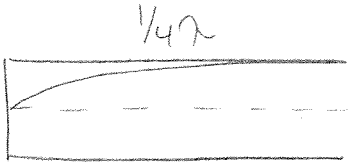
P #45

Ch 14 - pg 459

$L = 2.8\text{ cm} = .028\text{ m}$

$V = 340\text{ m/s}$



For fundamental frequency: $L = \frac{1}{4}\lambda$

$(.028\text{ m}) = \frac{1}{4}\lambda$

$\lambda = .112\text{ m}$

$V = f \cdot \lambda$

$(340\text{ m/s}) = f \cdot (.112\text{ m})$

$\boxed{f = 3036\text{ Hz}}$