Attendance Quiz for Lecture 19

NAME: (print!) _____ **Section:** _____

E-MAIL ADDRESS: (print!) _____

1.: Find the Laplace Transform of the pde $u_{xx} = 4u_{tt}$, $t > 0$.

2.: Solve the pde

$$u_{xx} = u_{tt} \quad , \quad 0 < x < 1 \quad , \quad t > 0 \quad ,$$

subject to the **boundary-conditions**

$$u_x(0,t) = 0 \quad , \quad u_x(1,t) = 0 \quad , \quad t > 0 \quad ,$$

and the **initial conditions**

$$u(x,0) = 0 \quad , \quad u_t(x,0) = \sin(\pi x/2) \quad , \quad 0 < x < 1 \quad .$$