

**MATH 113: DISCRETE STRUCTURES
HOMEWORK FOR MONDAY WEEK 4**

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.]