

Homework 2 - Math 142, Frank Thorne (thornef@mailbox.sc.edu)

Due Friday, September 7

- (a) What does the rule for *integration by substitution* say? Explain why this is the Chain Rule backwards, and give a typical example of its use.
- (b) What does the rule for *integration by parts* say? Explain why this is the Product Rule backwards, and give a typical example of its use.
- (c) Ch. 5.5, 10-24 (even), 52-62 (even), 75, 77, 78, 79, 80.
- (d) Ch. 7.1, 4-34 even (omit 16), Stewart, Ch. 2.2, 1-4, 7, 9, 13.

Additional problems:

- (a) Ch. 5.5, 10-24, 52-62; Ch. 7.1, 4-34 (odd).

Bonus: Ch. 7.1, 35-38.