

1 Applications of Differentiation

- 1.1 Definition of the Derivative Meets Derivative Rules**
- 1.2 Related Rates**
- 1.3 Extrema on an Interval**
- 1.4 Mean Value Theorem and Rolle's Theorem**
- 1.5 Increasing and Decreasing Functions and the First Derivative Test**
- 1.6 Concavity and the Second Derivative**
- 1.7 Second Derivative Test**
- 1.8 Graphs of f , f' , and f''**