



CALCULUS II
SPRING 2011

ASSIGNMENT 8.2
DUE OCTOBER 17

Solve the differential equation or initial value problem using the method of undetermined coefficients.

Exercise 1. $y'' + 3y' + 2y = x^2$

Exercise 2. $y'' + 9y = e^{3x}$

Exercise 3. $y'' - 2y' = \sin 4x$

Exercise 4. $y'' + 6y' + 9y = 1 + x$

Exercise 5. $y'' + y = e^x + x^3, y(0) = 2, y'(0) = 0$

Exercise 6. $y'' - 4y = e^x \cos x, y(0) = 1, y'(0) = 2$

Exercise 7. $y'' + y' - 2y = x + \sin 2x, y(0) = 1, y'(0) = 0$