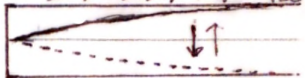


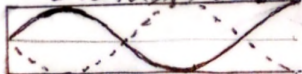
基本振動 $\lambda_1 = 4l$



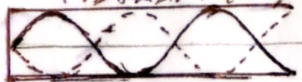
3倍振動 $\lambda_2 = \frac{4}{3}l$



5倍振動 $\lambda_3 = \frac{4}{5}l$

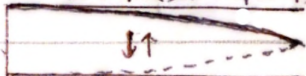


7倍振動 $\lambda_4 = \frac{4}{7}l$



空気的位置(速度)の
振動とみた場合

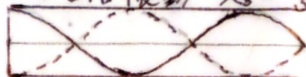
基本振動 $\lambda_1 = 4l$



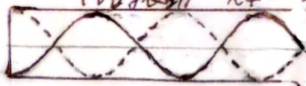
3倍振動 $\lambda_2 = \frac{4}{3}l$



5倍振動 $\lambda_3 = \frac{4}{5}l$



7倍振動 $\lambda_4 = \frac{4}{7}l$



疎密波とみた場合

四 閉管の中の気柱にできる定常波