

Answer on Question#34755 - Math – Other

I JUST WANT TO CONVERT 10.2 m/s to km/h.

Solution.

We know that $1 \text{ km} = 1000 \text{ m}$ and $1 \text{ h} = 3600 \text{ s}$.

So, $1 \text{ m} = \frac{1}{1000} \text{ km}$ and $1 \text{ s} = \frac{1}{3600} \text{ h}$. Substitute these values in our velocity.

We obtain:

$$\begin{aligned} 10.2 \frac{\text{m}}{\text{s}} &= 10.2 * 1 \text{ m} * \frac{1}{1 \text{ s}} = 10.2 * \frac{1}{1000} \text{ km} * \frac{1}{\frac{1}{3600} \text{ h}} = 10.2 * \frac{1}{1000} \text{ km} * \frac{3600}{\text{h}} = 10.2 * \frac{3600 \text{ km}}{1000 \text{ h}} \\ &= 36.72 \frac{\text{km}}{\text{h}} \end{aligned}$$

Answer. $10.2 \text{ m/s} = 36.72 \text{ km/h}$.