Problem Set #11, revised version
Section 4, Prof. Dylan Thurston
Due Wednesday, December 14, 2005

For this problem set, the exercises are optional.

1 Exercises

1. Section 17.1: exercises 1, 3, 5, 17, 19.
2. Section 14.8: exercises 1, 5, 7.

2 Homework

1. Find the general solution to the differential equation
   \[ y'' - 3y' + 2y = 0. \]
2. Find the general solution to the differential equation
   \[ 9y'' - 6y' + 1y = 0. \]
3. Find the solution to the differential equation
   \[ y'' + 3y' - 4y = 0 \]
   where \( y(0) = 5, \ y'(0) = 0. \)
4. Find the general solution to the differential equation
   \[ y'' - 4y = x^2 + e^x. \]