

Attendance Quiz for Lecture 17

NAME: (print!) _____ Section: _____

E-MAIL ADDRESS: (print!) _____

1. Solve :

$$u_{xx} + u_{yy} = 0 \quad , \quad 0 < x < \pi \quad , \quad 0 < y < 1 \quad ,$$

Subject to

$$\begin{aligned} u(0, y) = 0 \quad , \quad u(\pi, y) = 0 \quad , \quad 0 < y < 1 \quad ; \\ u(x, 0) = 0 \quad , \quad u(x, 1) = f(x) \quad , \quad 0 < x < \pi \quad . \end{aligned}$$