Turn in starred problems Wednesday, March 8, at the beginning of the period. See the remarks below for hints or modifications of several of these problems.

Exercises from Abbott, *Understanding Analysis*:
- Section 3.2: 2, 3, 4*, 6*, 7, 8, 10, 12*
- Section 3.3: 1, 2 and 11, 4*, 5, 6*, 10

Optional extra credit problem; turn in in lecture Thursday 3/09: Abbott 3.3.7. For an extra credit problem, please do not consult any sources or work with other students. See Comment below.

Comments, hints and instructions:
- 3.2.7: The goal of this problem is a proof of Theorem 3.2.12, which we proved in class. However, part (a) is of some independent interest.
- 3.3.6: Hint: in all cases, the statements are true with “compact” but not with “closed”.
- 3.3.7: It seems to me that it may be difficult to get a really clear and convincing explanation in (a). Please do your best: if I find your prose too impenetrable, I won’t read it.
- 3.3.10: In class we proved
  open-cover compact ⇒ sequentially compact ⇒ closed and bounded ⇒ open-cover compact; for the last step we essentially followed Exercise 3.3.9. Exercise 3.3.10 sketches an alternate proof of this step.