

### 1. PREDATOR-PREY VARIATIONS

Can be found on page 320 of the textbook, project 5.9

There are many variations of the classical predator-prey model, and in this example we look at replacing the exponential parts by logistic parts:

$$\begin{aligned}\frac{dx}{dt} &= ax - bx^2 - cxy \\ \frac{dy}{dt} &= e xy - fy\end{aligned}$$

Do Part 1 a) b) c) d)  
Do Part 2 a) b) c) d)