AME 538

Homework 26

Due: Friday, 15 November 2002, in class

1. Air, considered to be calorically perfect and ideal, is at rest in a tube. For $0\ m \leq x \leq 1\ m$, we have $T(x,0) = 300\ K$. For $0\ m \leq x \leq 0.5\ m$ we have $P(x,0) = 300\ kPa$. For $0.5\ m < x \leq 1\ m$, we have $P(x,0) = 100\ kPa$. Plot $P(x, t = 0.0001\ s)$, $T(x, t = 0.0001\ s)$.