# Tut 0101 and Tut 0102 <br> Quiz 5 

## Thursday March 29

## No aids allowed.

1. If the average of two successive years' production $\frac{1}{2}\left(a_{n}+a_{n-1}\right)$ is $2 n+5$ and $a_{0}=3$, find $a_{n}$.
2. Find the functional equation for the generating function whose coefficients satisfy the relation:

$$
a_{n}=3 a_{n-1}-2 a_{n-2}+2, \quad a_{0}=a_{1}=1 .
$$

