

Slide 1 **Calculus I Announcements**

- **Register your iClickers at**
<http://www.iclicker.com/support/registeryourclicker/>
- The final Exam is Thursday 12/15 from 8:00AM - 11:00AM.
There are two rooms: Please go to the rooms per the schedule shown below
 - DCC-324 for sections 1,2,21,22
 - LOW-4050 for sections 3,4,23,24
- See the course web page for office hour information and review session updates.
- The final Exam is comprehensive, more information on the next page.

Slide 2 **Final Exam Study Guide**

- 50%-60% of the exam will be questions similar to those on exams 1-4.
- 20% of the exam will be no-partial credit skills questions like on your quizzes.
- 10% of the exam will be essay questions like on past exams or this review.
- 10%-20% of the exam will be like homework questions on the study guides for exams 1-4.

What are you going to study?

Slide 3 **Review sessions**

- Monday, December 12th
 - 2:00-5:00 Academy Hall, 3rd Floor Auditorium.
Friendly math mentors available to answer your questions. (with coffee etc..)
 - 5:00- DCC-308, Review problems presented by a few math mentors.
 - 8:00-10:00 LOW-4050, review problems presented by Catalina (from Drop-in Tutoring)

- Tuesday, December 13th
 - 12:00-1:00 Academy Hall, 3rd Floor Auditorium.
Review problems presented by a few math mentors.
 - 1:00-5:00 Academy Hall, 3rd Floor Auditorium.
Friendly math mentors available to answer your questions. (with coffee etc..)

Slide 4 **Possible Essays from Exam 1 Material**

1. Define continuous function.
2. State the Intermediate Value Theorem.

Slide 5 Possible Essays from Exam 2 Material

1. State the definition of the derivative, illustrate it with a picture, and explain the idea.
2. Use the definition of derivative to find $f'(x)$ if
$$f(x) = 3 + \frac{1}{x}.$$

Slide 6 **Possible Essays from Exam 3 Material**

1. Define precisely what we mean when we say that $f(x)$ grows faster than $g(x)$ as $x \rightarrow \infty$
2. Define precisely what we mean when we say that $f(x)$ grows at the same rate as $g(x)$ as $x \rightarrow \infty$
3. Make a sketch to illustrate the graphs of all antiderivatives of a given function $f(x)$ on the interval $[-\pi, \pi]$

Slide 7 **Possible Essays from Exam 4 material**

1. State both parts of the Fundamental Theorem of Calculus.

2. Illustrate how the Riemann sum $\sum_{k=1}^n f(c_k) \Delta x_k$ approximates area under a function using areas of rectangles. Label x_k , Δx_k and $f(c_k)$ on your picture. Write an explanation of how the sum gives an approximation to area.

Slide 8 **iClicker**

Question Have you registered your iClicker yet?

A. Yes, I did it at:

<http://www.iclicker.com/support/registeryourclicker/>

B. Not yet, but I will go and do it today at:

<http://www.iclicker.com/support/registeryourclicker/>

C.

D. No, I don't need any extra credit, I made 100's on everything this semester.

E. I don't use iClickers in this class?