

Fall 2015, Math 431: Week 9 Preliminary Problems
Due: Thursday, November 12th, 2015
Ordinary Generating Functions

Preliminary problems. The problems below should be completed before class on Thursday.

(P1) Let $A(x) = \sum_{n=1}^{\infty} x^n$. (Note the starting n value!)

(a) Write out the first few coefficients of $(A(x))^2$, and describe their general form.

(b) Write out the first 6 terms in the composition $A(A(x))$. Show enough work to easily recall where each term comes from. You do *not* need to give the general form.