Name: July 20, 2016 MAP 2302.4787 Cyr

## Quiz 4 You must show all work to receive full credit!!

**Problem 1.** (2 points) Write the <u>form</u> of a particular solution suggested by the method of undetermined coefficients. DO NOT find the coefficients.

(a)  $y'' + 2y' = t^2 + t$ 

(b) 
$$y'' - 4y' + 4y = te^{2t} - \sin(2t)$$

**Problem 2.** (3 points) Use variation of parameters to find a general solution to the differential equation

$$y'' + 2y' + y = e^{-t}.$$