Quiz 2 Name:

Recitation Time:

(1) Test the following equation for exactness and then find the solution. If you do not test for exactness you will lose half the marks.

$$2y + 2x + (2x - 6y)y' = 0$$

(2) For the following equation.

$$y'' + 2y' - 3y = e^{2t} + t$$

(a) Find the homogeneous solution.

(b) Find the particular solution.

(c) Find the general solution.