## MTH 254H: Homework 4

Due: September 29, 2017

- 1. Read Sections 2.3-5 in Marsden and Tromba.
- 2. Do problems 2.1.6, 2.1.12, 2.1.18, 2.1.20, 2.1.29, 2.1.35, 2.2.1, 2.2.2, 2.2.8, 2.2.10, 2.2.14, 2.2.16, 2.2.18, 2.2.19, and 2.2.25 in Marsden and Tromba.
- 3. Give a proof of part (i) of Theorem 3 on page 95 using the  $\epsilon \delta$  formulation of limits.

Notes on homework prep:

• For Question 3, it may be helpful to review the proof of part (ii) of Theorem 3 done in lecture.