MATH 141 Calculus 2
Fall 2015
Info on quiz 2

Time: 26, 27, 28 October, at the start of tutorials

Duration: 40 minutes

Coverage: From the start of the course up to and including the lecture of 19 October; i.e. Sections 5.1 - 5.5, 6.1 - 6.3, 7.1 - 7.5.

Questions: There will be three questions, of the following types respectively:

1. (7 points) Calculate a volume of revolution.
2. (7 points) Compute an indefinite integral.
3. (7 points) Compute an indefinite integral.

For question 1, you may be required to draw the following curves (for constants a, b, k, and positive integers n):

$$y = ax + b$$
$$y = ax^n + b,$$
$$y = a\sin(kx)$$
$$y = a\cos(kx)$$
$$y = ae^x$$
$$y = a\ln x$$

One of questions 2 and 3 will require a trigonometric substitution, and the other will require partial fractions. Note that a final answer involving a composition of a trigonometric function and an inverse-trigonometric function (in any order) will not be accepted, e.g. $\sin(\arctan x)$ needs to be converted to $\frac{x}{\sqrt{1+x^2}}$.

The questions for each tutorial are completely different.

A practice quiz, and solutions, will be available shortly from MyCourses and the Exams section of the course webpage (`http://amypang.github.io/141`). To get the most out of the practice quiz:

1. Finish WebWork 3 - don't just do scratch work on a scrap of paper, write out full solutions neatly in a notebook so you have something to study from, for this quiz and also for the final.

2. Refresh your memory on volume integrals and integration by parts. Read through examples from lecture, tutorial, and any problems you did (e.g. WebWork 2). Make sure you can draw the curves listed above.

3. Print the practice test. (The pressure isn't the same if you do it in front of the computer.) Do it under timed conditions without your notes in a quiet, unfamiliar place.

4. Get out your notes and, with a red pen, try to finish any questions you couldn't do. Then look at the solutions and further correct your answer.

5. If you would like to know an approximate score for your effort, bring your paper to Dr. Pang's office hours.