

Exercise to Solve

ES01: Find all solutions of the recurrence relation $a_n = 2a_{n-1} + 2n^2$.

ES02: Find the solution of the recurrence relation in Q1 with initial condition $a_1 = 4$.

ES03: Find the solution of the recurrence relation $a_n = 2a_{n-1} + 3 \cdot 2^n$.

ES04: Find all solutions of the recurrence relation $a_n = 4a_{n-1} - 4a_{n-2} + (n + 1)2^n$.

ES05: Find the solution of the recurrence relation $a_n = 4a_{n-1} - 3a_{n-2} + 2^n + n + 3$ with $a_0 = 1$ and $a_1 = 4$.