

Math 3100 Quiz 1

Name _____

1. (10 points) Let $\{a_n\}$ be the sequence given recursively by

$$a_{n+1} = a_n + 2n$$

for all $n > 1$, with $a_1 = 3$. Show that

$$a_n = n^2 - n + 3$$

for all natural numbers n .