

Math 678. Fall 2011.

Homework #6.

Due Wednesday 11/30/11 in class.

Solutions should represent individual work, with all necessary details. Only facts discussed in class or given in the main textbook can be used without proof (except the facts known from calculus).

(1-2) Problem 5 (b-c), p.162 Evans

(3) Solve the 1st order IBVP using Laplace transform method:

$$\begin{cases} u_x + xu_t = 0 \\ u(x, 0) = 0 \\ u(0, t) = t \end{cases}$$