

Quiz 9: November 23, 2021

Name: _____

Student ID: _____

1. (10 points) if $a_n = 6a_{n-1} - 8a_{n-2}$ for $n \geq 2$, with $a_0 = 2, a_1 = 1$, find the closed form of this Linear Homogeneous Recurrence Relation of order 2 with constant coefficients.

Make sure you give your characteristic equation (3 points), find your roots (2 points), write down the solution in terms of unknown constants (2 points), and then solve the two equations with two unknowns to come up with a final solution (3 points).