

例題2 解答

[1]

基本振動



3 倍振動



5 倍振動



$$\lambda_1 = 4L = 4 \cdot 0.17 = 0.68 \text{ m}$$

$$f_1 = \frac{V}{\lambda_1} = \frac{340}{0.68} = 5.0 \times 10^2 \text{ Hz}$$

$$\lambda_3 = \frac{4}{3}L = \frac{4}{3} \times 0.17 = 0.23 \text{ m}$$

$$f_2 = 3f_1 = 1.5 \times 10^3 \text{ Hz}$$

$$\lambda_5 = \frac{4L}{5} = \frac{4}{5} \times 0.17 = 0.14 \text{ m}$$

$$f_5 = 5f_1 = 2.5 \times 10^3 \text{ Hz}$$