

Algebra 2

Topic 2 // Lesson 2

Name: _____

Date: _____

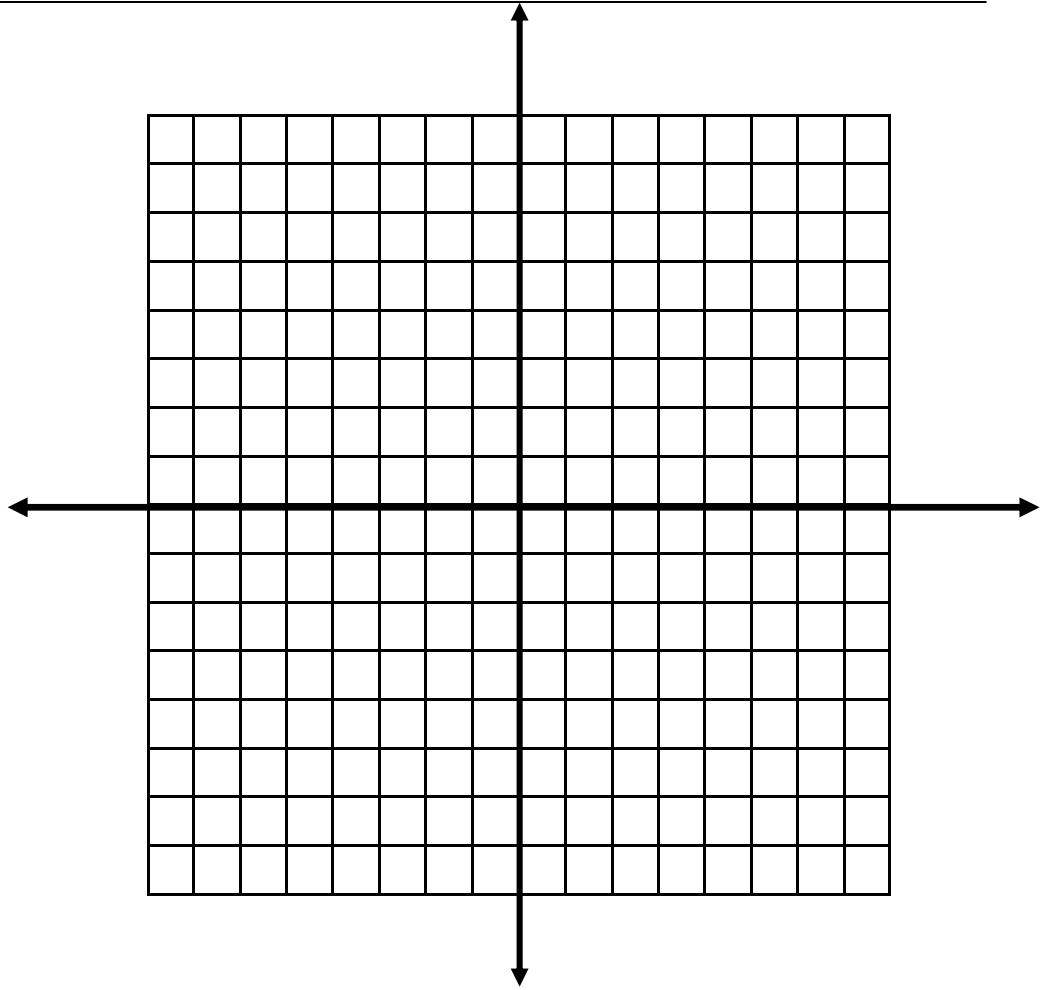
Period: 0 1 2 3 4 5 6

Goal:

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

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

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



Q1: 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:

Note: Same steps as chapter 5: 1.) Find slope **m** 2.) Find y-intercept **b** 3.) Plug in $y=mx+b$

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:

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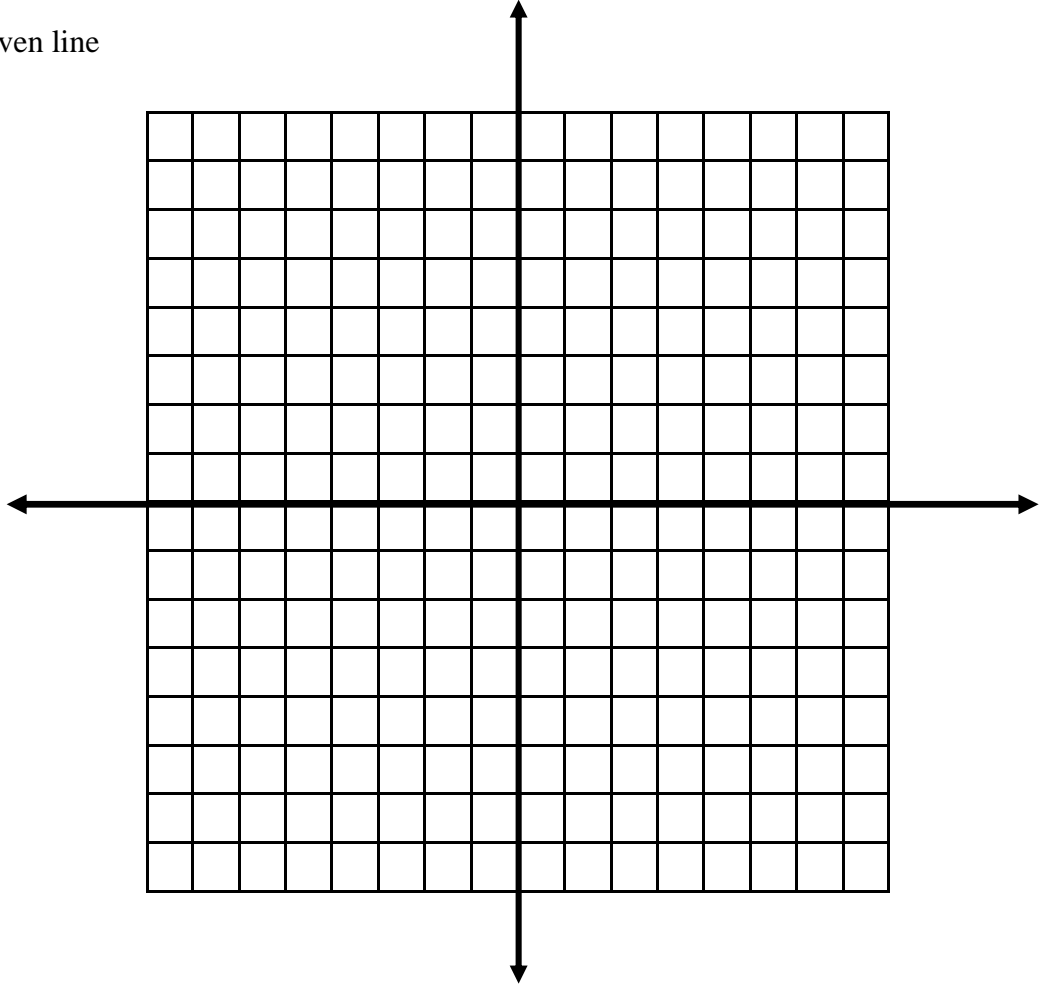
Period: 0 1 2 3 4 5 6

Goal: to graph a parallel line to a given line

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

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

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



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