

Check Homework - Worksheet

$$\textcircled{26} \quad 7.895 + 3.4 = \overset{11.295}{\underline{\underline{11.3}}}$$

$$\textcircled{31} \quad \overset{(4)}{7.895} / \overset{(2)}{34} = \overset{0.2322205\dots}{\underline{\underline{0.23}}}$$

$$\textcircled{33} \quad \overset{(1)}{0.00005} \times \overset{(3)}{538} = \overset{0.0269}{\underline{\underline{0.03}}}$$

$$\textcircled{34} \quad \overset{(4)}{6008} / \overset{(4)}{8.724} = \underline{\underline{688.7}}$$

Converting Units:

You will need to multiply by conversion factors to work in more appropriate units. Conversion factors will be referenced.

i.e. $1\text{m} = 100.\text{ cm}$

$$1\text{ hr} = 60.\text{ min}$$

$$1000\text{m} = 1\text{ km}$$

$$1\text{ min} = 60.\text{ sec}$$

$$1\text{ m/s} = 3.6\text{ km/h}$$

Example 1

d = 1.8 m , convert to cm

$$1.8 \cancel{\text{m}} \times \frac{100 \text{ cm}}{1 \cancel{\text{m}}} = 180 \text{ cm}$$

$$1 \text{ m} = 100 \text{ cm}$$

d = 1.8 m, convert to mm

Example 2:

$$1 \text{ min} = 60. \text{ s}$$

1) $t = 30.0 \text{ s}$, convert to h

$$1 \text{ hr} = 60 \text{ min}$$

$$30.0 \cancel{\text{s}} \times \frac{1 \text{ min}}{60. \cancel{\text{s}}} = 0.500 \text{ min}$$

$$0.500 \text{ min} \times \frac{1 \text{ h}}{60 \text{ min}} = \boxed{0.00833 \text{ h}}$$

Example 3

$v = 102 \text{ km/h}$, convert to m/s

$$102 \text{ km/h} \times \frac{1 \text{ m/s}}{3.6 \text{ km/h}} = \boxed{28.3 \text{ m/s}}$$

$$1 \text{ m/s} = 3.6 \text{ km/h}$$

$$\frac{3600 \cancel{\text{km}}}{1 \cancel{\text{h}}} \times \frac{1000 \text{ m}}{1 \cancel{\text{km}}} \times \frac{1 \cancel{\text{h}}}{60 \text{ min}} \times \frac{1 \text{ min}}{60 \text{ s}}$$

3.6

$$\begin{array}{r} (3) \\ 15.0 \text{ km/hr} \end{array} \times \begin{array}{r} (2) \\ 0.50 \text{ hr} \end{array} = 7.5 \text{ km}$$

$$\begin{array}{r} \text{km} \\ \hline \text{hr} \end{array} \times \begin{array}{r} \text{hr} \\ \hline \end{array} = \begin{array}{r} \text{km} \\ \hline \text{hr} \end{array} = \text{km/hr}$$

Attachments

S10 sig figs answers.notebook