

PCT's Classical Mathematics I-III and Standard AGA Comparison Chart

Classical Mathematics I-III are meant and designed to teach the same essential concepts and skills taught in the traditional Algebra 1, Geometry, Algebra 2 arrangement, but at a historically contextualized and conceptually advanced level.

Classical Math I	Concepts/Skills*	Traditional Designation
I	Geometric Concepts & Definitions	Geometry
I	Geometric Constructions	Geometry
I	Angles	Geometry
I	Triangles: Similarity & Congruence	Geometry
I	Polygons & Quadrilaterals	Geometry
I	Circles	Geometry
I	Solids	Geometry
I	Planar Area & Surface Area & Volume	Geometry
I	Elements of Proofs	Geometry
I	Theorems	Geometry
I	Geometric Transformations	Geometry
I	Real Numbers	Algebra 1
I	Algebraic Operations	Algebra 1
I	Algebraic Expressions	Algebra 1
I	Quadratic Functions	Algebra 1
I	Sequence & Series	Algebra 2

Texts:
 • *Elements* - Euclid
 • *Arithmetic* - Nicomachus
 • *Arithmetica* - Diophantus
 • *Mathematics for the Nonmathematician* - Kline

Classical Math II	Concepts/Skills*	Traditional Designation
II	Real Numbers (cont.)	Algebra 1
II	Algebraic Operations (cont.)	Algebra 1
II	Algebraic Expressions (cont.)	Algebra 1
II	Quadratic Functions (cont.)	Algebra 1
II	Linear Functions	Algebra 1
II	Quadratic Functions (cont.)	Algebra 1
II	Exponential Functions	Algebra 1
II	Systems of inequalities	Algebra 1
II	Polynomials & Polynomial Functions	Algebra 1
II	Properties of real numbers, exponents	Algebra 1
II	Circles (cont.)	Geometry
II	Conics	Geometry
II	Sequence & Series (cont.)	Algebra 2

Texts:
 • *Elements* - Euclid
 • *Measurement of a Circle* - Archimedes
 • *Conics* - Apollonius
 • *Arithmetica* - Diophantus
 • *Analytic Art* - Viete
 • *Geometry* - Descartes
 • *Mathematics for the Nonmathematician* - Kline

Classical Math III	Concepts/Skills*	Traditional Designation
III	Properties of real numbers, exponents (cont.)	Algebra 1
III	Algebraic Operations (cont.)	Algebra 1
III	Algebraic Expressions (cont.)	Algebra 1
III	Graphing On a Coordinate Plane	Algebra 1
III	Linear Functions (cont.)	Algebra 2
III	Quadratic Functions (cont.)	Algebra 2
III	Exponential Functions (cont.)	Algebra 2
III	Systems of inequalities (cont.)	Algebra 2
III	Polynomials & Polynomial Functions (cont.)	Algebra 2
III	Rational and radical functions	Algebra 2
III	Trigonometric Functions	Algebra 2
III	Probability & Statistics	Algebra 2

Texts:
 • *Elements* - Euclid
 • *Analytic Art* - Viete
 • *Geometry* - Descartes
 • *Mathematics for the Nonmathematician* - Kline

*Please note that the concepts may not necessarily be taught or encountered in the order listed.