Calculus I, 21-111
Course review questions
May 2

Announcement: The 21-111 and 21-112 sequence is being restructured. If you are planning to take 21-112, the natural successor to this version of the course will be taught for the last time this summer and next fall. After that, the new version of 21-112 will be in place, and will differ significantly from the current sequence. Please feel free to talk to me or an undergrad advisor in the math. sci. dept. if you have any questions.

- What is a derivative of a function f?
- What is a limit?
- How do we compute derivatives?
- What kinds of functions can we differentiate?
- What do the first and second derivatives tell us about the graph of a function?
- What are some applications of derivatives?
- What is an optimization problem and how do we solve them?
- What types of optimization problems have we seen?
- What is a related rate problem and how do we solve them?
- What is an exponential function?
- What's special about the exponential function e^x?
- What relationship do the functions e^x and $\ln(x)$ have?
- What are some applications of exponential or logarithmic functions?