

Pulled from an old book by request:

18.33: a)0.357m b)0.715m

18.34: a)536 Hz b)42.9mm

18.35: a)0.656m b)1.64m

18.40: fundamental=206 Hz and fundamental = 84.5 Hz

18.44: a)multiples of 0.0858 Hz b)Nope. Harmonics are very closely spaced so resonance is likely

18.47: a) 1.59Khz Nothing this complicated on exam

18.48: L=1.16m Nothing this complicated on exam (but a nice exercise in boundary conditions!)

17.18: a) $5 \times 10^{-5}$  W b)  $3 \times 10^{-3}$  J

17.19: 66 dB

17.20:  $0.082 \text{ W/m}^2$

17.25: a)0.691 m b)691 km

17.29: a) $1.32 \times 10^{-4} \text{ W/m}^2$  b)81.2 dB

17.30: a)65dB b)67.8db c)69.6dB

17.33: a)30m b) $9.49 \times 10^5$ m

17.63