Euclid and his discoveries

The " father of geometry", known as the Greek mathematician Euclid created a famous textbook about mathematical proofs and definitions called The Elements around 300 BC. This thirteen volume textbook was based on foundings from other mathematicians before him. Euclid's theories of basic geometry are simple and logical, and he solidified the foundation that no one could doubt his reasonings. He described his geometry based on actual and physical space. This differs from " non-euclidian" theories, which are based on astronomical space relative to gravity. Not much is known about the philosopher's life, but his collection of geometric ideas is very popular. It was widely documented that American President Abraham Lincoln admired Euclid and even referred to the six books of Euclid to " fine-tune his mind". Many mathematicians after Euclid's time translated his textbooks, first from Greek, then in the 1570s was translated in Arabic, and later Latin and English. In essence, Euclidian geometry teaches us to make assumptions and deducing something from those assumptions.

Geometry comes from the root words " geo" which means " earth" and " metry" meaning " measurement". In the Elements, Euclid created postulates (axioms), which are the statements about certain geometric terms that are accepted as true without proof. For example, two of the axioms state that " for every two points, there is one line that joins them" and " through any three noncollinear (not inline) points, there is one plane". These statements are important when identifying planes, points, and lines in geometry. It can demonstrate one, two and three-dimensional lines.

Euclidean geometry also focuses on the ideas of circles, angles, and parallel lines. The idea of a circle refers to a line that connects the center to a point

on the circle is the radius. While two radii are equal to the diameter, while the arc is the product of a line arched at one end of the diameter to the other. Terminologies in Geometry is defined as specifically proving our theories or what we already know is true and accurate. Geometry definitions also accompany their respective symbols. The idea of an angle is when two rays share a common vertex on one common endpoint forming a " corner" or angle. Angles can be measured by using a protractor. Supplementary angles are angles connected by a common vertex and mirror each other, thus demonstrating equal measurement of vertical angles. The idea of parallel lines with a line intersecting will demonstrate both angles formed are equal. Non-parallel lines with a line intersecting through it will demonstrate both angles formed are NOT equal.