

Homework

Closed form Solution for Recurrence Relations

Solve the following recurrence relations.

1. $b_0 = 1, b_1 = 2, b_n = 7b_{n-1} - 10b_{n-2}, \forall n \geq 2.$

2. $y_0 = 2, y_1 = 3, y_k = 3y_{k-1} - 2y_{k-2}, \forall k \geq 2.$

3. $t_0 = 0, t_1 = 3, t_k = 6t_{k-1} - 9t_{k-2}, \forall k \geq 2.$