Homework #4

due Tuesday February 26

1. Hirose & Lonngren Chapter 2 #1, and also, find the maximum transverse speed of any particle on the string.

2. Hirose & Lonngren Chapter 2 #4.

3. Hirose & Lonngren Chapter 2 #7.

4. Hirose & Lonngren Chapter 2 #8.

5. Show explicitly that the following functions satisfy the wave equation: (a) $y(x,t) = k(x+vt)^3$; (b) $y(x,t) = Ae^{ik(x-vt)}$; and (c) $y(x,t) = \ln k(x-vt)$, where A and k are constants.