

Chapter 2 Review

You must be able to or know:

- 1. Limits (Definition of a limit)**
- 2. Definition of Differentiability (Relationship between differentiability and continuity)**
- 3. Definition of a Derivative (Using alternate form of a Derivative)**
- 4. Finding the slope of tangency (Using it to find equations of tangent and normal lines)**
- 5. Standard Equation of the position function (Relationship between position, velocity, and acceleration)**
- 6. Instantaneous Velocity vs. Average Velocity**
- 7. Trig Derivatives**
- 8. Implicit Differentiation**
- 9. Related rate problems**
- 10. Graphical Relationship between $f(x)$ and $f'(x)$**
- 11. Taking the derivative: Recognizing power rule, product rule, quotient rule, and most important, the chain rule.**

Suggested Problems:

p.153 #'s 1-7 odd, 8, 9, 11, 13, 15-33 mx3, 34, 35, 39, 58

p. 154 # 42-57 mx3, 66-78 mx3, 89, 99, 105, 107

And ANY OTHER EVEN ones from the sections we have covered.