

# MATH 226

## Differential Equations

### Assignment 15

*Due Monday, April 14*

**Read** Section 6.5: “Fundamental Matrices and the Exponential of a Matrix” and Section 6.6: “Nonhomogeneous Linear Systems” of Chapter 6: *Systems of First Order Linear Equations*

### Problems

MATLAB will be useful for parts of the starred problems.

#### 6.3 Homogeneous Linear Systems with Constant Coefficients

**Practice Problems:** 1, 2, 11\*, 15\*, 18\*

**Feedback Problems:** 2, 15\*

#### 6.4 Nondefective Matrices with Complex Eigenvalues

**Practice Problems:** 3, 5, 11, 15\*

**Feedback Problems:** 3, 11

