

Prof. S. Brick  
Spring '08

Differential Equations; Quiz 1

Math 238  
section 102

0. Print your name: \_\_\_\_\_

1. Show that  $y = e^x \cos(x)$  is a solution to  $y'' - 2y' + 2y = 0$ .

2. Verify that  $y = Ce^{-x} + x - 1$ , where  $C$  is a constant is a solution to  $y' = x - y$ . Then find  $C$  such that the initial condition  $y(0) = 10$  is satisfied.