Dr. Z.'s Math 421(2), (Fall 2014, RU) REAL Quiz #8

NAME: (print!) _____

E-MAIL ADDRESS: (print!) _____

1. Solve

$$3\frac{\partial^2 u}{\partial x^2} = \frac{\partial u}{\partial t} \quad , \quad 0 < x < 2\pi \quad , \quad t > 0$$

subject to the conditions

$$u(0,t) = 0 \quad , \quad u(2\pi,t) = 0 \quad , \quad t > 0$$

$$u(x,0) = 300$$

(You may use the ready-made formula)