

Name: Class:

Convert metric units

Convert the following

1. 10cm 8mm = _____ mm

2. 10,200 liters = _____ kiloliters _____ liters

3. 6,408 grams = _____ kilograms _____ grams

4. 17.19m = _____ meter _____ centimeters

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Convert metric units

Convert the following

1. $10\text{cm } 8\text{mm} = \underline{108} \text{ mm}$

Let's first of all convert cm to mm.

If $1\text{ cm} = 10\text{ mm}$,then $10\text{cm} = (10 \times 10)\text{ mm} = 100\text{mm}$

Now, add 100mm to 8 mm you already had

 $10\text{cm } 8\text{mm} = 100\text{mm} + 8\text{mm} = 108\text{mm}$ So, $10\text{cm } 8\text{mm} = 108\text{ mm}$.

2. $10,200\text{ liters} = \underline{10} \text{ kiloliters } \underline{1} \text{ liters}$

Let's first of all convert from liters to kiloliters

If $1\,000\text{ liters} = 1\text{ kiloliters}$

$$\text{then } 10,200\text{ liters} = \frac{10,200}{1000} = \frac{102}{10} \longrightarrow 5 \begin{array}{r} 10 \\ 51 \\ - 50 \\ \hline 1 \end{array} \quad 10\text{ R } 1$$

So, $10,200\text{ liters} = 10\text{ kiloliters } 1\text{ liter}$

3. $6,408\text{ grams} = \underline{6} \text{ kilograms } \underline{51} \text{ grams}$

Let's first of all convert from grams to kilograms

If $1000\text{ grams} = 1\text{ kilogram}$,

$$\text{then } 6408\text{ grams} = \frac{6408 \times 1}{1000} = \frac{801}{125} \longrightarrow 125 \begin{array}{r} 6 \\ 801 \\ - 750 \\ \hline 51 \end{array} \quad 6\text{ R } 51$$

So, $6408\text{ grams} = 6\text{ kilograms } 51\text{ grams}$.

4. $17.19\text{m} = \underline{0} \text{ meter } \underline{1,719} \text{ centimeters}$

Let's first of all convert from meters to centimeters

If $1\text{ meter} = 100\text{ centimeter}$,then $17.19\text{ meter} = (17.19 \times 100)\text{ cm}$ $17.19 \times 100 = 1719\text{ centimeters}$ So, $17.19\text{m} = 0\text{m } 1,719\text{ cm}$