## MAT0028 ~ Lesson 18-B

Work the following examples as you listen to the recorded lecture.

## **Graphing Lines by Point-Plotting**

It takes only 2 points to draw a line on the rectangular coordinate system. For example, plot the points (3,4) and (-2,-2) on the graph below, and then draw a line that goes through both.



To graph linear equations, we simply need 2 points that work for the equation.

Example 1: y = -4x





Remember
To graph a line by Point-Plotting:
1. Pick a value for either <b>x</b> or <b>y</b> .
2. Solve the equation for the unknown value.
3. Plot the point, and repeat these steps for another value.
4. Hint: pick numbers that make the equation easy to solve.

Example 2: y = -x + 2





Example 3: x + 3y = 6



