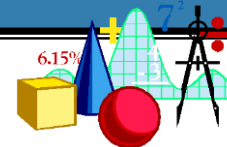


Mathematics, Grade 8

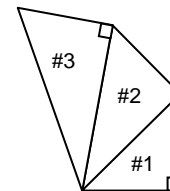
Unit XI: Lesson A2

Model / Diagram / Report: **Spiral of Archimedes**



Review the Pythagorean Theorem in your textbook. Research the spiral of Archimedes.

Using wood, Tagboard, or other material, construct a model of the spiral. Begin by constructing a right triangle in the middle of your poster with both legs equal to one inch. Construct right triangle #2 with the bottom leg equal to the hypotenuse of triangle #1. Continue this process for at least sixteen triangles. Use the Pythagorean Theorem to calculate the length of each hypotenuse until you see a pattern. Finally, join the vertices of the right angles in a sweeping curve to form the spiral of Archimedes.



In a written report give a brief history of the spiral. Explain how you made it, and describe the pattern that you discovered.

Share your report with the class and display your spiral.