

**MORE MATH 55 PRACTICE PROBLEMS (FROM CHAPTERS 8-10),
SPRING 2014**

- (1) Use generating functions to solve $a_k = 3a_{k-1} + 2$ with the initial condition $a_0 = 1$.
(From Section 8.4 # 33.)

- (2) Suppose that a relation R is symmetric. Show that R^* is symmetric. (From Section 9.4 #23).

- (3) Show that the property that a graph is bipartite is a graph invariant. (From Section 10.3 #66).