Math 441, Prof. Hildebrand, Summer 2018

HW 10, DUE FRIDAY, 7/27
(Extended due to Midterm)

- **Use this sheet as cover sheet and staple it to the assignment.** Do the problems in order, and clearly label each problem.
- **Show all work.** Provide full justifications. Answers alone (such as those found in the back of the book) will not earn credit.
- **Questions/help.** I’d be happy to answer questions, look over drafts of your work, and provide feedback. I’m available after class each day in the regular classroom.

**NOTE:** Several of the problems ask to draw graphs of various types (sample trajectories, phase plot, etc.). In all cases, a rough hand-drawn plot that shows the *qualitative* behavior of the solution (e.g., spiraling to center) is sufficient; it doesn’t have to be to scale. (A computer-drawn sketch is of course acceptable as well.)

1. **Section 7.1:**
   (a) 7.1:1
   (b) 7.1:4
   (c) 7.1:6

2. **Section 7.5:**
   (a) 7.5:1
   (b) 7.5:2
   (c) 7.5:9 (complex solutions okay)

3. **Section 7.6:**
   (a) 7.6:1
   (b) 7.6:2
   (c) 7.6:9
   (d) 7.6:13
   (e) 7.6:17

---

Presentation/effort (5 points):
Graded problems (5 points):
Total score (10 points):

---

1If you worked with another student or in a small group on this assignment, list the names of all students involved.