

Name _____ Student number _____

Home assignment 3

Find the transverse displacement $w(x, t)$ of the string shown if the initial velocity and displacement at $t = 0$ are $\partial w / \partial t = \dot{W} \sin(\pi x / L)$ (\dot{W} is constant) and $w = 0$, respectively. Use the continuum model and assume that the string tightening S and the mass per unit length ρA are constants.

