# Math 491, Problem Set \#11 

(due 10/21/03)

1. Let $c_{n}$ be the number of domino tilings of a 3 -by- $2 n$ cylinder, obtained by gluing together the left and right sides (of length 3) of a 3 -by- $2 n$ rectangle. Express the generating function $c_{1} x+c_{2} x^{2}+c_{3} x^{3}+\ldots$ as a rational function of $x$.
