Homework 3

Math 262

due 5:00pm on Wednesday, February 23

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 3 assignment on Moodle.

Book Problems

- Section 1.3 #49 (page 35)

- Section 1.4 #51, 54, 59, 60, 71 (pages 46–52)

Additional Problem

Renata flies frequently and likes to upgrade her seat to first class. She has determined that if she checks in for her flight at least 6 hours early, the probability that she will get the upgrade is 0.8; otherwise the probability of getting the upgrade is 0.3. With her busy schedule, Renata checks in at least 6 hours early only 40% of the time. What is the probability that Renata will get a first class upgrade on a randomly selected flight?