Homework 6

1. Compare equation (19.5.18) of Weinberg (the pion effective action derived from the σ-model) with the pion effective action that follows from the formalism that uses $U(x) \in SU(2)$, as in (83.12) of Srednicki.

2. Problem 5 chapter 19 of Weinberg.

3. Srednicki problem 83.1. (We have not covered anomalies yet, but all you need to know is that the $U(1)_A$ is always anomalous.)

4. Srednicki problem 83.4.

5. Srednicki problem 83.6.

6. Srednicki problem 83.7.