

Geometry

Unit 2 // Lesson 1

Name:

Date:

Period: 1 2 3 4 5 6

Standards: 16.0

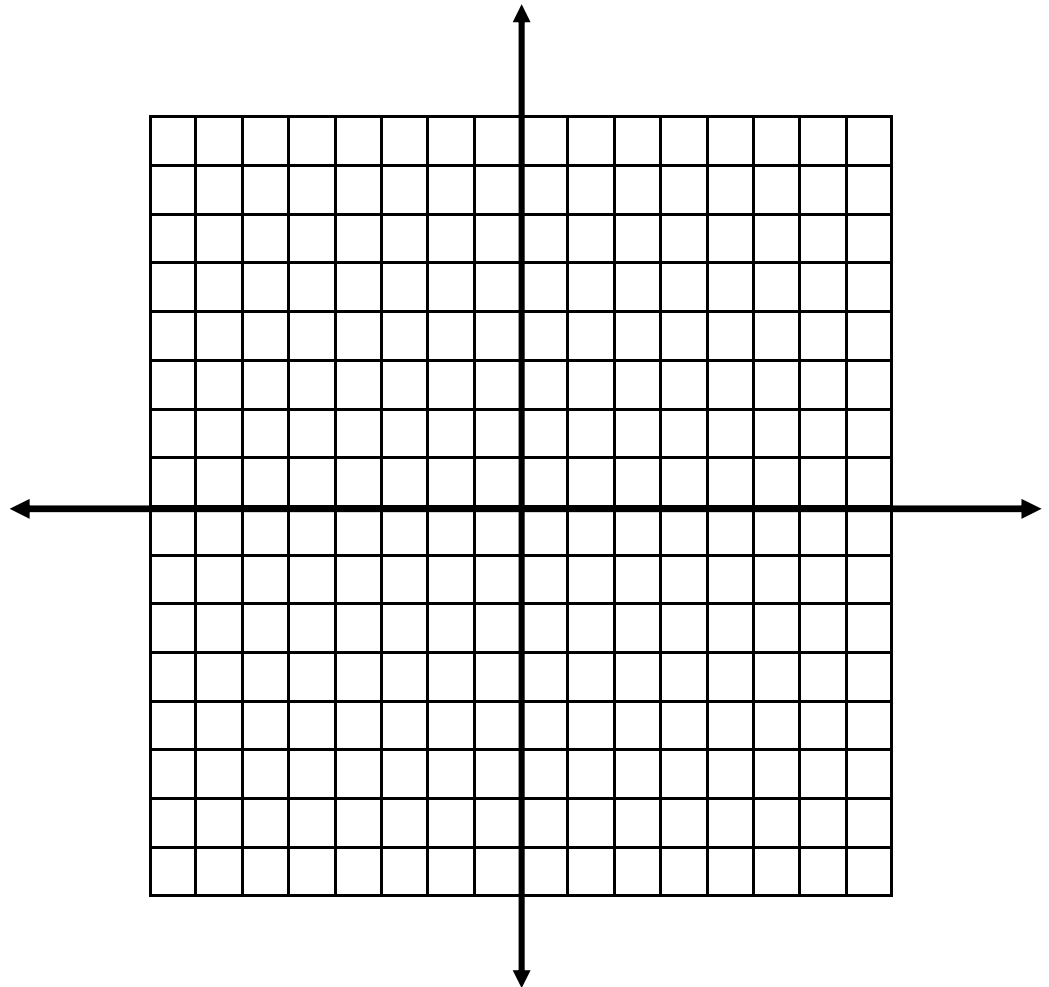
Holt: 3.6 Lines in Coordinate Plane

Objective

Graph the line: $y = -3x + 2$

Graph the line: $y = -3x + 3$

Graph the line: $y = -3x - 2$



Question: What do you notice about the lines?

These lines are called _____ lines

Parallel lines have the _____

Test Questions:

1. Which of the following lines **is** parallel to $y = 3x + 7$?

A.) $y = \frac{1}{3}x + 4$ B.) $y = -3x + 7$ C.) $y = 3x$ D.) $y = 3.1x + 4$

2. Which of the following lines **are** parallel to $y = 3x + 7$?

A.) $y = \frac{1}{2}x + 4$ B.) $y = 3x + 1$ C.) $y = 3x$ D.) $y = 3x + 4$

Example 1) Find a line parallel to $y = 4x + 6$ and through the point $(-2, 8)$

Equation:

Example 2) Find a line parallel to $y = \frac{1}{3}x + 2$ and through the point $(6, 3)$

Equation:

Steps: 1.) Choose the slope m 2.) Plug in to: $y - y_1 = m(x - x_1)$ 3) Solve for y

1) Find a line parallel to $y = 2x + 6$ and through the point $(-3, 5)$

Equation:

2) Find a line parallel to $y = \frac{1}{2}x + 2$ and through the point $(-4, 9)$

Equation:

3) Find a line parallel to $y = \frac{2}{3}x + 6$ and through the point $(9, 1)$

Equation:

4) Find a line parallel to $y = 5x + 2$ and through the point $(-1, 7)$

Equation: