

Estimate resonance frequencies of the following two-tube system (assume no coupling between the two cavities and air as the medium).

$$A_1 = 8 \text{ cm}^2, A_2 = 1 \text{ cm}^2, l_1 = 9 \text{ cm}, l_2 = 6 \text{ cm}^2,$$

Can you guess what would happen to resonance frequencies if you closed the opening of the front tube?

