

Math 331-004 Quiz 2

Tuesday 1/27/2004

Name _____

Determine the long time solution for the following problem:

$$0 < x < 1, 0 < t : u_t = u_{xx} - u$$

$$x = 0 : u(0, t) = 0, x = 1 : u(1, t) = 1$$

$$0 < x < 1, t = 0 : u(x, 0) = f(x)$$