Name_____   Date_____

UNIT 3   **LESSON 3**

Do Now: Check homework answers and then we are going to watch a video!
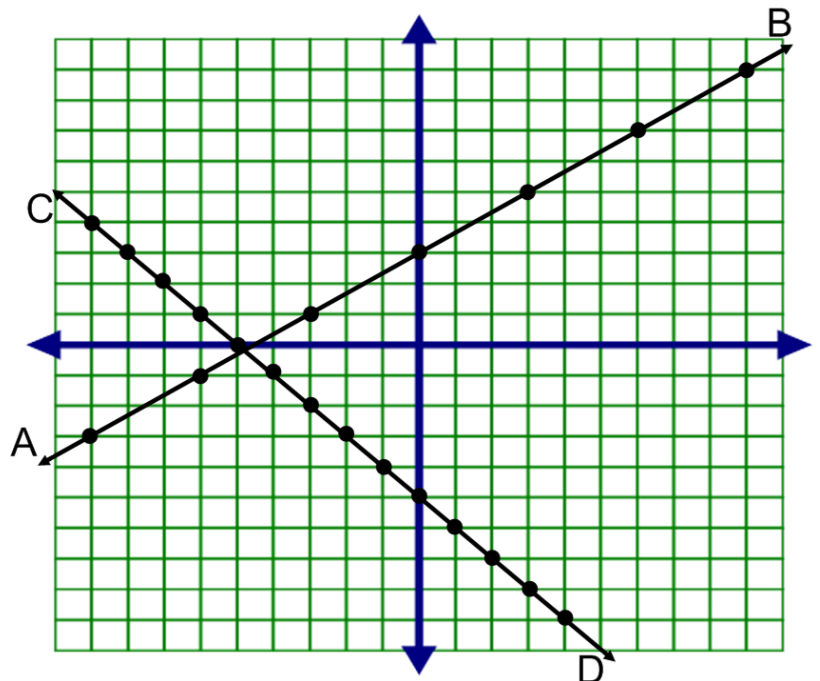
https://www.youtube.com/watch?v=avS6C6_kvXM

AIM: Graphing lines using the SLOPE-INTERCEPT method

Lines have either a positive slope, a negative, a zero slope, or no slope.

The incline or steepness of a line is also called the_____. It's the change in the

_____ distance over the change in the _____ distance.

1. Find the slope of AB:

2. Find the slope of CD:

3. Given: $y = -x + 6$ and $y = 2x + 3$

    a. Using your calculator graph both equations.

    b. What do you notice about these graphs?

Rule: The equation of a line is represented by_____

$$m = \underline{\hspace{3cm}}$$

$$b = \underline{\hspace{3cm}}$$

4. What is the slope and y – intercept of the following lines?

    a. $y = 2x - 5$ b. $y = -3x + 2$ c. $y = 7x$ d. $y = \dfrac{1}{2}x - 1$

Directions: Write an equation of the line whose slope and y-intercepts are given.

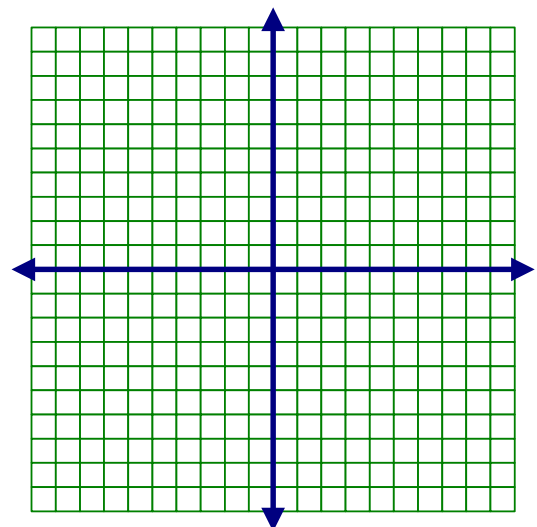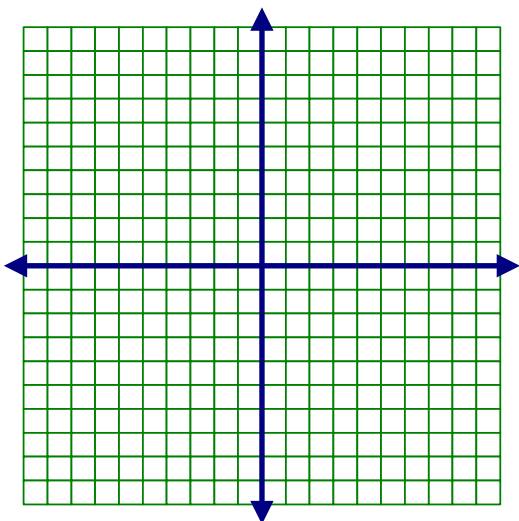5. slope = 3, y-int = -1   6. slope = -2, y-int = 2   7. slope = -1, y-int = 0   8. slope = 0, y-int = 3
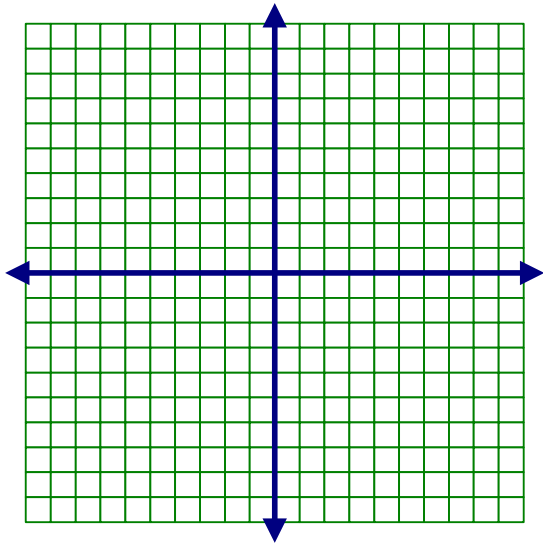
Directions: Graph the equation of the lines.

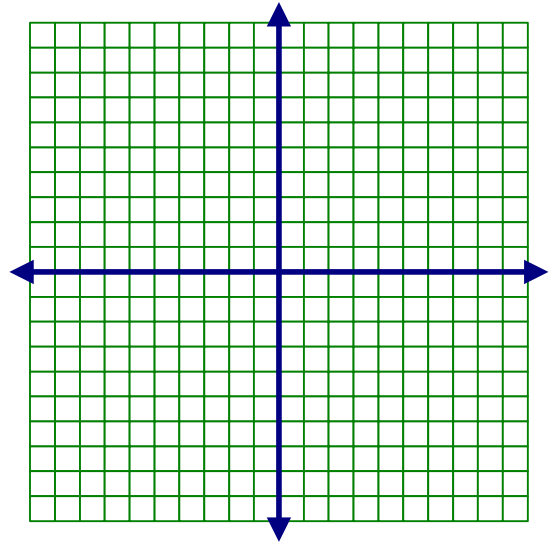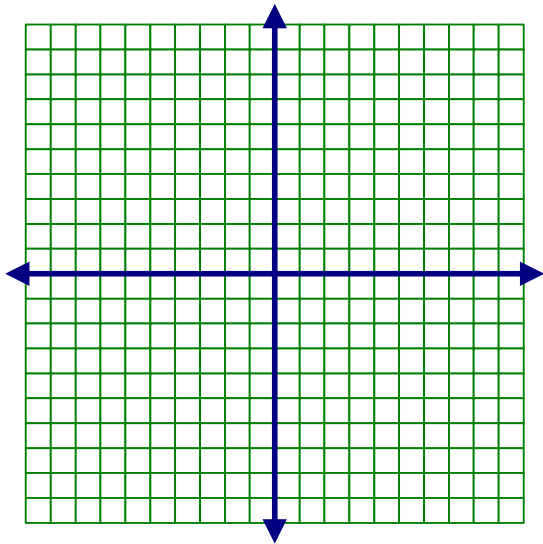   9. Graph: $y = 4x - 2$ 10. y = -2x +3

11. $y = -\dfrac{3}{4}x + 5$

12. $y = 2x$

13. y = x -5

14. y = -x