

MAT 162-003 and MAT 162-300
Main Topics for Test 1
Wednesday, Feb. 1, 2012

(Sections 7.1, 7.2, 7.3, 7.4, 7.5 and the part of 7.6 dealing with tables of integrals)

Review

Be able to:

- perform integration by the method of substitution (for both indefinite and definite integrals)

New Methods of Integration

Be able to perform integration using our basic, memorized list of common integration formulas and common trig. identities combined with:

- integration by parts
- various methods for trigonometric integrals
- trigonometric substitution
- the method of partial fractions
- rationalizing substitutions
- the use of integral tables

The list of “trigonometric identities useful in integration” will be provided for the test.