

## JOSH ENGWER -- MATH1451-026 (Calculus I): EXAM 2 Info/Logistics/Advice

### INFO:

- When: Friday (10/12) at 3:00pm -- Duration: 50 minutes
- # Questions will be reasonable for a 50-min exam. Bonus questions? Yes
- Covers Chapter 3 except Section 3.8 on Differentials/Linear Approximation/Newton-Raphson.
- Subsections in book NOT covered (and, thus, to skip):
  - Estimating a Derivative via a table [EXAMPLE 4 pg 101]
  - Sketching graph of  $f'(x)$  given graph of  $f(x)$  [EXAMPLE 7 pg 104]
  - Proofs of Derivative Rules [Proofs on pgs 111, 113, 119, 121-123, 142, 151-153; EX7 pg 116]
  - Average Rate of Change [pg 126, EXAMPLE 2(a) on pg 127]
  - Relative Rate of Change [pg 128]
  - Identifying Models [pg 130]
  - Finding total distance in Rectilinear Motion Problems [very bottom of EXAMPLE 5 pg 132]
  - Derivative Rules for arcsec & arccsc [Last line of Thm 3.11, pg 151]
  - Binomial Theorem & Pascal's Triangle [Mentioned during Sec3.1 lecture]
- Any necessary geometric (e.g. area, volume, ...) or physics results (e.g. Hooke's Law) will be provided.
- Provided formulas on exam: Definition of Derivative [pg 100], Height of Falling Body [h(t) on pg 133]
- Numbers will be 'nice enough' to comfortably work with by hand.
- Parts of problems worth more points require more work (and time) – so manage your time!

### LOGISTICS:

- All you need to bring are pencil(s), eraser(s) & your Raidercard.
- Backpacks are to be placed at the front of the classroom.
- Books, notes, notecards, calculators NOT PERMITTED.
- Mobile devices (phones, tablets, PC's, music, ...) are to be shut off and put away.
- Clear your desk of everything except pencil(s) and eraser(s).
- No talking, cheating, or listening to music!
- Tissues will be furnished – for allergies, not for sobbing.
- Print your name at the top-right corner of exam. Print your initials at top-right of subsequent pages.
- There will be a proctor (in addition to me).

### ADVICE:

- Don't be late to the exam.
- Review past homework, and perhaps even work some similar problems in the textbook.
- Review Chapter 3 in the textbook – go over relevant examples in each section.
- Review the relevant Lecture Notes, especially [DERIVATIVES-I]
- Use flashcards to aid in memorizing difficult derivative rules. Study for the exam together in groups.
- Show up to the review sessions on Monday (10/8) & Wednesday (10/10).
- SHOW APPROPRIATE WORK! Attempt bonus questions.
- What constitutes 'appropriate work'? Look at examples worked in lecture, textbook & Lecture Notes.