Solve the following problems from Srednicki.

- **1** Problem 16.1 on page 114.
- **2** Problem 18.1 on page 120.
- **3** Problem 20.1 on pages 126.
- 4 Problem 20.2 on pages 126.
- **5** Problem 21.3 on pages 131.
- **6** Problem 22.1 on page 139.
- **7** Problem 22.2 on page 139.
- **8** Problem 22.3 on pages 139.

Remark: At least one of these problems will be included in the final exam. You should write your solution to each of the problems in a separate sheet of paper, so that you can hand in just the solution to the problem(s) that appear in the final exam.