

Learning Goals for Core Mathematics Courses

1. Master the algebra of expressions with real numbers and variables.
2. Understand and be able to use the notion of a function.
3. Be able to interpret equations and functions using analytic geometry.
4. Be able to translate a problem presented in words to mathematical notation and solve it.
5. Be prepared for subsequent mathematics courses.

Learning Goals for the Mathematics Major

Mathematics Majors are expected to:

1. Master the basic computational aspects of mathematics:
basic algebra, trigonometry, exponential functions, logarithms, calculus, and linear algebra.
2. (a) Know definitions, statements, and proofs.
(b) Be able to develop proofs, examples and counterexamples.
(c) Present mathematics in clear English both orally and in writing.
3. Learn to solve computational problems effectively and accurately.

Learning Goals for the Applied Mathematics Major

1. Master the basic computational aspects of mathematics:
basic algebra, trigonometry, exponential functions, logarithms, calculus, and linear algebra.
2. (a) Know definitions, statements, and proofs.
(b) Be able to develop a mathematical model for a practical problem.
(c) Present mathematics in clear English.
3. Learn to solve computational problems effectively and accurately.
4. Be able to use technology to solve practical computational problems.

Learning Goals for the Mathematics Minor

Mathematics Minors are expected to:

1. Master the basic computational aspects of mathematics:
basic algebra, trigonometry, exponential functions, logarithms, calculus, and linear algebra.
2. Learn to solve computational problems effectively and accurately.