Q1 - Answer = c

Q2 - Problem A - Last name A-K

...ound has a velocity of 330 m/s. What is the wavelength of ...ound whose frequency is 256 Hz?

A. 0.8 $= v/f = 330/256 = 1.3$ m

B. 1.3 m

C. 2.4 m

D. 4.1 m

E. 3.1 m

Q2 - Problem B - Last Name L-Z

Light travels at 3×10^8 m/s. What is the frequency of red light with wavelength 623 nm (623×10^{-9}m)?

A. 2.0×10^{17} Hz

B. 1.5×10^{14} Hz

C. 9.6×10^{14} Hz

D. 4.8×10^{14}Hz

E. 2.1×10^{19} Hz

$f = v/\lambda = 3 \times 10^8/6.23 \times 10^{-7}$

$= 4.8 \times 10^{14}$ Hz