

Real Quiz 7 of Dr. Z.'s Dynamical Models in Biology class

Name: (print!)

Email: (print!)

1. (a): (3 points) . Prove that $(0,0)$ is a steady-state of the first-order vector recurrence

$$a_1(n+1) = \frac{a_1(n)}{2 + a_2(n)} \quad ,$$

$$a_2(n+1) = \frac{a_2(n)}{3 + a_1(n)} \quad .$$

Explain!

b (7 points): Is $(0,0)$ a stable steady-state? Explain!