

# Math 205, Differential Equations

## Quiz 6

1. Use the method of undetermined coefficients to find a particular solution.

$$y'' + y = 2x \sin x$$

2. Find the general solution of the following homogeneous equations.

a.  $y^{(4)} + y^{(3)} + y'' = 0$

b.  $y''' - y'' - 4y' + 4y = 0$