

CSE 311 Quiz Section 8: May 22, 2014

1. Homework 5, #4: induction step for $n! < n^n$.
2. Homework 5, #5: What is required to demonstrate that $f(n+2) \bmod f(n+1) = f(n)$? For example, is $f(3) \bmod f(2) = f(1)$?
3. Homework 6, #1: In an extended binary tree with height h , the number of leaves is at most 2^h .
4. Homework 6, #3(b): There is a bijection from the equivalence classes of R to what familiar mathematical set?
5. Carry-lookahead adder: a circuit for adding two n -bit numbers whose delay is only $O(\log n)$ instead of $\Theta(n)$: <http://www.cs.umd.edu/class/sum2003/cm311/Notes/Comb/lookahead.html>