

MATH 226 : Differential Equations

Differential Equations

Assignment 17

Due Monday, November 14

Read Section 7.2: "Almost Linear Systems" and Section 7.3 "Competing Species" of Chapter 7: *Nonlinear Differential Equations and Stability*.

Problems

6.7 Defective Matrices

Practice Problems: 1, 3, 9

Feedback Problems: 3, 9

7.1 Autonomous Systems and Stability

To describe the basin of attraction (part d), try to have MATLAB or *Maple* draw the separatrices that you can see in the direction field and discuss.

Practice Problems: 1*, 2*, 4*, 6*, 8*, 23, 24, 25, 26

Feedback Problems: 4*, 6*, 24

