

11. (a) The amplitude of a sinusoidal wave is the numerical coefficient of the sine (or cosine) function:
 $p_m = 1.50 \text{ Pa}$.
- (b) From the theory presented in Ch. 17, we identify $k = 0.9\pi$ and $\omega = 315\pi$ (in SI units), which leads to $f = \omega/2\pi = 158 \text{ Hz}$.
- (c) We also obtain $\lambda = 2\pi/k = 2.22 \text{ m}$.
- (d) The speed of the wave is $v = \omega/k = 350 \text{ m/s}$.