Quiz 7 – PH241 **Name**_____ ☐ **Pledged**

$L = \frac{n\lambda}{2}$ $v = f\lambda$ $f = \frac{nv}{2L}$ $T = \frac{1}{f}$
for a standing wave on a string

(A) If a human being can hear up to 20000 Hz, how many overtones of a low C (f=32.2 Hz) can be heard by the human ear?

(B) Assume the length of the string is 2.4 m that produces this fundamental low C. What is the wavelength? What is the speed of the standing wave?