MATH 19 – Exam 3 Details

The third exam will take place in class on Wednesday, April 17. You will have the whole class period to take the exam, but I will also try to offer up to 15 minutes after class. I do not anticipate that the exam will take this long. This exam will be similar in length and format as the previous exams. You are allowed a scientific or graphing calculator. **Please note that academic integrity violations will be taken seriously, and will be met with serious consequences.**

The exam covers sections 4.1, 4.2, 4.3, 4.5, and 5.1. The topics you should know are:

- **4.1 First Derivative and Graphs** – Determine intervals where a function is increasing or decreasing. Find critical numbers and local extrema.
- **4.2 Second Derivatives and Graphs** – Determine intervals where a function is concave up or concave down. Find points of inflection.
- **4.5 Absolute Maxima and Minima** – Find the absolute maximum and absolute minimum of a function on a specified interval.
- **4.3 L'Hopital's Rule** – Evaluate limits which are in indeterminate form $0/0$ or $\pm\infty/\pm\infty$.
- **5.1 Antiderivatives and Indefinite integrals** – Calculate integrals using the basic rules we learned in class. Calculate specific integrals (solve for C) and apply these to real-world problems.
- **Miscellaneous** – Make sure you remember the derivative rules (product, quotient, chain, logarithm, exponential)

The exam will approximately weight each section equally and will be very similar to the practice exam.

Study resources:

- Your class notes
- Quiz 6, 7, 8
- **Exam 3 Practice Exam**
- Extra office hours: Mon 1:30-3pm, Wed 12:30-1:45pm. Help sessions: Mon-Wed 5-7pm (I'll be there Mon 5-7pm).