Computer Science CSC 238H | Wednesday June 17 1998
St. George Campus | University of Toronto

Quiz #4

First Name: ______________________________

Last Name: ______________________________

Student Number: ______________________

1. [1 mark] Let $P(n)$ be the statement "$\sum_{i=0}^{n}(2i+1) = (n+1)^2$." Prove, using mathematical induction, that $P(n)$ is true for all natural numbers n. Recall that $\sum_{i=0}^{n}(2i+1)$ denotes the sum $1 + 3 + 5 + 7 + \cdots + (2n+1)$.