Solve the following problems from Srednicki.

- 1 (20 points) Problem 10.1 on page 78.
- **2** (20 points) Problem 10.2 on page 78.
- **3** (20 points) Problem 10.3 on pages 78.
- 4 (20 points) Problem 10.4 on pages 78.
- **5** (20 points) Problem 10.5 on pages 78.