What is the Math Placement Test?

The UMBC Math Placement Test was prepared by the Mathematics Association of America. The test is designed to assess the current level of mathematical skill of a student for a variety of courses offered at UMBC.

The test consists of two parts: Part I – the Algebra Test and Part II – the Calculus Readiness Test. The Algebra Test is required of all students who take the Math Placement Test. The Calculus Readiness Test is required of only those students who want to place into a calculus course.

Who has to take the Math Placement Test?

All entering freshmen and transfer students who are not transferring credits from a college-level math class must take the Math Placement Test.

Why is the Math Placement Test used at UMBC?

The Math Placement Test is used because it is an accurate predictor of success in UMBC’s math classes. It determines the appropriate entry-level math class for each student according to his/her current mathematical competence. Assessment accuracy has been established by researching the success of 10,000 UMBC freshmen who have taken the Math Placement Test.

Can I take the Math Placement Test a second time?

Students who believe that the first Math Placement Test does not accurately reflect their mathematical ability may take the Challenge Math Placement Test. If a student chooses to take the Challenge Math Placement Test, the scores from this test will be used to place the student into the appropriate math class. This does not work like the SATM’s. We do not use the highest score from each test. By taking the Challenge Test, the student has declared that the first test was invalid; therefore, scores from the first testing will no longer be considered.

How do I register for the Challenge Math Placement Test?

The on-line and on-site Math Challenge Test will be given on a regular schedule during the year. These tests will be by appointment only.

To make an appointment for testing, call the Learning Resources Center (LRC) at 410-455-2444. Dates, locations, and times will be confirmed during this phone call.

You should plan at least 90 minutes to take the test.
How do I prepare for the Challenge Test?

It is highly recommended that you prepare before taking the Challenge Math Placement Test. There are several very effective ways to prepare for this test. The one that you choose depends on your personal preferences and learning style.

Ways to prepare for the Challenge Math Placement Test:

- Review notes and text books from high school algebra and/or precalculus courses
- Review commercially prepared review books on algebra and/or precalculus, i.e. Algebra Made Simple; Schaum’s Outlines for Algebra and/or Precalculus; or Cliffs Quick Review for Algebra and/or Precalculus. There is a good selection of these books in the UMBC Bookstore. To borrow a review book from LRC, call the Learning Resources Center (LRC) at 410-455-2444 to schedule an appointment.
- Review by accessing one of the many commercially prepared computer programs for Algebra or Precalculus.

What topics should I review for the algebra portion of the placement test?

- Arithmetic of rational numbers
- Operations with algebraic expressions
- Linear equations and inequalities
- Factoring and algebraic functions
- Exponents and radicals
- Graphing and distance
- Fractional and quadratic equations
- Inequalities
- Absolute values
- Systems of equations

What topics should I review for the calculus readiness portion of the placement test?

- Geometry and measurement
- Graphs of functions
- Word problems and modeling
- Concept formation
- Numerical awareness
- Exponential functions
- Exponents and logarithms
- Equations and factoring
- Functional notation
- Inequalities
- Absolute value
- Trigonometry

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