

MA 22300 – Topics List

- I. Finding derivatives
 - Using the constant, power, constant multiple and sum rules
 - Using the product rule
 - Using the quotient rule
 - Using the chain rule – both directly and using related functions
 - Using implicit differentiation
 - Higher order derivatives

- II. Applications of the derivative
 - Finding the slope/equation of a tangent line; finding point(s) on a graph where the tangent line is horizontal
 - Finding the rate of change of a function
 - Finding a marginal function; its use in estimating actual change
 - Using increments to approximate the change in a function
 - Related rates
 - Intervals of increase/decrease

- III. Applications not using the derivative
 - Finding the y -value of a point
 - Finding the actual change in a function