

## MATH 111 Section 01 Homework 3

Below is a list of selected problems from Swokowski and Cole's Precalculus - Functions and Graphs. You will have until Wednesday February 27 to finish the problem set. The first problems are suggested exercises and you do not need to turn them in. The latter set you should write up carefully and neatly as they will be graded. It is in your best interest to work all of the problems. All problems from the homework are fair game on the exams! You are encouraged to work in groups, but you must write up your own solutions. I will be available during office hours for help.

### 1 Suggested Problems

§3.2) 1-37 odd

§3.3) 11-19 odd

§3.4) 11-23 odd

### 2 Required Problems

- 1) List all polynomials with degree 4 that have the roots  $x = 2$  and  $x = 3$  so that  $f(0) = 1$ .
- 2) Let  $f(x) = 2x^6 + x^5 - 15x^4 - 15x^3 - 5x^2 - 16x + 12$ . Find all the roots of  $f(x)$  and state their multiplicity.
- 3) §3.4 #34.
- 3) §3.4 #38.