

62. (a) Using Eq. 18-39 with $v = 343$ m/s and $n = 1$, we find $f = nv/2L = 86$ Hz for the fundamental frequency in a nasal passage of length $L = 2.0$ m (subject to various assumptions about the nature of the passage as a “bent tube open at both ends”).
- (b) The sound would be perceptible as *sound* (as opposed to just a general vibration) of very low frequency.
- (c) Smaller L implies larger f by the formula cited above. Thus, the female’s sound is of higher pitch (frequency).