

**MATH 113: DISCRETE STRUCTURES**  
**HOMEWORK DUE WEDNESDAY WEEK 5**

*Problem 1.* DM:EB 3.6.1.

*Problem 2.* The book proves equation (3.5) via induction, which we haven't covered yet. Come up with a combinatorial proof of the identity. [Warning: DM:EB 3.6.4 gives a potentially misleading (but still workable) hint on this. You may want to come up with your own method.]