

Clicker Question 1

The speed of sound in He gas (lighter than air) is \_\_\_\_\_ that in air at the same conditions of pressure and temperature.

- A) faster than
- B) slower than
- C) the same as
- D) either faster or slower than

Answer - A

Clicker Question 2

The sound level in a truck is 20 dB greater than the sound level in a Starbucks cafe. If the intensity in the cafe is  $10^{-7} \text{ W/m}^2$  the intensity in the truck is \_\_\_\_\_  $\text{W/m}^2$ .

- A)  $20 \times 10^{-7}$
- B)  $10^{-9}$
- C)  $10^{-5}$
- D) 20

Answer C

Clicker Question 3

A ripple on a pond propagates on the surface in 2 dimensions. The intensity of the wave (defined as the power per unit length) will \_\_\_\_\_ as the radius  $r$  increases.

- A) decrease as  $1/r^3$
- B) decrease as  $1/r^2$
- C) decrease as  $1/r$
- D) remain the same.

Answer C