MATH 141 Calculus 2
Fall 2015
Info on quiz 1

Time: 28, 29, 30 September, at the start of tutorials.

Duration: 40 minutes.

Coverage: Up to and including the lecture of Friday 18 September, i.e. Sections 5.1 - 5.5.

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

1. (3 points) Approximate an integral using a Riemann sum (e.g. WebWork 1 Q1);
2. (4 points) Compute the derivative of an integral (e.g. WebWork 1 Q6);
3. (5 points) Compute the distance travelled by a particle given its velocity function (e.g. WebWork 1 Q12);
4. (4 points) Compute an indefinite integral;
5. (5 points) Compute a definite integral.

The questions for each tutorial are completely different. Remember that **you may only take the quizzes in the tutorial in which you are registered.** If you even attempt a quiz in another tutorial, you will automatically receive a score of zero.

On the next page is a sample of the cover page of the quiz. Please read it and familiarise yourselves with the rules, and the formulae that you will receive. Note that **no calculators** are allowed, and **no cellphones** are allowed for whatever reason; you may want to bring an alternative timekeeping device.

Here is some generic advice on studying for math exams:

1. Go through your notes and make a list of important formulae, theorems and concepts.
2. Do lots of practice questions from the textbook. If you get stuck frequently, do questions at office hours or the Helpdesk (Burnside room 911 weekdays noon-5pm) or a study session with friends, so you can ask for a hint when you're stuck.
3. If you get nervous in tests, do some problems under timed conditions without your notes and in an unfamiliar place.
4. The day before the exam, read all the practice problems you've done, and get a good night's sleep.
5. At the exam, read all the questions before you start working on any of them, so your mind will subconsciously think about them all. Also, the questions are not necessarily in order of difficulty.

Some suggested problems and some sources of help are on the Resources part of the course webpage (`http://amypang.github.io/141`). Also on the Exams part there, you can find some information about the quizzes and the final.

Math 141 Quiz 1 — –:– —-day – September 2015
Section -, —— ———-

Name: _____ **ID#:** _____

- You have 40 minutes.
- Complete the following five problems. In order to receive full credit, please show all of your work and justify your answers.
- You do **not** need to simplify your arithmetic unless explicitly instructed to do so in the question.
- If you need extra room for your answers, use the back side of the question pages, and clearly indicate that your answer continues there. Do not use your own scratch paper, and do not detach pages from this booklet.
- The use of cellphones, calculators, and other electronic devices, for whatever reason, is considered cheating.

Formulae you may find useful:

$$\sum_{i=1}^{n} i = \frac{n(n+1)}{2}$$
$$\sum_{i=1}^{n} i^2 = \frac{n(n+1)(2n+1)}{6}$$
$$\sum_{i=1}^{n} i^3 = \left[\frac{n(n+1)}{2}\right]^2$$

$$\sin(2\theta) = 2\sin\theta\cos\theta$$
$$\cos(2\theta) = 2\cos^2(\theta) - 1 \quad = 1 - 2\sin^2(\theta)$$

The following boxes are strictly for grading purposes. Please do not mark.

Question:	1	2	3	4	5	**Total**
Points:	3	4	5	4	5	21
Score:						