The Calculus Placement Test

Overview

Calculus is an important course for many students, but it can be a very challenging course. It requires hard work and commitment for the entire semester. But hard work cannot make up for inadequate preparation.

Calculus, like most of mathematics, is a cumulative discipline; each new idea depends on a thorough understanding of the preceding material. This is true all through the Calculus sequence, including the very beginning: Students who do not have a solid background in algebra and trigonometry will have serious trouble in Calculus. The Placement Test is designed to identify such students, and it has proved to be quite accurate.

Students who do not pass this test are very unlikely to succeed in Calculus. To ensure greater student success in the calculus classroom all students who want to take Math 220, Math 223 (Intro to Calculus), or Math 224 (Differential Calculus) are required to take the placement exam. Their score on the test will determine whether they are allowed to take these courses. If a student's score is not high enough to take Math 220, Math 223, or Math 224 then they encouraged to take our Precalculus course (Math 108) to improve their background in algebra and trigonometry. Students who do so have a much better chance of success in Math 220, Math 223, or Math 224.

Test format

You have an hour to take the test. It is administered by computer, under supervision. The questions are all multiple choice. Students may use pencil and paper for scratch work, but may not use calculators of any kind. When the student completes the exam, the exam score will appear on the computer screen. For a charge of $17.50 (as of June 2014), you can take the test online with a remote proctor observing you via webcam. To use this option, visit ProctorU.com and register for an account, then schedule a time with ProctorU to take the Calculus Placement Test for Binghamton University.

Each test has 33 questions. Each correct answer on the test counts as one point, and the passing grade is currently 26 for Math 224, 23 for Math 223, and 24 for Math 220.

For all three courses, an adequate score on a Placement Test is an absolute requirement. You may register for a course before passing a Placement Test, but, at the end of the first week of classes, all students who have not fulfilled the Placement Test requirement will be disenrolled. In that case you are encouraged to take our Precalculus course (Math 108) to improve your background in algebra and trigonometry. Students who do so have a much better chance of success in Math 220, Math 223, or Math 224.

If you have a disability and are unable to take the exam in the way described here, please let the Math Department know by phone [(607) 777-2148] or email (calcplacement@math.binghamton.edu) and an accommodation will be arranged.

Test topics

The topics covered on the test are standard topics in precalculus mathematics, and, at a minimum, will include:

- Algebraic operations with fractions, radicals and exponents.
Manipulation, graphing and solution of linear and quadratic equations.
Simple geometry, including circles and triangles.
Basic trigonometry, including identities.
Inequalities, including absolute value expressions.
Sets and functions.

Most standard precalculus texts cover this material in great detail, and students should find such a text and use it for review. Notice that calculators are not permitted during the test (and, indeed, calculators are prohibited in almost all mathematics tests at Binghamton). Therefore a precalculus text that places heavy emphasis on calculator use will not be a good review text for this test.

Schedule

Click here for the Placement Test schedule.

You have up to 3 tries on the Placement Test during any three month period. If you took and passed the Calculus Placement Test when it was offered for the previous semester then you do not need to take it again.

Questions and Answers

Check this link if you have questions about the Placement Test. If your question isn't answered here then send email to calcplacement@math.binghamton.edu

The Number 1 question that students ask about the Placement Test is “Do I have to take it?” The answer is

Yes! You must pass the placement test in order to take Math 224, Math 223, or Math 220. You must have passed the test before the end of the first week of classes. There are no exceptions. If you have other questions, check the FAQ.

The Self-evaluation Test

You can get a very good idea of what the Placement Test looks like by taking our Self-evaluation Test. This is a version of the Placement Test that is designed for students to take at home. If you take the Self-evaluation seriously (without assistance, calculators, etc) and do well on it then you should have no problems when you take the Placement Test.

The Self-evaluation is not the Placement Test. Your score on the Self-evaluation is only intended to give you an idea of how you will do on the Placement Test. A passing score on the Self-evaluation does not qualify you to take Math 224, Math 223, or Math 220. You must pass the Placement Test if you want to take Math 224, Math 223 or Math 220.

The Self-evaluation has 33 questions and is timed; you have one hour to take it. You must identify yourself by BU ID or BU email address, plus your full name.

Click here to take the Self-evaluation Test.

Improving your Precalculus Skills
Many students take our Precalculus course (Math 108) and go on to be successful in Calculus. If you don't get the Placement Test score you need, you are encouraged to take our Precalculus course (Math 108) to improve your background in algebra and trigonometry. Another option is to take a Precalculus course over the summer at a college near home.

If taking a Precalculus course is not an option, one online option for reviewing Precalculus is ALEKS. This is an automated system to pinpoint your weaknesses and get appropriate review questions. Keep in mind that ALEKS is a tool for review, not a teacher. If you need help understanding the material, then you need a Precalculus class, or at least a tutor.

Even if you pass a Placement Test with a low passing grade, you might want to consider strengthening your Precalculus skills before going in to Calculus. Algebra, geometry, and trigonometry get used nonstop in Calculus, and getting thoroughly comfortable with these topics will pay off enormously.