

Solve the following exercises from Ferguson's Lecture Notes:

- a. Exercises 3 and 4 from Section 1.5 of Part II;
- b. Exercise 2 from Section 4.7 of Part II;
- c. Exercises 6 and 10(a) from Section 5.9 of Part II;
- d. Exercise 3 from Section 1.6 of Part III;
- e. Exercise 4 from Section 2.5 of Part III;
- f. Exercise 1 from Section 3.5 of Part III;
- g. Exercises 2 and 4 from Section 4.5 of Part III.