

Algebra I

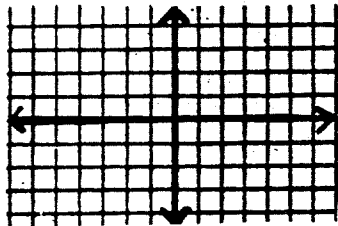
Notes 5.5 Horizontal and Vertical Lines

- Objectives: Determine from an equation of a line if a line is horizontal or vertical.
Know the slope of horizontal and vertical lines.
Be able to graph horizontal and vertical lines from their equations.

Horizontal Lines

Graph on the coordinate plane

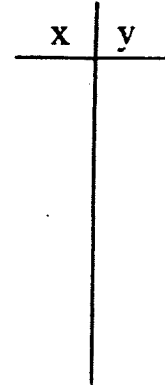
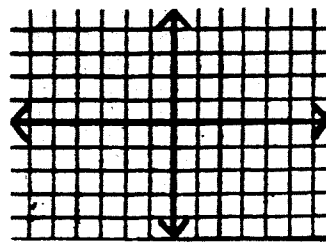
$y = 1.$



Vertical Lines

Graph on the coordinate plane

$x = 2.$

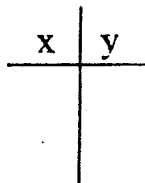
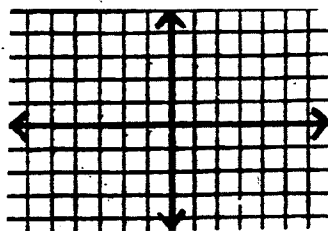


Find the slope of the line using two points.

Find the slope of the line using two points.

Graph on the coordinate plane

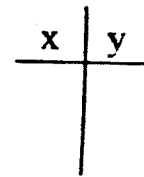
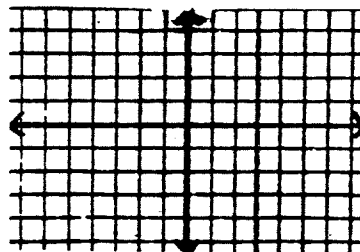
$y = -3.$



Find the slope of the line using two points.

Graph on the coordinate plane

$x = -4.$



Find the slope of the line using two points.

Horizontal lines are in the form _____.

Vertical lines are in the form _____.

Horizontal lines have _____ slope.

Vertical lines have _____ or _____ slope.

Determine if each line is **horizontal** or **vertical**.

1. $y = -6$

2. $x = -6$

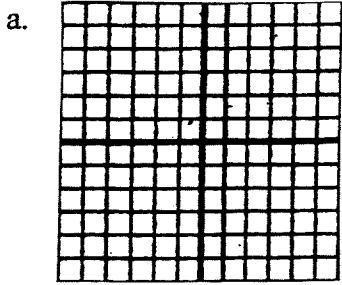
3. $x = \frac{1}{2}$

4. $y = 0$

For each equation:

- a. Graph the line. b. Identify each line as **horizontal** or **vertical**. c. Determine the **slope** of each line.

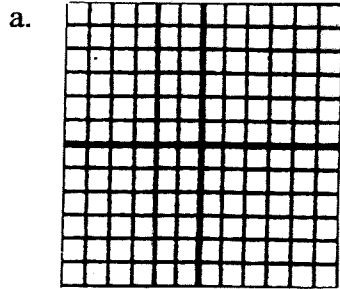
1. $y = 2$



b. _____

c. slope =

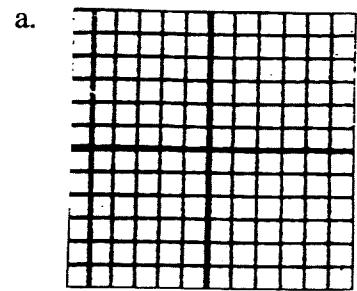
2. $x = 4$



b. _____

c. slope =

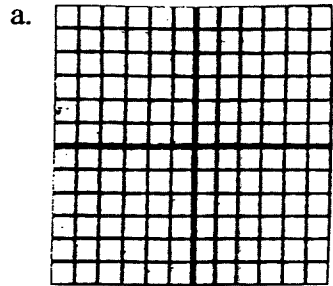
3. $y = -3$



b. _____

c. slope =

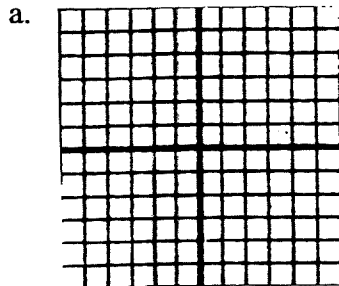
4. $x = -2$



b. _____

c. slope =

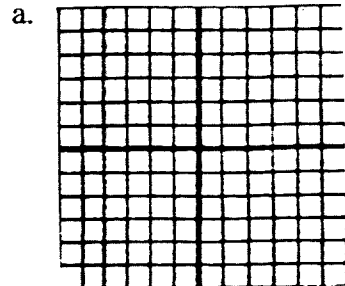
5. $y = 4$



b. _____

c. slope =

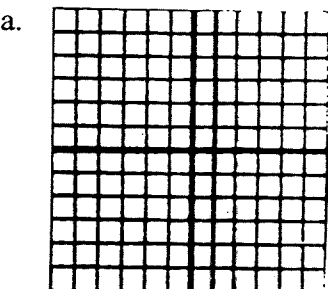
6. $x = 3$



b. _____

c. slope =

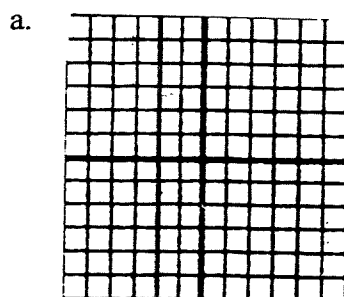
7. $x = -4$



b. _____

c. slope =

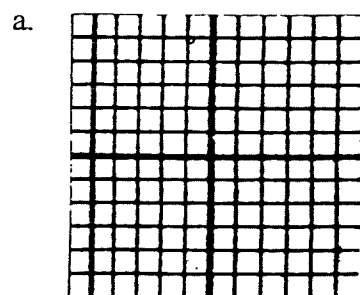
8. $x = 5$



b. _____

c. slope =

9. $y = 5$



b. _____

c. slope =