

1. (10 points) if $a_n = 7a_{n-1} - 10a_{n-2}$ for $n \ge 2$ and $a_0 = 2, a_1 = 1$, prove that the closed form of this recurrence relation is $a_n = 3 \cdot 2^n - 5^n$

Clearly identify your Basis Cases(2 points), your Inductive Step (6 points), and your Inductive Hypothesis (2 points).