Tut 0101 and Tut 0102 Quiz 5

Thursday March 29

No aids allowed.

- 1. If the average of two successive years' production $\frac{1}{2}(a_n + a_{n-1})$ is 2n + 5 and $a_0 = 3$, find a_n .
- 2. Find the functional equation for the generating function whose coefficients satisfy the relation:

$$a_n = 3a_{n-1} - 2a_{n-2} + 2, \quad a_0 = a_1 = 1.$$