Evolutionary Dynamics Exercise 1

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Problem 1

(Solved in Tutorial)

Problem 2

- (a) Determine the equilibrium points x^* of the system.
- **(b)** Are the points stable for r = 0.5, r = 1.5, r = 2.5?
- (c) Confirm this by numerically iterating the difference equation
- (d) Examine the stability and behaviour for r = 3.5.

(e) What happens for r = 3.9?

Problem 3

(a)

- **(b)** Numerically integrate to demonstrate the results above for K=1.
- (c) Numerically integrate to demonstrate the results above for K = 1.