## Homework 2

Due Tuesday, September 14 at 10am. Please upload a legible copy to bCourses.

You may work together, but the solutions must be written up in your own words. Show all work and justify all answers.

- 1. Ross, 4.15.
- 2. Ross 4.16.
- 3. Ross 8.2 a), c) and e). Prove convergence directly from the definition; do not use any limit theorems.
- $4. \ \operatorname{Ross} \, 8.5$
- 5. Ross 8.7
- 6. Ross 8.10
- 7. Find the limit of  $s_n = \sqrt{1 1/n}$ . Prove your answer.