

Attendance Quiz for Lecture 15

NAME: (print!) _____ Section: _____

E-MAIL ADDRESS: (print!) _____

1. Using the **ready-made formula** (don't do it from scratch) solve the boundary value problem

$$4 \frac{\partial^2 u}{\partial x^2} = \frac{\partial u}{\partial t} \quad , \quad 0 < x < \pi \quad , \quad t > 0 \quad ,$$

$$u(0, t) = 0 \quad , \quad u(\pi, t) = 0 \quad , \quad t > 0$$

$$u(x, 0) = 3x(\pi - x) \quad , \quad 0 < x < \pi \quad ,$$