

**MATH 361 Quiz 6****Name:**

Show all work. 5 points each.

1. Solve the initial value problem  $y'' - 4y = 0$ ,  $y(0) = 1$ ,  $y'(0) = -4$  .

2. Find the Green's function for this differential equation and use it and question 1 to solve it.  $y'' - 4y = e^{2x}$ ,  $y(0) = 1$ ,  $y'(0) = -4$  .