

## Review Problems for Final Exam:

Make sure you look over previous homework and exams. Here are some additional problems organized by subject.

- Limits: Pg. 177-179 (Ch. 2 Exercises)
  - Evaluating limits: # 1-22, 31
  - Squeeze Theorem: # 25
  - Continuity: # 31
  - Intermediate Value Theorem: # 35, 36
  - Definition of derivative: # 41a, 48abc, Pg. 273: # 100, 101
  - Derivative function/Differentiability: # 44-46, 48abc, 49
  - Asymptotes: # 48abc
- Differentiation Rules: Pg. 271-273 (Ch. 3 Exercises)
  - Finding derivatives: # 1-42, 67
  - Higher derivatives: # 49, 50
  - Tangent lines: # 55-59, 63, 81
  - Velocity & Acceleration: # 86, 87
  - Derivative as a rate of change: # 88
  - Related Rates: #91-95
  - Linearization: # 96a, 97a
- Parametric Equations: Pg. 697 (Ch. 10 Exercises)
  - Sketching curves described by parametric equations: # 1-4
  - Finding the slope of a curve given parametric equations: # 19-22
- Applications of Differentiation: Pg. 362-363 (Ch. 4 Exercises)
  - Finding the local and absolute extreme values on a closed interval: # 1-6
  - Finding information about a function given information about its derivatives: # 15-18
  - Finding local extreme values and sketching curves: # 19-22, 32, 34, 35 (Try finding the local extreme values for these functions. You do not need to sketch all of these functions.)
  - Optimization: # 50, 52, 58, 59