

### 18.034 PROBLEM SET 3

**Due date:** Friday, March 5 in lecture. Late work will be accepted only with a medical note or for another Institute-approved reason. You are strongly encouraged to work with others, but the final write-up should be entirely your own and based on your own understanding.

Each of the following problems is from the textbook. The point value of the problem is next to the problem. In Problem 36 from p. 175, please give an accurate plot. If you choose to do this by hand, that is fine, but plot the whole interval  $[-2, 0]$  with a step size of 0.1. If you choose to use Matlab, there will be a handout online giving step-by-step instructions how to plot functions.

- (1) (5 points) p. 129, Problem 4
- (2) (5 points) p. 129, Problem 5
- (3) (5 points) p. 168, Problem 16
- (4) (5 points) p. 175, Problem 4
- (5) (5 points) p. 175, Problem 6
- (6) (5 points) p. 175, Problem 36
- (7) (5 points) p. 175, Problem 44
- (8) (5 points) p. 175, Problem 46
- (9) (10 points) p. 176, Problem 48