

Exam 2 Topics

- Definition of the derivative
 - ◆ Slope of a tangent line
 - ◆ Instantaneous rate of change (or velocity)
 - ◆ Limit definition
 - Statement
 - How to use to find the derivative of a function
- Differentiation rules
 - ◆ Derivative of a polynomials
 - ◆ Sum and Difference rules
 - ◆ Product Rule
 - ◆ Quotient Rule
 - ◆ Power Rule
 - ◆ Derivatives of Trig functions
 - Special limits involving SIN and COS
 - ◆ Chain Rule
- Other Derivative topics
 - ◆ Iterated derivatives
 - ◆ Derivative of piecewise functions
 - ◆ Implicit differentiation.
 - Remember slope of the tangent line is dy/dx
 - ◆ Minimum and Maximum values
 - including Extreme Value Theorem and application of Fermat's Theorem
- Topics from Exam 1