

Congratulations on having completed your Math assessment. **To access your test results:**

1. Log onto your Student Center
2. Under the **ACADEMICS** tab click on **ACADEMIC HISTORY SECTION**, then click on **TEST SCORES**

Math placements often include eligibility for multiple courses. **Plan to register for the Math courses listed on your Student Center account and CONTINUE TAKING A MATH COURSE EACH SEMESTER** until you have completed the math sequence required for your degree. See the descriptions below to better understand your math course placement. If you have questions, **please see an Academic Advisor**. Save this paper for reference.

MAT 080/081/082: Basic Arithmetic

Test results indicate that there is a gap between your math skill level and the level needed to succeed in college. Course emphasis on conceptual understanding of and solving problems involving whole numbers, integers, fractions, decimals, percentages, and geometry.

MAT 090/091/092: Introductory Algebra

Test results indicate that there is a gap between your math skill level and the level needed to succeed in college. Course emphasis on solving and graphing linear equations and inequalities, understanding and using functions.

MAT 112: Mathematical Concepts and Applications

A problem solving approach to mathematics as it applies to real-life situations. Use of mathematical concepts and applications that relate to measurement, percentage, practical geometry, statistics, finance, and unit conversions. This course should only be taken if you **DO NOT** plan to pursue a four-year degree. This course is required for some Associate degrees and Certificates.

MAT 120/121/122: Intermediate Algebra

Course emphasis is on analysis of rational, radical, quadratic, and exponential equations, functions, graphs, operations on polynomials.

MAT 140/141/142: College Mathematics

College level mathematics course and its applications to real-life problems. Topics include set theory, probability, statistics, finance, and geometry.

MAT 150/151/152: College Algebra/Functions

Course emphasis on analysis of polynomial, rational, exponential, logarithmic, power and absolute value functions, systems of equations, matrices, modeling, and sequences and series.

MAT 182: Plane Trigonometry

A study of measures of angles, properties of graphs of trigonometric functions, fundamental identities, addition and half-angle formulas, inverse trigonometric functions, solutions of trigonometric equations, complex numbers and properties of triangle solution.

MAT 187: Precalculus

A precalculus course combining topics from college algebra and trigonometry. Preparation for analytic geometry and calculus.

MAT 212/213: Brief Calculus

Introduction to theory, techniques and applications of the differential calculus of functions with problems related to business, life and the social sciences.

MAT 217/218: Mathematical Analysis for Business

An introduction of the mathematics required for the study of business. Includes multivariable optimization, Lagrange multipliers, linear programming, linear algebra, probability, random variables, discrete and continuous distributions.

MAT 220/221: Calculus with Analytic Geometry I

Course emphasis on limits, continuity, differential and integral calculus of functions of one variable.

MAT 225: Elementary Linear Algebra

Introduction to matrices, systems of linear equations, determinants, vector spaces, linear transformations and eigenvalues. Emphasizes the development of computational skills.



MAT 227: Discrete Mathematical Structures

Introduction to lattices, graphs, Boolean algebras and groups. Emphasis on topics relevant to computer science.

MAT 230/231: Calculus with Analytic Geometry II

Techniques of integration for both proper and improper integrals with applications to the physical and social sciences, elements of analytic geometry and the analysis of sequences and series.

MAT 240/241: Calculus with Analytic Geometry III

Multivariable calculus including vectors, vector-valued functions, partial differentiation, multiple integration and an introduction to vector fields.

MAT 256: Investigating Quantity: Number, Operations and Numeration Systems

Explore numbers, numeration systems and operations on numbers. Techniques of problem solving with an emphasis on exploring a variety of strategies. Use a variety of visualization techniques to develop a conceptual understanding of these topics.

MAT 257: Investigating Geometry, Probability and Statistics

Explores geometry, measurement, probability and statistics. Uses visualization, technologies, problem solving, reasoning and proof to develop a conceptual understanding of these topics.

MAT 276: Modern Differential Equations

Introduces differential equations, theoretical and practical solution techniques with applications. Problem solving using MATLAB.

Placement Testing: You are allowed to retake placement tests under the following circumstances: 1) Students will be permitted one re-test in Math after a 24-hour waiting period. 2) ONE additional retest is permitted no sooner than three months from the oldest valid score date at any course placement testing site. Course placement scores will be valid for two years from the date of the original or re-test assessment.

Use the diagnostic information from your original test to review for a higher placement. For math study packets and other test preparation materials, go to:

<https://www.mesacc.edu/testing-services/study-guides-placement-tests/math-study-guide>

Enroll in Math Boot Camp! Math Boot Camp gives you the chance to review math skills and become more confident in your math abilities. It can help you improve placement test scores, reduce math anxiety, and strengthen and refresh math concepts. There are two levels of Math Boot Camp:

* **Math Foundations 1: Ideal for students entering MAT081 or MAT090-092 or for HESI review.**

Topics Covered: Fractions, decimals, percentages, ratios, proportions, measurement, basic geometry, basic statistics, integers, order of operations, and solving equations.

* **Math Foundations 2: Ideal for students entering MAT120-122 or MAT150-152**

Topics Covered: Solving and graphing linear equations and inequalities, solving systems of linear equations, functions, exponent rules, polynomials and factoring.

Please visit our website for registration details:

<https://www.mesacc.edu/employees/foundations-student-success/math-boot-camp>