## M2554 MIDTERM EXAM STUDY GUIDE-Spring, 2015 TEXT: CALCULUS-Early Transcendentals by Briggs & Cochran

To the student of M2554: Below is a list of problems that will help you prepare more efficiently for your Midterm Exam. You should consider each problem to be representative of a TYPE that may occur on the exam. The time constraint will not permit that each section listed will have at least one representative on the exam, but you should prepare for each type of problem listed.

- Section 2.1: The Idea of Limits & Section 2.2: Definitions of Limits

  There will be no problems on the exam from these sections
- Section 2.3: Techniques for Computing Limits Pages 73-74: #'s 1-48, 56-65
- Section 2.4: Infinite Limits
  Pages 82-83: #'s 15-26, 37-39
- Section 2.5: Limits at Infinity
  Pages 92-93: #'s 9-30, 38-46, & 52-53
- Section 2.6: Continuity
  Pages 103-104: #'s 9-44
- Section 2.7: Precise Definitions of Limits

  There will be no problems on the exam from this section.
- Section 3.1: Introducing the Derivative Page 132: #'s 11-32
- Section 3.2: Rules of Differentiation Pages 142-143: #'s 7-49
- Section 3.3: The Product and Quotient Rules Pages 152-153: #'s 7-57
- Section 3.4: Derivatives of Trigonometric Functions Pages 161-162: #'s 1-55
- Section 3.5: Derivatives as Rates of Change Pages 171-172: #'s 11-20, 26-27
- Section 3.6: The Chain Rule Pages 180-181: #'s 7-44
- Section 3.7: Implicit Differentiation Page 189: #'s 5-46