1. Problems 5, 8, 12, 14 in section 2.2 of the text.

2. Problems 3, 8, 13 in section 2.3 of the text.

3. Let \( f(x) = ax^2 + bx + cx^2 \). Suppose \( f(1) = 2, f(-1) = -2 \) and \( f(2) = 9.5 \). Find and solve a matrix equation to determine \( a, b, c \).

4. Problems 6, 14, 26, 32 in section 2.4 of the text.