2: On the graph below graph the linear equations $y = 4$ and $y = -3$.