

**Use the pdf problem set posted to the website**, as the numbering differs from that of the text.

**Recitation (ungraded)**

Attempt these before the recitation and check your solutions and solution process with TAs.

- (1) DMC Problem 16.13, 16.23, 16.39, 16.52, 16.56
- (2) DMC Problem 17.19, 17.25, 17.29, 17.33, 17.35

**Problems (Submit solutions)**

**Show your work and explain your reasoning.** Write in complete and grammatically sound sentences, and typeset your solution. See this  $\text{\LaTeX}$  source file and the corresponding pdf for an example of an acceptable solution set.

- (1) [12] DMC Problem 16.12
- (2) [12] DMC Problem 16.22
- (3) [12] DMC Problem 16.33
- (4) [14] DMC Problem 16.42
- (5) [12] DMC Problem 17.15
- (6) [12] DMC Problem 17.16(f)
- (7) [12] DMC Problem 17.18
- (8) [14] DMC Problem 17.32

**Bonus**

Submit a correct solution to DMC Problem 16.96 *or* DMC Problem 17.42 at the end of your solution to this problem set, clearly labeled.

- (i) You'll get full credit for a well-written, correct proof, and zero credit and perhaps no substantive response otherwise (this depends on the number of students who submit a solution).
- (ii) You are to solve this without discussion with anyone, including TAs and me.

For the preceeding reasons, do not attempt this problem unless you think it will be a rewarding/enriching experience in itself to wrestle with it. That said, a correct solution will net you a bonus 1% added to your final percentage in the course (future bonuses will not stack past the 2% mentioned in the syllabus).