For each of the following, if the recurrence relation is linear and homogeneous with constant coefficients, solve it by providing the closed form equation. If it is not, state why it is not.

1. \( \forall n \geq 2, a_n = a_{n-1} + 6a_{n-2}, a_0 = 3, a_1 = 6. \)
2. \( \forall n \geq 2, a_n = 7a_{n-1} - 10a_{n-2}, a_0 = 2, a_1 = 1. \)
3. \( \forall n \geq 2, a_n = 2a_{n-1} + 1, a_0 = 5 \)
4. \( \forall n \geq 2, a_n = 6a_{n-1} - 8a_{n-2}, a_0 = 4, a_1 = 10. \)
5. \( \forall n \geq 2, a_n = 2a_{n-1} - a_{n-2}, a_0 = 4, a_1 = 1. \)
6. \( \forall n \geq 2, a_n = a_{n-2}, a_0 = 5, a_1 = -1. \)
7. \( \forall n \geq 2, a_n = -6a_{n-1} - 9a_{n-2}, a_0 = 3, a_1 = -3. \)
8. \( \forall n \geq 2, a_n = -4a_{n-1} + 5a_{n-2}, a_0 = 2, a_1 = 8. \)
9. \( \forall n \geq 1, a_n = n + a_{n-1}, a_0 = 1 \)
10. \( \forall n \geq 1, a_n = 4a_{n-1}, a_0 = 2 \)