

STUDY GUIDE FOR TEST TWO

IMPORTANT ANNOUNCEMENTS!!!!

- 1) As announced in class, the test will be held on 07/23, rather than 07/21.
- 2) I will be holding extra office hours on 07/20 (that's right, Sunday!) and 07/22 from 2:30-5:30 PM on both of those days.

You will be asked to state the Extreme Value Theorem *verbatim* as given in your class notes or textbook. Learn the theorem correctly, with all hypotheses and conclusion, and earn points. It's that simple. There will be one question asking you to sketch the graph of a function along with stating certain features of the function such as intervals of concavity and relative extrema, and indicating some of those features on the graph. Also, a Related Rates problem will be given. Applied Max-Min problems will be on the Final Exam, along with Rolle's Theorem, The Mean Value Theorem, Integration, Parametric Equations, and previous material. Finding Absolute Extrema will be on Test Two.

SUGGESTED PRACTICE PROBLEMS:

Section 3.7-#3, 12-17 all, 20-22, 24, 25-28 all (*math is fun!*)

Section 4.1-#1-31 odds

Section 4.2-#1-43 odds

Section 4.3-#11-47 odds, 51, 52 (the inverse function material of #1-6 and 53-56 is for the final exam).

Section 4.4-#1, 5-35 odds, 41-49 odds (Disregard the calculator directions.), 51-54 all

Section 5.1-#1-37 odds, 41, 43 (Disregard the calculator directions.), 53-57 all. If you believe a statement to be false, then give a specific counterexample.

Section 5.2-#1-45 odds, 46, 47, 48, 50, 52

Section 5.3-#1-6 all, 14 [the ease of the problem is increased (no pun!) by algebraically simplifying the first derivative]

Section 5.4-1-3 all, 5-39 odds, 43, 45