

Math 513-131 Quiz 3 (A)

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

Q.1: Solve the wave equation $a^2 \frac{\partial^2 u}{\partial x^2} = \frac{\partial u}{\partial t}$ subject to the conditions $u(0, t) = 0$, $u(\pi, 0) = 0$,
and $u(x, 0) = 0.2 \sin(3x)$, $u_t(x, 0) = x(\pi - x)$.