"Try"-angle and Systems of Equations Activity Handout

I. Students will complete the LearningCheck warm-up before getting into groups.
- RED Group
  – Using the red paper, straight edge, and compass in front of you, create right triangles where one of the angles, *x* is twice as large as the other angle, *y*. Each member must have unique angle measures for *x* and *y*.
  – Cut out your triangles and place them on the grid paper in the appropriate place (using the *x* and *y* angle values as their (*x*, *y*) coordinate).

- Blue Group
  – Using the blue paper, straight edge, and compass in front of you, create triangles where two of the angles, *x* and *y*, are complementary. Each member must have unique angle measures for *x* and *y*.
  – Cut out your triangles and place them on grid paper in the appropriate place (using the *x* and *y* angle values as their (*x*, *y*) coordinate).

II. After all triangles have been posted on the grid paper:

- Using your keyboard, the Notefolio application, and complete sentences, make some observations using mathematical lingo about what you see on the grid paper.

III. Open the Activity Center in Navigator and have students do the following (make sure you have the activity center set to accept points; once all students have plotted their points, stop the activity and reset it to accept equations):

- Using your TI-84, logon to NavNet.
- Plot your triangle's "point".
- Input an equation that would accurately represent the points your group plotted.

IV. After completing the activity center portion of the assignment, have students do the following:

- Going back to your keyboards and Notefolio, answer the following:
  – 1) What do you notice about the equation, the points, and the initial directions given to your group?
  – 2) Are there any other triangles that could have been "plotted" that are not already on the grid paper? How do you know?
  – 3) Create a triangle that could be placed in the fourth quadrant. What do you notice?
  – 4) Create a triangle that could be plotted in the second quadrant. What do you notice?
  – 5) What is significant about the red and blue triangles that overlap?

V. After students have completed the Notefolio portion of the activity, they should complete the LearningCheck Cool-Down.