Dartmouth College
Mathematics 23 - Assignment 7

1. Find the general solution to each of the following:

   (a) $y'' + 25y = 0$

   (b) $y'' + y' + 2y = 0$

   (c) $y'' + y' - 2y = 0$

2. Boyce and DiPrima, Section 3.3: 19

3. Boyce and DiPrima, Section 3.3: 22

4. Boyce and DiPrima, Section 3.3: 34 (First read the paragraph preceding problem 34.)

5. Boyce and DiPrima, Section 3.3: 35

6. Solve the initial value problem $(x^2 + 2y)y' = -2xy$, $y(0) = 1$.