

Name:

Math 241, Section F1H, Fall 2007
Graded HW Assignment 3, Due 9/17/07

1. **Instructions:** Write your name legibly in the space provided. Do the problems in order, and make sure that each problem is clearly labelled. Staple this cover sheet to the assignment. (No loose sheets!)
2. **Write-up:** For full credit it is essential that you write up your solution in a clear, logical manner, and **explain all key steps**. (See the notes on the Solutions to HW 1 for common errors such as circular arguments, etc.) An answer alone (such as those that can be found in the back of the book), or an inadequately or incorrectly justified answer, won't earn credit.
3. **Turn-in:** The assignment is due in class on the due date; late homework, or homework dropped off in mailboxes, will not be accepted. (You can, however, turn in the homework in person in my office, 241 Illini Hall, at any time before the due date.)

Problems

1. 12.4:35
2. 12.4:55
3. 12.4:56
4. 12.4:62
5. 12.4:65
6. 12.4:71
7. 12.6:15
8. 12.6:17
9. 12.6:34
10. 12.6:38
11. 12.7:34 (Compare to Example 2)
12. 12.7:38 (This is of the same type as the error estimate problems from 12.6 and can be done with differentials.)
13. 12.7:40
14. 12.7:49
15. 12.M:19 (Note that the error here is a *relative* (percentage) error, not an absolute error, as in 12.6:34.)