MATH ASSESSMENT – INSTRUCTIONS

To Access the Tests:
1. Point your web browser to http://www.stevens.edu/ (Stevens home page).
2. Follow the link to myStevens (at the top of the home page).
3. Log in with your Stevens username and myStevens password.
4. Click on the “webassign” link; you should be redirected to the course in WebAssign.
5. The instructions in this document are located under the “Resources” tab.
6. The deadline for completing the assessments is Monday, June 29th.

System Requirements
The major browsers are supported: Chrome, IE, Firefox and Safari. WebAssign will warn the user if the Java or Flash Player plug-ins need to be updated. If necessary, visit the following web page at WebAssign for a more complete description of system requirements:
http://www.webassign.net/user_support/admin/system_requirements.html.

Contact Information
For assistance with myStevens, contact the Help Desk: (201) 216-5500 or helpdesk@stevens.edu.

For assistance with WebAssign, contact the Math Dept: (201) 216-5449 or mathtest@stevens.edu.

Overview
After logging into WebAssign you should see several assignments identified as STEP 1 through STEP 4.
• **STEP 1: A Short Survey** will query you about your prior experience with calculus.
• **STEP 2: Practice Exercises** is for you to become familiar with the WebAssign interface before starting a timed test. You must score at least ten points to gain access to the timed tests.
• **STEP 3: Precalculus Test** is a 75-minute timed test on Precalculus topics.
• **STEP 4: Calculus Test** is a 75-minute timed test on Calculus I topics.
• Each timed test has 75 minutes allotted but most students should finish in 45-60 minutes.
• The two tests can be taken at different times to allow for flexibility in scheduling your time.
• **Have a calculator available;** some questions might require a calculator. A graphing calculator is not necessary.

The remainder of this document contains:
• More detailed step-by-step instructions (p. 2)
• Frequently Asked Questions (pp. 3-4)
• List of test topics (p. 5)
STEP-BY-STEP INSTRUCTIONS

Follow the assignments in the order indicated, STEP 1 through STEP 4.

**STEP 1: A Short Survey.**
- Please take a minute to answer the three Yes/No questions regarding your previous educational experience with calculus.
- If you answer No to the first question, you should complete only the Precalculus Test.
- If you answer Yes to the first question, you should attempt to complete both timed tests.

**STEP 2: Practice Exercises.**
- These exercises are for you to acquire experience entering answers into WebAssign before starting the timed tests. There is no time limit on the practice exercises.
- You must accumulate 10 points (out of a possible 50) on the Practice Exercises before you will be able to access the timed tests.
- After entering a solution, select Submit Answer to have your solution graded. The scores are updated at the top of the page.
- To exit the practice session, select the My Assignments link.

**STEP 3: Precalculus Test.**
Select the first of the timed tests when you are ready.
- When you select a timed test, a dialog box pops up with a warning that this is a timed test for which you have 75 minutes to complete.
- You are given a final opportunity to cancel. The timer will continue to run even if you log out, so do not start the timed test unless you have the 75 minutes available.
- Select Continue if you are ready to proceed. This action starts the timer.
- The time remaining will be displayed in the upper right corner of the test page.
- The best practice is to select Save Answer at the end of each question to save your work.
  - This protects your completed work if you should lose your network connection.
  - Saved answers can be reviewed and revised as long as there is time remaining.
  - Submitted answers are final and cannot be changed.
  - The system automatically submits saved answers when the timer runs out.
- When finished with the test, use the Submit Assignment button at the bottom of the test to submit your answers.
- The submitted answers will have a grey background and cannot be edited. The answer fields that were left blank can still be filled in and submitted.
- If time runs out, the system automatically submits your completed answers.
- To exit the assignment, select the My Assignments link.

**STEP 4: Calculus Test.**
If you have any prior experience in learning calculus, you should take the Calculus Test.
Select the timed test only if you are sure that you have the time available to complete the test.
- Repeat the process described for the timed Precalculus Test.
MATH ASSESSMENT – FREQUENTLY ASKED QUESTIONS

Why are you requiring this test?
We have learned over time that the high school math experience can vary widely for students entering Stevens. The data from these assessments helps the math faculty to benchmark the performance level of the entering class and assists us in providing a better overall experience in the mathematics sequence. Performance on these tests will be a factor in determining whether students should be enrolled in our Introduction to Calculus (MA-120) or Calculus 1 (MA-121).

What topics will be covered?
Everyone will be tested on precalculus topics. If you have any experience in calculus from your high school curriculum, you will also take a second test covering topics from our Calculus I course.

I’ve already taken the AP exam and received results of 4 or 5 and been awarded credit for Calculus I. Do I still need to take this examination?
Yes, we ask that all students entering calculus in the fall participate in the assessment. The outcome of this test will not affect your AP credit but the data will help to benchmark the performance level of the entering class.

I am currently taking the Euclid class for MA 90 or MA 121-122. Do I need to take this test?
Yes, the test results will not override your grade from the Euclid course.

What if I am away and unable to complete the tests during the prescribed time?
Contact the Math Department at mathtest@stevens.edu and let us know when you expect to be available for taking the test.

What is the length of the test?
The assessment is comprised of two 75-minute timed tests. Once the allotted 75 minutes has passed, you will no longer be able to access that test. See the instructions page for more details on timed tests.

Can the two tests be completed at separate times, or must they be done back to back?
The two tests can be taken at different times to allow for flexibility in scheduling your time.
**What is the format of the test questions?**
There are a few multiple choice questions but most answers are blank fields to be filled in using the keyboard and mouse. A simple, intuitive math palette (CalcPad) pops up automatically for answer fields that might require special math symbols, fractions, or exponents.

**What are the Practice Exercises, and do these problems count towards my overall assessment?**
You are required to accumulate 10 points (out of a possible 50) before you will be given access to the timed tests. This is to ensure that everyone spends at least a few minutes becoming familiar with the WebAssign interface for entering answers. There are ten questions available for practice and no time restrictions. Answers to the practice questions will not count toward your assessment.

**Can a calculator be used during the exam?**
Yes, a calculator might be required for some answers. A graphing calculator is not necessary.

**What happens if I have a question during the test?**
During the administration of the test, there is no access to a professor, since this test can be taken at any time you choose, during the day or night. If you feel there is an issue with the test, please complete the test in its entirety, and then contact the Math Department at mathtest@stevens.edu with your questions.

**Will I be receiving any notification of my results?**
No. There will be no results distributed to students. This assessment is really for the faculty to gauge the overall preparedness of our incoming students. Thus, scores will not be distributed.

**What if I have trouble logging into the exam?**
Contact Stevens’ Information Technology Help Desk at (201) 216-5500 or helpdesk@stevens.edu.

**What system requirements or browsers are required for this test?**
The major browsers are supported: Chrome, IE, Firefox and Safari. If necessary, a more complete description of system requirements is available at webassign.net: [http://www.webassign.net/user_support/admin/system_requirements.html](http://www.webassign.net/user_support/admin/system_requirements.html).
MATH ASSESSMENT – LIST OF TOPICS

**PRECALCULUS covers topics from the following areas:**

1. Relations and functions
2. Polynomial functions; especially linear and quadratic functions
3. Rational functions; especially rational polynomials
4. Exponential and logarithmic functions
5. Trigonometric functions
6. Conic sections (circles, ellipses, parabolas, hyperbolas)

**CALCULUS covers topics from the following areas:**

1. Continuity; definition of the derivative; interpretations of the derivative
2. Calculating derivatives; the chain rule and implicit differentiation; rules for inverse functions
3. Application to finding max/min, describing the shape of curves, solving optimization models
4. The definite integral and its interpretations; antiderivatives; Fundamental Theorem of Calculus
5. Integration techniques: method of substitution, integration by parts
6. Application to finding areas and volumes