

## Homework Assignment 4.

Given Oct 09, due Oct 21.

1. Section 3.7: problems 9, 10, 16, 17, 20 (give an estimate of the error), 44.
2. Make sure you understand the meaning of equations (10), (11) on page 184. Then read Appendix 3 (proof of chain rule).
3. Read page 160 about the limitation of Newton's method. (ie. When does it work and not work?)
4. Section 3.8: problems 11, 12.
5. Section 3.8: problems 13, 22. Just write the formula, need not get the numerical values.
6. Section 3.8: Read problem 24.
7. Chap 3: problem 90. Do the same for  $\frac{1}{1+\sin(2x)}$ .
8. Section 4.2: problems 33, 34, 58, 61, 64, 81.  
Section 4.3: problems 17, 25, 64, 76, 78, 80.