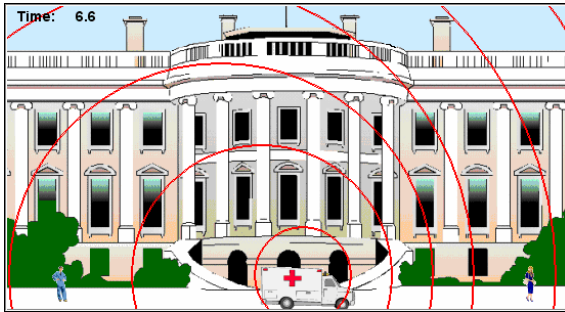# *Worksheet for Exploration 18.5: An Ambulance Drives by with its Siren On*

When the ambulance is moving (**position is given in meters and time is given in seconds**) use the animation to guide your answers to the following questions.

a. How does the wavelength of the sound wave change in relation to the woman at the right?

λ increases   decreases   same

b. How does the frequency of the sound wave change in relation to the woman at the right?

f   increases   decreases   same

c. How does the wavelength of the sound wave change in relation to the man at the left?

λ increases   decreases   same

d. How does the frequency of the sound wave change in relation to the man at the left?

f   increases   decreases   same

e. How does the wavelength of the sound wave change in relation to the patient in the ambulance?

λ increases   decreases   same

f. How does the frequency of the sound wave change in relation to the patient in the ambulance?

f   increases   decreases   same