

**Homework 11**  
due Friday, April 30

Reading for Lectures 23-25:

- Boyce & DiPrima 3.1–3.6, 4.1–4.3

Problems (most problems in B&D have short answers in the book, so indicate your method of solution):

- 3.1 Ex. 6, 17; 3.4 Ex. 6, 18; 3.5 Ex. 8; 3.6 Ex. 12
- 3.2 Ex. 9, 25. Why doesn't Ex. 25 contradict the Existence and Uniqueness theorem for the initial value problem given by the differential equation in this exercise, with initial conditions  $y(0) = 0$ ,  $y'(0) = 1$ ?
- 3.3 Ex. 24
- 3.5 Ex. 19
- 4.1 Ex. 14
- 4.2 Ex. 20
- 4.3 Ex. 10