

# Section 1.1 Exercises

## WDRP - Simple Discrete Models in Biology and MATLAB

### 1. Exercise 1.1.2

- In part a) the phrase "increment of 1 in  $t$ " might be confusing. It's just saying that your time should be measured in "half an hour". So  $t = 1$  is 0.5 hours, while  $t = 2$  is 1 hour.
- For part b) make the graph using MATLAB over a 24 hour period. Don't worry about explicitly writing a table, as this will be implicit in your arrays for the plot.

### 2. \*Exercise 1.1.4

- Don't worry about doing exercise 1.1.3 by hand, just do it in MATLAB as it says in 1.1.4.

### 3. Exercises 1.1.5

- In addition to just ad hoc trying a bunch of iterations, use a while loop.

### 4. \*Exercise 1.1.7

### 5. Exercise 1.1.8

### 6. \*Exercise 1.1.10

### 7. Exercise 1.1.13

### 8. \*Exercise 1.1.15 & 1.1.16

- These two are related in some sense.