Math 122 Exam 3 Topics

1. Compute the work done by a variable force through a distance. See Section 7.5. Practice by doing problems 9–16.

2. Set up and solve a differential equation. See Section 7.6. Practice by doing problems 40, 43.

3. Use the Comparison Test (page 433) and/or the Integral Test (page 431) to decide whether or not an infinite series of positive terms converges or diverges. See Section 8.3. Practice by doing problems 11 – 26.

4. Use the Ratio Test (page 443) or the Root test (page 445) to decide whether or not an infinite series of positive terms converges. See Section 8.4. Practice Ratio Test problems: 25, 31, 37, 39. Practice Root Test problems: 25, 31, 39.

5. Use the Alternating Series Test (page 438), in combination with one of the other tests, to decide whether or not an alternating series converges, and if so, if that convergence is absolute or conditional. See Section 8.4. Practice by doing problems 19, 21, 35, 39. Additional problems are 19, 21, 23 on page 480.