Pythagorean Spiral Project

Items needed:

* 8 X 11 paper
* Ruler
* Protractor
* Pencil

1. Hold paper horizontally
2. Measure from top left corner—13 cm and make a dot.
3. Measure 13 cm at the bottom also to make a straight line down the paper. Don’t draw the line, just line up the ruler.
4. With your ruler placed at the 13 cm mark (down the paper) Measure down 12 cm and make a dot. This makes the starting point.
5. Measure down right side of the paper 12cm and make another dot. Draw a 2cm line from the starting dot to the dot at the right, making a 2cm line exactly parallel to the top and bottom of the paper.
6. Now place the bottom of the protractor along the 2cm line. Place the center mark of the protractor at the right edge of the 2cm line. Make a dot at the 90®mark. Now you can make a straight line from the right edge of the 2cm line to the 90® mark, but only draw another 2 cm line. It will be perpendicular to the first 2cm line.

NOTICE YOU ARE USING THE SMALL DOTS OF YOUR PROTRACTOR AT THE BOTTOM OR THE PROTRTACTOR TO LINE UP AT THE EDGE OF THE HYPOTENUSE AND AT THE 90® MARK TO MAKE YOUR SMALL GUIDE DOTS!

1. Connect the two ends of the 2cm lines making the hypotenuse of your triangle.
2. To make the next triangle. Use the protractor to line up the 90® mark perpendicular to the hypotenuse of the 2 x2 triangle. (see you tube example)
3. Draw another 2cm line perpendicular to the hypotenuse.
4. Connect the ends of the triangle, which creates a new hypotenuse.
5. Continue the process until you have made 35 right triangles.
6. Color your Pythagorean Spiral!

You tube references.

<https://www.youtube.com/watch?v=9G0NiB0-koM>

<https://www.youtube.com/watch?v=b3JafYAW1wg>