Problem Set 2

ESS 590G and 590H
Winter 2017

Due Tuesday Feb 7, 2017

1. Exercise on top of Page 73 of Nicholson Chapter 6 second sentence: "Verify by direct substitution that (6.11) …" (i.e. Assume you already KNOW that v $_{perp}$ is a constant of motion (from the 1st adiabatic invariant $\mu= \frac{1}{2}$ m (v $_{perp}$)^2/B).

2. Exercise on bottom of Page 76 of Nicholson Chapter 6 items (a), (b) and (c) only.

3. Exercise on Page 90 of Nicholson Chapter 6

4. Problem 6.2, (Nicholson, P. 125)

5. Problem 6.3

6. Problem 6.4