

# Fractals

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Considering all of the different areas of math, including advanced geometry, one of the least heard of is fractals, geometric figures in which each part has the same statistical characteristics. Fractals are important to understand as they have a lot to do with scientific concepts such as brain waves and the growth of bacteria. This project takes the background and previous research of fractals in order to attempt to fully program one. Research was conducted on preexisting equations of fractals and was used with background research and knowledge of the subject in order to program a fractal. The best shape for the base of the fractal was also researched. The hypothesis was that if research is conducted on the properties and background of a fractal, then a full fractal could be fully programed using a coding app. The results of the programming, unfortunately, did not support my hypothesis as a fractal was not = fully programed. However, results did show that, with time, a full fractal could potentially be programed. The results are also promising for a more advanced future project.