

98. (a) We observe that “third lowest ... frequency” corresponds to harmonic number $n = 5$ for such a system. Using Eq. 18-41, we have

$$f = \frac{nv}{4L} \implies 750 = \frac{5v}{4(0.60)}$$

so that $v = 360$ m/s.

- (b) As noted, $n = 5$; therefore, $f_1 = 750/5 = 150$ Hz.