

Name: _____

Conversion Factors

Millimeters, Centimeters, Meters, and Kilometers



A **conversion factor** is the number a value is multiplied by to convert between units of measurement. The conversion factor is the ratio between the desired unit and the current unit.

Example: Use a conversion factor to convert 300 centimeters to meters.

The ratio of meters to centimeters is 1:100, or $\frac{1}{100}$.

$$300 \text{ cm} \times \frac{1}{100} = 3 \text{ m}$$

1,000,000 millimeters = 100,000 centimeters = 1,000 meters = 1 kilometer

Use the information to give the conversion factor between units. Simplify.



Preview

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d. meters to centimeters _____ centimeters to meters _____

e. kilometers to meters _____ meters to kilometers _____

f. millimeters to kilometers _____ kilometers to millimeters _____

Complete the equation using the conversion factor found above.

g. $27 \text{ m} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}} \text{ cm}$

h. $460,000 \text{ cm} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}} \text{ k}$

i. $12,340 \text{ mm} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}} \text{ m}$

j. $8,910 \text{ m} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}} \text{ k}$

ANSWER KEY

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