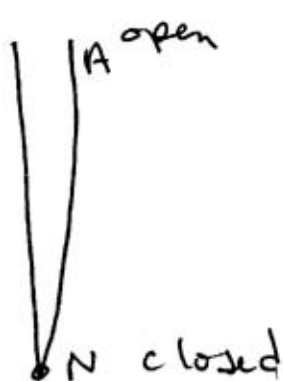


(A)

$$L = \lambda \quad L = .4 \quad f = 87$$

$$v = f\lambda = (87)(.4) = \underline{\underline{34.8 \text{ m/s}}} \quad \text{(B)}$$

(D)



$$l_{\text{pipe}} = \lambda/4$$

$$v = f\lambda$$

$$343 = (87)\lambda$$

$$\lambda = 3.94 \text{ m}$$

$$l = \underline{\underline{.986 \text{ m}}} \quad \text{(C)}$$