## Velocity ACT

A sound wave having frequency  $f_0$ , speed  $v_0$  and wavelength  $\lambda_0$ , is traveling through air when in encounters a large helium-filled balloon. Inside the balloon the frequency of the wave is  $f_1$ , its speed is  $v_1$ , and its wavelength is  $\lambda_1$  Compare the speed of the sound wave inside and outside the balloon

1. 
$$v_1 < v_0$$

2. 
$$v_1 = v_0$$

3. 
$$v_1 > v_0 \leftarrow$$
 correct

