1. Chapter 5, “Problems and Applications”, #2, #7, #10 (6 points).

2. Chapter 6, “Problems and Applications”, #1, #5, #7 (6 points).

3. Chapter 6, “made up problem” - Steady State Unemployment (7 points):
   - Assume, as in the example in the book, that the job separation rate $s$ is 0.01 (1%) per month and that the job finding rate $f$ is 0.2 (20%) per month.
   - Assume that the labor force is 100 million.
     (a) What is the steady state unemployment rate for this economy?
     (b) Given that $L = 100$ million, what is the steady state number of employed $E$ and unemployed $U$?
     (c) If U.S. immigration policy changed today (period $t = 1$) such that we allowed more people to enter the country and $L$ increased to 110 million from its initial value of 100 million. Assume that these new entrants would be unemployed first and then find jobs at the job finding rate $f$. Create a table (maybe in Excel) that shows how $E$, $U$, and $U/L$ evolve over time, given $s = 0.01$ and $f = 0.2$, starting at $t = 1$ and ending when the unemployment rate reaches its steady state rounded to the nearest thousandth (tenth of a percent).
     (d) In the table from the previous scenario, how many periods does it take for the unemployment rate to reach its steady state level rounded to the nearest thousandth (tenth of a percent)?

4. Chapter 7, “Problems and Applications”, #1, #3, #8 (6 points).