MATH PLACEMENT CHART

How to read this chart: Begin with the Algebra score – if it is below 395, the Basic score determines placement into Math 10 or Math 20. If Algebra is 626 or above, look at the Trig score.

<table>
<thead>
<tr>
<th>Basic</th>
<th>Algebra</th>
<th>Trigonometry</th>
<th>Course Placement</th>
</tr>
</thead>
<tbody>
<tr>
<td>150-325</td>
<td>150-395</td>
<td>⇒</td>
<td>Math 10 (Mandatory review course)</td>
</tr>
<tr>
<td>326-850</td>
<td></td>
<td></td>
<td>Math 20 (Mandatory review course)</td>
</tr>
<tr>
<td>396-585</td>
<td></td>
<td>⇒</td>
<td>Math 104, 106, 108, 109, 203, or 246</td>
</tr>
<tr>
<td>586-625</td>
<td></td>
<td>⇒</td>
<td>Math 111 or 112</td>
</tr>
<tr>
<td>626-850</td>
<td>150-585</td>
<td></td>
<td>Math 111 or 113</td>
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<tr>
<td></td>
<td>586-850</td>
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<td>Math 114</td>
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</tbody>
</table>

MANDATORY REVIEW POLICY: New freshmen whose Algebra score is below 395 MUST successfully complete Review Mathematics (Math 10 or Math 20) prior to completing 30 credits or future registration will be blocked. This is a UW System policy and applies to all new freshmen, regardless of major.

COURSE DESCRIPTIONS

Math 10  Developmental Mathematics (4 crs). This course develops basic arithmetic and introductory algebraic skills, and is intended for students who need a review of these skills prior to entering Math 20. The course carries only transcript credit, which does not count toward graduation.

Math 20  Intermediate Algebra (4 crs). A course designed for students who need to strengthen their algebraic skills prior to enrollment in Math 109, Math 104, 108 or Math 203 or 246. The course covers the real number system, linear equations and inequalities, operations on polynomials and rational expressions, factoring, solutions of quadratic equations, Cartesian coordinates, functions, and related applications. Prerequisite: Math 10 or one year of college-preparatory algebra and suitable scores on the placement test. The course carries only transcript credit, which does not count toward graduation.

Math 104  Finite Mathematics with Applications (4 crs). This course will cover applications from Economics, Social and Biological Sciences. The topics include sets, functions, counting principles, probability, solution of linear systems by graphical and algebraic methods, matrices, linear programming, problem formulation, and solving with graphs and trees. Prerequisite: “C” or better in Math 20 or suitable scores on the placement test and two years of high school algebra. May not be taken for credit after or concurrently with Math 114, 212, 314, or 346.

Math 106  Introduction to Mathematical Thinking (4 crs) is an accessible introduction to some interesting mathematical topics requiring analytical reasoning and critical thinking. Approximately eight learning modules will be selected from sixteen. Some of the topics included are number theory, geometric
symmetry and patterns, fractals and chaos theory, coding theory, exponential growth models, chance, graph theory, game theory and history of mathematics. **Prerequisite:** Math 20, or two years of college-preparatory algebra and suitable scores on the placement test.

**Math 108 Earth Algebra** (4 crs). This course models real data drawn from biology, the environment, finance, and other physical systems. Topics include the development of linear, polynomial, exponential and logarithmic functions, and the rate of change in an applied setting. **Prerequisite:** “C” or better in Math 20, or two years of college-preparatory algebra and suitable scores on the mathematics placement test.

**Math 109 Algebra for Calculus** (4 crs). A college algebra course designed to provide the algebraic skills needed for Math 111 or Math 112. Topics covered include: Algebraic concepts, techniques, and applications including polynomial and rational expressions, linear and quadratic equations, complex numbers, inequalities, absolute value, functions and graphs, exponential and logarithmic functions, systems of equations and inequalities, and zeros of polynomials. **Prerequisite:** “C” or better in Math 20 or two years of college-preparatory algebra and suitable scores on the placement test. **NOT FOR G.E.**

**Math 111 A Short Course in Calculus** (4 crs). A course emphasizing applications of calculus and designed primarily for students in business and social sciences. It covers functions, limits, continuity, derivatives, integrals, and applications. **Prerequisite:** Math 109; a B in Math 108; or three years of above average work in college-preparatory high school mathematics and suitable scores on the mathematics placement test.

**Math 112 Precalculus Mathematics** (4 crs). A course designed for students who plan eventually to take Math 114 but who need additional background first especially in the area of trigonometry. **Prerequisite:** Math 108 or 109 or three years of above-average achievement in college-preparatory mathematics and suitable scores on the mathematics placement test. **NOT FOR G.E.**

**Math 113 Trigonometry** (2 crs). Will cover graphs, properties, and geometric significance of trigonometric functions of a real variable. Other topics include trigonometric equations and identities, inverse trigonometric functions and applications. **Prerequisite:** MATH 109, or a grade of B or above in MATH 108; or three years of above-average work in college-prep MATH and suitable scores on the placement test. **NOT FOR G.E.**

**Math 114 Calculus and Analytical Geometry I** (4 crs). This is the first of three calculus courses designed primarily for students majoring or minoring in mathematics, chemistry, computer science, or physics, as well as students in pre-engineering or pre-medicine. **Prerequisite:** Four years of above-average work in college preparatory mathematics (including trigonometry) and suitable scores on the mathematics placement test.

**Math 203 Mathematics for Elementary/Middle School Teachers I** (3 crs). An integrated study of mathematics content, methods, and curricula open only to students in elementary/middle education or special education. Topics include problem solving, reasoning, whole numbers and notation with an emphasis on cognitively guided instruction, elementary number theory, integers. **Prerequisite:** “C” or better in Math 20 or two years of college-preparatory algebra and suitable scores on the mathematics placement test.

**Math 246 Elementary Statistics** (4 crs). Basic statistical analysis, including descriptive statistics, probability, confidence intervals, hypothesis testing, simple linear regression, correlation, Chi-Square, and Analysis of Variance. **Prerequisite:** “C” or better in Math 20, or two years of college-preparatory algebra and a suitable mathematics placement test score.