

HOMWORK 9, M 331
DUE 4/16/09

Note that Homework 8 is due 4/14/09!

Problem 1. Find the general solution of the inhomogeneous ODE

$$y^{(4)} - y = 3t + \sin t.$$

Problem 2. Find the solution of the inhomogeneous ODE

$$y^{(3)} + 4y' = -t$$

with initial conditions $y(0) = y'(0) = 0$, $y''(0) = 1$.

Problem 3. Find the general solution of the inhomogeneous ODE

$$y^{(3)} + y'' + y' + y = e^{-t}.$$