$\alpha_{n+2} = 4 \alpha_{n+1} - 4 \alpha_n$

Or 0= 1, 0, = 4 P(x) = (1 + 4x) - 4x = 1

 $A(x) = \frac{1}{1 - 4x - (-4)x^2} - \frac{1}{1 - 4x + 4x^2} = \frac{1}{(1 - 2x)^2}$ $A(x) = \sum_{n=1}^{\infty} 2^n C_{n+1}^n x^n =$

 $O_N = 2^N (N+1)$

 $= \sum_{i=1}^{n} \sum_{j=1}^{n} (n+1) \times n$

 $A(x) = \sum_{i=1}^{n} C_{i}(x)$