

## Mathematics 141: Review for Test 2.

Since Test 2 we have covered Sections 4.4, 4.6, 4.8, 5.1, 5.2, 5.3, 5.4, 5.5 and 5.6. Here is a list of practice problems for these sections.

- Section 4.4 Problems 1, 5, 13–25 odd, 103, and 105.
- Section 4.6 Problems 1–15 odd, 35, 37, and 39.
- Section 4.8 This is the first section on finding antiderivatives. A large percentage of the test will be finding antiderivatives. Problems 1–55 odd, 65, 67, 85, 91–97 odd, 105, and 107.
- Section 5.1 Problem 9.
- Section 5.2 Problems 1–5 odd and 11.
- Section 5.3 You should know the rules in Table 5.6. Problems 9–25 odd.
- Section 5.4 This is the section on the Fundamental Theorem of Calculus. You should know the statements of Theorem 4 parts 1 and 2 (pages 330 and 331 in my text) and Theorem 5. You will have to compute several definite integrals using the Fundamental Theorem. Problems 1–33 odd, 39–51 odd, and 57.
- Section 5.5 This is on doing substitutions in integrals. This is an important skill and you can count on problems where you have to do a substitution. Problems 1–51 odd, 73, 77, and 79.
- Section 5.6 Problems 1–31 odd, 47–59 odd (Problems 55 and will be easier if set up as a  $dy$  rather than a  $dx$  integral), 93, and 107.
- Surprise mystery questions.