Discrete Mathematics 21-228: Spring 2002
Homework.
HW6 due Monday 3/11/02

Q1: Let p_n denote the number of permutations which do not have cycles of length 2. Find a recurrence for p_n.
Q2: Let $B(n,k)$ be the number of partitions of $[n]$ into k non-empty parts, each of which is of **odd** cardinality. Find a recurrence for $B(n,k)$.
Q3: Solve the following recurrence

$$a_n - 7a_{n-1} + 12a_{n-2} = n(n-1)2^n \qquad n \geq 2.$$

$a_0 = a_1 = 1$.