Math 301   Quiz 4

(A)

Name:...ID#:.................................Ser:..............

Q.1: Solve $y' + 6y = e^{4t}, \; y(0) = 2$.

Q.2: Solve $y'' - 6y' + 13y = 0, \; y(0) = 0, \; y'(0) = -3$.

Q.3: Use Laplace transform to solve the integral equation $f(t) = \cos t + 3 \int_0^t e^{-3\tau} f(t - \tau) \, d\tau$.