

$$l = .700 \text{ m}$$

$$v = 366.24 \text{ m/s}$$

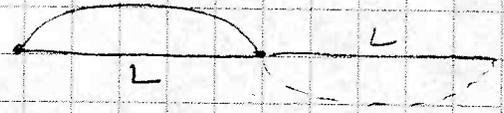
a) f_{fund} occurs when $\lambda = 2 \cdot L$

$$\lambda = 2 \cdot (.700 \text{ m}) = 1.4 \text{ m}$$

$$v = f \cdot \lambda$$

$$366.24 \text{ m/s} = f \cdot (1.4 \text{ m})$$

$$f = 262 \text{ Hz}$$



b) $f_{\text{1st overtone}}$ occurs when $\lambda = L$

$$\lambda = L = .700 \text{ m}$$

$$v = f \cdot \lambda$$

$$366.24 \text{ m/s} = f \cdot (.700 \text{ m})$$

$$f = 523 \text{ Hz}$$

