

Answer on question #60908, Chemistry / General Chemistry

The speed of sound at room temperature is about 343 miles per second. Calculate this speed in miles per hour 1m=1.609m 1h=60sec 1m=60 sec

Solution:

1 mile = 1609 meters;

1 hour = 3600 seconds.

For this must be multiplied by 3600 and divided by 1609.

$$v_s = 343 \text{ m/s} = 343 \frac{3600 \text{ s}}{1609 \text{ m}} = 767.43 \text{ mph (miles per hour)}$$

Answer: 767.43 mph