

Section 7.1: Basic Integration Rules

- A. See page 484 for a list of 20 basic integration rules.
- B. Procedures for Fitting Integrands to Basic Rules
 - 1. Expand the numerator.
 - 2. Separate the numerator.
 - 3. Complete the square of the denominator.
 - 4. Divide improper rational functions when the degree of the numerator is larger than that of the denominator.
 - 5. Add and Subtract terms in the numerator.
 - 6. Use Trigonometric Identities.
 - 7. Multiply and divide by Pythagorean conjugates.

See Page 485 for Examples of these techniques.

Examples: 6, 12, 18, 26, 30, 46, 54, 56