

Dartmouth College
Mathematics 23 - Assignment 7

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

(a) $y'' + 6y' + 9y = 0$

(b) $y'' + 7y' = 0$

(c) $y'' + y' + 4y = 0$

2. Boyce and DiPrima, Section 3.4: 15

3. Boyce and DiPrima, Section 3.4: 18

4. Boyce and DiPrima, Section 3.4: 24

5. Boyce and DiPrima, Section 3.4: 31 (In the second half of part (b), after deriving the general integral formula, just compute the integral in case $N = 1$; you don't have to do the case $N = 2$, which involves integration by parts twice. Read the rest of the problem though; it's quite interesting.)