Math and Computers, Math 165
Homework two, Due Monday October 23

1. Using Descartes' rule of signs find as much information as you can about the possible number of roots (counting multiplicities) of each of the following polynomials:

   a) $x^4 - x^2 + x - 2$

   b) $x^9 - x^5 + x^2 + 2$

   c) $x^5 + 2x^3 - x^2 + x - 1$

2. Apply Sturm's sequences and find out exactly how many distinct roots are there for each of the polynomials of problem one.

3. problems 4,8 section 2 chapter 1

4. problem 6,7 section 3 chapter 1