

Math

Algebra 1

Prerequisite: None
Grades: 9-12
Credit: 1 unit
Offered: Andrew Jackson, Buford, Indian Land, Lancaster

You'll study the real number system and learn operations with algebraic expressions, factoring polynomials, solutions of equations, graphing and problem solving.

The course will help prepare you for college math.

Algebra 1 Pre AP

Prerequisite: Recommendation based on district criteria
Grade: 8
Credit: 1 unit for students who meet district requirements
Offered: All middle schools

You'll study the real number system and do operations with algebraic expressions, factoring polynomials, solutions of equations, graphing and problem solving.

You may have to complete summer review work for your next math honors class.

Algebra 2

Prerequisite: Algebra 1 or Geometry
Grades: 9-12
Credit: 1 unit
Offered: Andrew Jackson, Buford, Indian Land, Lancaster

You'll extend fundamental skills you learned in Algebra 1.

You'll study real and complex number systems, quadratic and cubic equations, rational and irrational expressions, matrices, exponential functions and extended problem solving.

Algebra 2 Pre AP

Prerequisite: Algebra 1 Pre AP or teacher recommendations
Grades: 9-10
Credit: 1 unit
Offered: Andrew Jackson, Buford, Indian Land, Lancaster

You'll build on the fundamental skills you developed in Algebra 1 Pre AP.

You'll study the real and complex number systems,

quadratic and cubic equations, rational and irrational expressions, matrices and exponential functions, and extended problem solving.

You may be expected to complete summer review work in preparation for your next math Pre AP class.

Algebra 3

Prerequisite: Algebra 2 CP
Grades: 10-12
Credit: 1 unit
Offered: Indian Land

You'll focus on the study of functions and advanced mathematics concepts to solve problems. You'll study polynomial, rational, exponential, logarithmic and trigonometric functions.

Calculus

Prerequisite: PreCalculus
Grade: 12
Credit: 1 unit
Offered: Andrew Jackson, Indian Land, Lancaster

Your studies will include derivatives and integrals of polynomial, rational, logarithmic, trigonometric, and inverse trigonometric functions and their applications.

Calculus AP

Prerequisite: PreCalculus Pre AP
Grade: 12
Credit: 1 unit
Offered: Andrew Jackson, Buford, Indian Land, Lancaster

Calculus AP will help you prepare to earn advanced placement credit either by exemption or placement in honors calculus in college.

Topics include limits, derivatives and antiderivatives. To take the course, you must successfully complete Pre-Calculus Pre AP.

You may need to register for a Pre AP Calculus course at some high schools.

Calculus Pre AP

Prerequisite: PreCalculus Pre AP
Grade: 12
Credit: 1 unit
Offered: Andrew Jackson, Buford, Indian Land, Lancaster

Your studies will include derivatives and integrals of polynomial, rational, loga-

rithmic, trigonometric, and inverse trigonometric functions and their applications.

Fundamentals of Algebra

Prerequisite: None
Grades: 9-12
Credit: 1 unit
Offered: Andrew Jackson, Buford, Indian Land, Lancaster

You'll learn to use math to solve real work-related problems, which will help you understand math theories and practical ways they are used.

You'll learn to solve basic equations, inequalities, graph linear equations, solve systems of equations and do arithmetic with polynomials.

Geometry

Prerequisite: Algebra 1
Grades: 10-12
Credit: 1 unit
Offered: Andrew Jackson, Buford, Indian Land, Lancaster

You'll develop skills in critical thinking, logical reasoning and problem solving.

You'll study properties of basic geometric figures including polygons and circles, transformations, vectors, coordinate geometry, congruence and similarity. You'll also calculate surface area and volumes of three-dimensional objects. Topics will be studied with an emphasis on proofs.

Geometry Pre AP

Prerequisite: Algebra 2 Pre AP or teacher recommendation
Grade: 10
Credit: 1 unit
Offered: Andrew Jackson, Buford, Indian Land, Lancaster

You'll develop skills in critical thinking, logical reasoning and problem solving.

During second semester, you'll review Algebra 2 concepts and be introduced to trigonometric functions and identities in preparation for PreCalculus Pre AP.

You may be expected to complete summer review work in preparation for your next math Pre AP class.

Intermediate Algebra

Prerequisite: Successful completion of preceding course
Grades: 9-12
Credit: 1 unit each
Offered: Andrew Jackson, Buford, Indian Land, Lancaster

You'll learn to use math to solve real work-related problems, which will help you understand math theories and practical ways they are used.

You'll review topics studied in Algebra 1. You'll also factor polynomials and solve and graph linear and quadratic equations.

Intermediate Algebra - York Tech

Prerequisites: Dual enrollment class with York Tech
Grade: 12
Credit: 1 unit
Offered: Lancaster

You'll study rational numbers and their applications, operations with algebraic expressions, linear equations and applications, linear inequalities, and more.

PreCalculus

Prerequisite: Algebra 1, Algebra 2 and Geometry
Grades: 11-12
Credit: 1 unit
Offered: Andrew Jackson, Buford, Indian Land, Lancaster

You'll study polynomial, rational exponential, logarithmic, trigonometric and polar functions. Graphing calculators are an integral part of instruction.

PreCalculus Pre AP

Prerequisite: Geometry Pre AP
Grades: 11-12
Credit: 1 unit
Offered: Andrew Jackson, Buford, Indian Land, Lancaster

You'll study polynomial, rational exponential, logarithmic, trigonometric and polar functions.

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Graphing calculators will be an integral part of instruction.

You may be expected to complete summer review work to prepare for your next math Pre AP class and AP Calculus.

Probability & Statistics

Prerequisite: Intermediate Algebra or Geometry

Grades: 11-12

Credit: 1 unit

Offered: Andrew Jackson, Buford, Indian Land, Lancaster (Grades 11-12)

You'll explore the fundamentals of experimental and theoretical probability, including how to collect data and how to analyze data.

You'll study basic statistical concepts like frequency distributions, central tendency, variability measures and data interpretation.

Statistics AP

Prerequisite: Algebra 2 Honors or teacher recommendation

Grades: 11-12

Credit: 1 unit

Offered: Buford, Indian Land, Lancaster

You'll study the science of data by collecting, classifying, summarizing, organizing, analyzing and interpreting numerical information.

You'll explore data by observing patterns and departures from patterns, planning a study by deciding what and how to measure, anticipating patterns by producing models using probability and simulation and developing statistical inference by confirming models.