### **MATH 226**

## **Differential Equations**

# Assignment 17

Due Wednesday, April 27

**Read** Section 7.2: "Almost Linear Systems" and 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 basic of attraction (part d), try to have *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

