MAC 2311 Final Exam Topics Guide

Limits – graphs
        piecewise functions
        to infinity
        functions
        one-sided

Continuity

Derivatives   polynomials
             Trig
             Chain rule
             Product rule
             Quotient rule
             Implicit
             Higher order

Related Rates

Max/Min problems

Concavity/Inflection Points

Optimization

Velocity/Acceleration

Anti-derivatives   definite and indefinite
                  Power rule, trig and u-substitution

Fundamental Theorem of Calculus (part 1 and 2)

Areas between curves

Volumes (from graphs or equations)   Shell Method
                                          Disk Method
                                          Washer Method

Work

Average Value of a Function