**MATH 113: DISCRETE STRUCTURES**
HOMEWORK DUE MONDAY WEEK 9

For the following problems, use the bijections developed in our text between parking functions, labeled Dyck paths, and labeled trees.

Problem 1. Find the labeled Dyck path and tree corresponding to the parking function $(3, 2, 6, 8, 5, 2, 1, 5)$.

Problem 2. Find the labeled Dyck path and the parking function corresponding to the tree
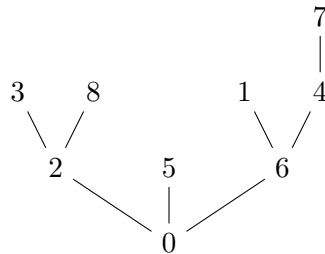
Problem 3. Let $p = (1, 1, \dots)$ be the parking function of length n with $p_i = 1$ for $i = 1, \dots, n$. Find the labeled Dyck path and tree corresponding to p.