Math 227A: Suggested Exercises Week 1

1. Send me an e-mail letting me know how comfortable you are with homotopy theory, for purposes of speed calibration.

2. Do exercises 4.1.1-5, 4.1.8 in Hatcher.

3. Let $X$ be connected. Express the set of unbasepointed maps $f : S^n \to X$ up to homotopy, written $[S^n, X]$, in terms of the groups we have defined in class.