

Homework 4 - Math 142, Frank Thorne (thornef@mailbox.sc.edu)

Due Friday, September 21

- (a) Stewart, 7.5, 5-18.
- (b) What is an *improper integral*? What makes it improper? Give at least two examples that describe different types of improperness.
- (c) What does it mean for an improper integral to *converge* or *diverge*? Give examples of both.
- (d) Stewart, 7.8, 1-2 (**please explain carefully in complete sentences**), 3, 5-16, 65.

Additional problems:

- (a) Stewart, 7.5, 19-24; 7.8, 17-22; 6.1, 13-18.

Bonus (2 points):

- (a) Stewart, 75, 81.