

## The SDSU Calculus I Gateway Exam: What and Why?

Many good students come to SDSU and other universities intent on pursuing one of the many excellent career paths that require knowledge of calculus, but dramatically under-perform their potential in calculus because of their lack of fundamental algebra and trigonometry skills. To address this problem, SDSU will start administering the SDSU Calculus I Gateway Exam to all Calculus I students during the Fall 2007 semester. Perhaps the most important feature of the Gateway Exam is the algebra and trigonometry concept list constructed by SDSU mathematics faculty. It identifies those concepts that have been the biggest barriers to success for SDSU calculus students in recent years.

More information on the SDSU Calculus I Gateway Exam and its associated concept list is available at <http://teach.sdstate.edu/users/vestals/Gateway.htm>. Here you will find:

- The Gateway Exam concept list.
- A sample Gateway Exam
- Answers to the sample exam
- Complete solutions to the sample exam
- Links to online resources for reviewing algebra and trigonometry

Finally, please note that the exam and website are intended to be a work in progress. We want it to be a useful tool for South Dakota's K-12 mathematics students and instructors, and welcome your feedback regarding ways to improve its usefulness. Please send your feedback to [Kurt Cogswell](#).