MATH 54 FALL 2016: DISCUSSION 102/105 QUIZ#13

GSI: CHRISTOPHER EUR, DATE: 12/2/2016

STUDENT NAME: _____

Problem 1. Find $u(x,t)$ satisfying the following (where $0 \leq x \leq \pi$ and $t \geq 0$):

$$u_t = u_{xx}$$
$$u(x,0) = 4\cos\tfrac{5}{2}x - 3\cos\tfrac{9}{2}x$$
$$u(\pi, t) = 0$$
$$u_x(0,t) = 0 \text{ (note the partial)}$$