

Calculus 2: Test 2 Review: In addition to the problems listed below, also look over the problems that we did in class and recitation.

Section 2.1 Trigonometric Integrals

- Be able to do problems with sine and cosine and with tan and sec
- Ex 1-5, 7,8,12, 13

Section 2.2 Trigonometric Substitution

- I'll give you what x is equal to (ex. Hint: $x=2\sec(\theta)$)
- Ex 1,3,4,7,8,13 and [Trig Substitution worksheet](#)

Section 2.3 Partial Fractions

- Look at the [Partial Fractions worksheet](#)
- Be able to handle all the cases
- Ex 1-6,7' (see what we did in class),11,14

Section 2.4 Integrating using Tables

- I will provide the tables, but you will need to know how to use them
- see the webassign examples and [Integrating with Tables](#)

Section 2.5 Numerical Integration

- Know both the Trapezoidal Rule and Simpson's Rule
- Know how the Midpoint Rule, Trapezoidal Rule, and Simpson's Rule compare in terms of accuracy
- Know how to use the formulas for error bounds
- Ex 1,7,9,11,13

Section 2.6 Improper Integrals

- Be able to determine whether an improper interval is convergent or divergent
- Ex 2-5, 7, 8, 9,14

