Homework Assignment 3.

Given Oct 07, due Oct 19.

- 1. Section 3.5: problems 31-40, 61-70. (No, it's not a joke. Practice is the only way to learn.)
- 2. Section 3.6: problems 22, 26, 34, 38, 44, 58.
- 3. Section 3.7: problems 9, 10, 16, 17, 20 (also give an estimate of the error), 34, 44, 51.
- 4. Make sure you understand the meaning of equations (10), (11) on page 184. Then read Appendix 3 (proof of chain rule).
- 5. Read page 190 about the limitation of Newton's method. (i.e. When does it work and not work?)
- 6. Section 3.8: problems 11, 12.
- 7. Section 3.8: problems 13, 22. Just write the formula, need not get the numerical values.
- 8. Section 3.8: Read problem 24.
- 9. Chap 3: problem 90. Do the same for $\frac{1}{1+\sin(2x)}$.