Assignment #2:
Due September 3

1. Exercises 4.3-6, 4.3-9
2. Exercises 4.4-2, 4.4-6
3. Problem 4-3: (b), (c), and (f)
4. Problem 4-4
5. (Challenge Problem – Need not be turned in and solution will not be
   provided): Consider Case 3 of master theorem: (i) $f(n) = \Omega(n^{\log_b a + \epsilon})$ for some $\epsilon > 0$; and (ii) $af\left(\frac{n}{2}\right) \leq cf(n)$ for some $c < 1$ for $n$ sufficiently large. Do we need both of these conditions or is one stronger than the other?