26 A musical instrument is made using a long tube with a mouthpiece at one end. The other end is open and flared, as shown.

A musician maintains stationary sound waves with a node at the mouthpiece and an antinode at the other end. The lowest frequency of sound that the instrument can produce is 92 Hz.

Which different frequencies of sound can be produced by the instrument?

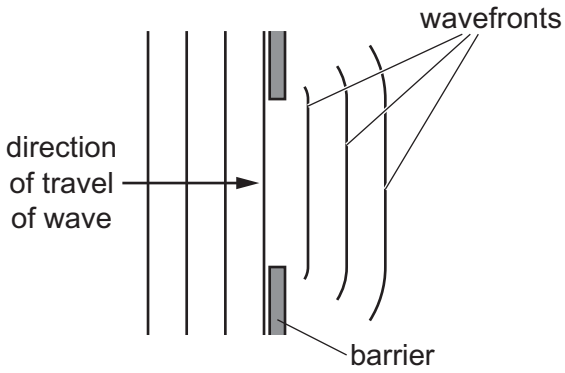
A 92 Hz, 138 Hz, 184 Hz, 230 Hz

B 92 Hz, 184 Hz, 276 Hz, 368 Hz

C 92 Hz, 276 Hz, 460 Hz, 644 Hz

D 92 Hz, 276 Hz, 828 Hz, 1288 Hz

27 A water wave passes through a gap between two barriers. The wavefronts spread out as shown.



What is the name of this phenomenon?

A coherence

B diffraction

C interference

D superposition