Homework 15

Math 230

due 4:00pm on Wednesday, November 11

Write your solutions to the following problems clearly and neatly. Make sure to explain your reasoning and provide mathematical details that support your answers. For a few tips on writing solutions, see this helpful guide for mathematical writing.

You may write or type your solutions electronically, or write them on paper and scan or photograph them. Upload a single file containing your solutions to the Homework 15 assignment on Moodle.

Book Problems

- Section 7.1 #1abcd, 5abcd (page 644)

- Section 7.2 #3, 12 (pages 654–655)

  Note: For #3, just compute the approximation using improved Euler's method and compare with the Euler's method approximation. Also note that the differential equation in #12 is the same as that from #5 in Section 7.1.

- Section 7.3 #3, 6 (pages 664–665)

  Note: For #3, just compute the Runge-Kutta approximation and compare with the Euler's method approximation. Also note that the differential equation in #6 is the same as that from #1 in Section 7.1.