

# Historical periods in Greek mathematics

Period	Approx. dates	Some major advances
Ionic	600 – 450 B.C.E.	Assimilation of geometrical work from Egyptian and Mesopotamian mathematics. Proofs of Vertical Angle Thm. and other results, use of similar triangles (attr.to Thales). Central role of mathematics, proof of Pythagorean Thm., irrationality of square root of 2 (attr.to Pythagoreans).
Athenian	450 – 300 B.C.E.	Influential contributions of different Greek philosophical schools, growth of geometry, classical construction problems, study of various plane curves, issues involving irrational numbers, general principles for deductive mathematics due to Plato and Aristotle.
Hellenistic (Alexandria was a major center of activity)	300 B.C.E – 150 A.D.	Euclid's <i>Elements</i> , which has had an enormous impact on subsequent learning. Major new advances by Archimedes and Apollonius of Perga, results of Eratosthenes, with a later shift to more algebraic and trigonometric topics probably including Heron's Formula.
Post – Hellenistic	150 – 400 A.D. (plus a few contributions during the following 125 years)	Highly original writings of Diophantus, but a significant decline in overall activity, with most devoted to astronomical questions or summarizing and building upon work from earlier periods.