

This computer-administered exam consists of six questions, with five correct answers required for a pass. The exam is administered through the WeBWorK system, with easiest access coming through the “Gateway Exam” link in the left sidebar on the course web page (Google for “jon’s central” and follow the Fall 2025 Calc 3 link). The exam allows 60 minutes, but if you come prepared time should not be a major factor.

The exam selects questions at random from six pools, but will always include:

- A simple definite integral (see 1-15 in §5.3 for practice)
- At least one Integration by Parts problem (see 3-25 in §6.1 for practice)
- At least two u-substitution problems (see 7-33 in §5.5 for practice)
- At least one question involving the derivative of an inverse trig function
- At least one trig integral (see 1-4, 17, 21, 23, and 27 in §6.2 for practice)

A few tips and points of information:

- Be careful about the antiderivative of $1/x$ – being mostly right doesn’t get partial credit on this exam.
- Don’t make these harder than they are.
- Calculators such as the TI-89, which perform symbolic differentiation, are not allowed for this gateway exam.
- Scratch paper is available – just ask.
- No consultation with other resources, human, online, or otherwise, is allowed while taking the gateway exam.
- The gateway exam can only be taken under the supervision of a proctor. All faculty in the Department of Mathematical Sciences, as well as the Undergraduate Assistants who staff the evening Math Help Sessions, are authorized to proctor.
- Only the three computers in the Lindsay Lounge will normally be used for proctoring the gateway exams, so plan to do it early or plan to wait in line.

You will receive up to 30 points toward the Quiz/WeBWorK portion of your grade for this Gateway. Your score will be $30 - 15 \cdot [\text{number of weeks beyond 10pm on 9/3/2025}]$.