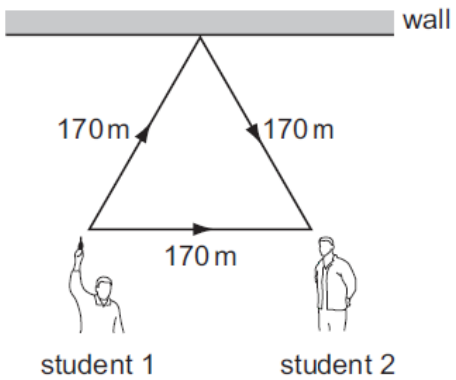
Sound – 2022 June IGCSE 0625

1. June/2022/Paper_13/No.25

Student 1 and student 2 stand 170 m apart as shown.

Student 1 fires a starting pistol. Student 2 hears the sound twice, once by the direct route and once from the reflection from the wall.



The speed of sound in air is 340 m / s.

What is the interval between hearing the two sounds?

A 0.25 s **B** 0.50 s **C** 1.0 s **D** 2.0 s

2. June/2022/Paper_21/No.22

A sound wave is created by a loudspeaker that vibrates backwards and forwards 96 000 times per minute.

The speed of sound is 320 m / s.

What is the wavelength of the sound wave?

A 0.20 m **B** 5.0 m **C** 300 m **D** 18 000 m

3. June/2022/Paper_42/No.5(a)

Sound waves are longitudinal and electromagnetic waves are transverse.

(a) A sound wave used for a medical examination has a frequency of 1.5 MHz.

(i) State and explain what type of sound wave this is.

.....

..... [2]

(ii) The wave travels through soft human tissue at a speed of 1.3 km/s.

Calculate the wavelength of the wave in soft human tissue.

wavelength = ... [3]