CSci 3501 Assignment 2
Due Friday, September 8 in class

Problem 1 (6 points). Prove the following:

- $n! \in o(n^n)$

- $g(n) \in o(f(n))$ then $f(n) + g(n) \in \Theta(f(n))$.

Problem 2 (9 points).

- Exercise 3.1-2 p. 52.

- Exercise 3.1-4 p. 53; prove your answers.

Problem 3 (4 points). Exercise 3-4 p. 62 parts d, g. You have to either prove the claims or give counterexamples. Think about the question carefully: the answer may be non-obvious.