**6.5 Slope-Point Form of a Linear Equation**

This form is created by rearranging the slope formula

If we know the slope and a point, we can create a linear equation.

ex.1 If slope is -3 and a point on the line is (-2,5), write the equation of the line in point slope form.

2. m = - point (2, -1)

3. points (3, 1) (-1, -2)

parallel – m equal

perpendicular – m negative reciprocal

ex.4. Write the equation of a line that is parallel to y = x – 5 and passes through point (1, -1).

ex.5. Write the equation of a line that is perpendicular to y = 3x + 5 and passes through (2, -3).

**Homework**