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Due at the Beginning of Next Class

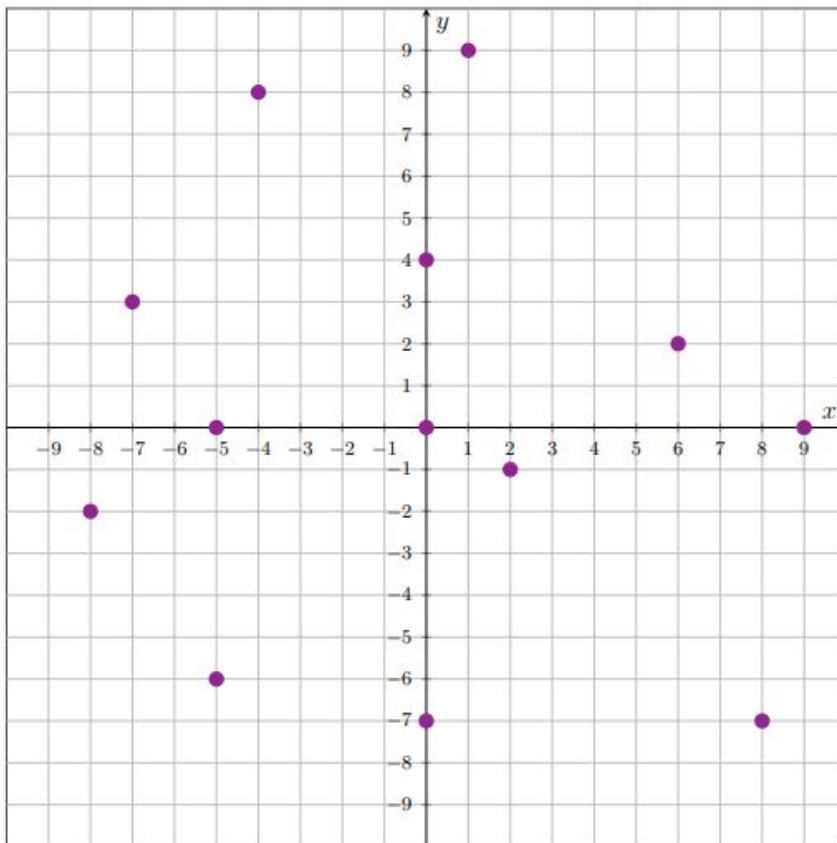
Section 4.1 Cartesian Coordinates

The Cartesian Coordinate System for Two Variables

The grid shown below is known as the Cartesian coordinate system or the rectangular coordinate system.

- A point is represented as an ordered pair, (x, y)
- The horizontal axis is called the x -axis
- The vertical axis is called the y -axis
- There are four quadrants labeled counter clockwise: *I, II, III, IV*
- The point $(0,0)$ is called the origin
- The scale is the width of each space on the graph

1. Label the ordered pair of each point on the Cartesian coordinate system.



Section 4.2 Graphing Linear Equations

Now that we have graphed ordered pairs, (x, y) , on a coordinate system we are going to look at lines.

Linear equations have both an x and a y variable, like $2x + 5y = 20$.

2. Determine whether the following ordered pairs are solutions to the equation $2x + 5y = 20$

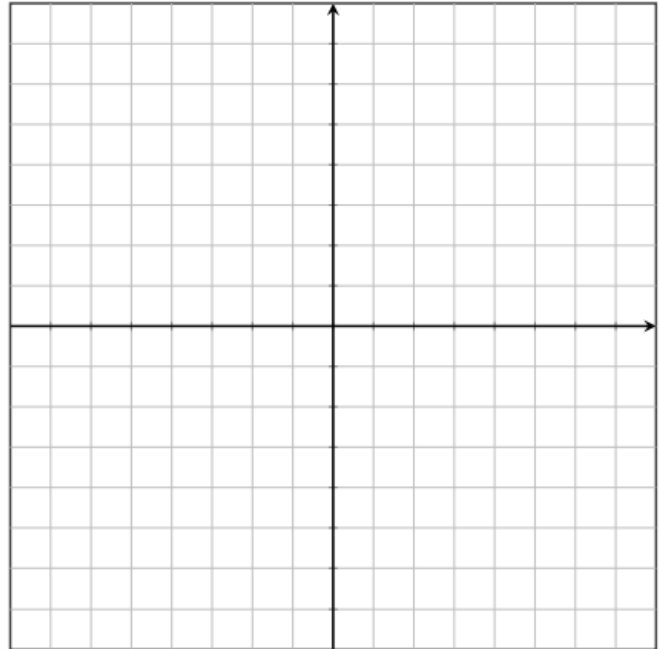
$(0,4)$

$(-5,6)$

$(2,3)$

3. Make a table of solutions to the linear equation $y = 3x + 1$. Then graph the line.

x	$y = 3x + 1$	(x, y)



4. Make a table of solutions to the linear equation $y = \frac{1}{2}x - 1$. Then graph the line.

x	$y = \frac{1}{2}x - 1$	(x, y)

