Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Class Period \_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_

**Graphing Linear Equations Quilt Project**

**Instructional Packets #22-26**

This is a week-long project. Work on a piece (or two) of the project each day this week and turn it all in at once on Friday. You will be creating a design for a quilt using the 9 equations that are given below.

**Step 1:** Find the slope and y-intercept of each line given. Remember Slope-Intercept Form! y = mx + b, where m is the slope and b is the y-intercept. So, if the equation is y = 4x – 7, 4 is the slope (m) and -7 is the y-intercept (b).

**Step 2:** Using your equation and the given x or y-value, find 2 ordered pairs that fall on each line. Substitute the numbers given in a and b for the variable given, and solve for the other variable.

**Step 3:** Graph each of the equations with a ruler. Make sure to draw the lines all the way to the edge of your paper. Do this step in pencil!

**Step 4:** Check the ordered pairs you found on Step 2 and make sure they fall on the lines you drew in the last step.

**Step 5:** Color each section of the quilt to make a colorful design.

**Step 6:** Go back over the lines you drew in Step 3 in black to make them stand out.



