Instructions for DIST2 calculator program

1. For the TI83 or 82: To enter the program editor, press the **PRGM** button (third button from top, center column). Move your cursor to **NEW** on the top row. Select **1:Create New** by pressing **ENTER**.

For the TI86 or 85: To enter the program editor, press the **PRGM** button (third button from top, center column). Select **EDIT**. This will give you a place to enter the name of your new program.

2. Name the program, DIST2. The **ALPHA LOCK** is automatically on.

3. To access the green letters and characters, you'll use the **ALPHA** button. Press it once and then the appropriate button if you want just one alphabetical character.
For the TI83 or 82, press the **2nd** button and then the **ALPHA** button to turn on the **ALPHA LOCK**. For the TI85 or 86, press **ALPHA** twice to turn on **ALPHA LOCK**. Do this when you need to enter the phrases like "ENTER FIRST X".

4. The commands **Disp**, **Input**, **ClrHome**, and **ClLCD** should be entered through the **PRGM**, **I/O** menu. It will not work to simply type them in with the **ALPHA** keys.

For the TI82 and 83, **Disp**, **Input**, **ClrHome** are found under the **I/O** menu within the **PRGM** menu. The arrow is the **STO→** button. The **equal sign** is under the **Test** menu (second function of the **MATH** button.) The **quote mark** is the **Alpha** function of the **plus** button. The **space key** is the **Alpha** function of the **zero** key in the number pad area. It looks like a rectangle with no top.

For the TI86 or 85, **Disp**, **Input**, **ClLCD,** and the **quote marks** are found under the **I/O** menu within the **PRGM** menu. The arrow is the **STO→** button. The **equal sign** is the **ALPHA** function of the **STO→** button. The **space key** is the **Alpha** function of the **negative (-)** key in the number pad area. It looks like a rectangle with no top.

5. Press **ENTER** after each line to move to the next line.

6. The calculator will save your progress as you go. If you accidentally exit the program editor as you're entering stuff, it's okay, do the following. From the home screen (blank screen you do simple calculations on), press **PRGM**, then select **EDIT** and the program DIST2. Arrow down through the program to where you left off.

Essentially what the program does is the following. It asks you to input the coordinates of two points. It calculates the distance between the two points (stores it under the variable F) and outputs it. It then calculates the x and y coordinates of the midpoint (stores them as I and J) and outputs them.

Come see me if you have problems with this. You should use the example on the handout to try your program.