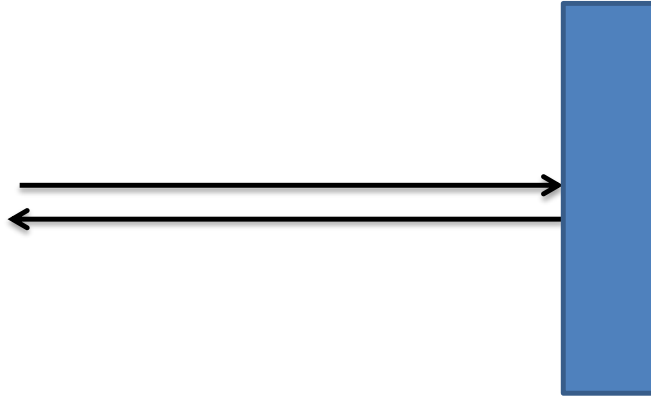


A sound wave, traveling at 355m/s, is emitted by the foghorn of a tugboat. An echo is heard 3.11 s later. How far away is the reflecting object?



A sound wave travel distance is the following:

$$2d = v * t$$

d – distance to the reflecting object

Therefore:

$$d = \frac{vt}{2} = 355 * \frac{3.11}{2} = 552.025 \text{ m}$$

Answer:  $d = 552 \text{ m}$