Convert Between Customary and Metric Units

Just as you can convert measurements within the same system, you can convert between customary and metric units. The tables below show the relationships between some common customary and metric units of measurement. Note that most of these conversion factors are approximate.



Length

1 in. = 2.54 cm

1 ft. $\approx 0.3 \text{ m}$

 $1 \text{ cm} \approx 0.39 \text{ in.}$

 $1 \text{ m} \approx 3.28 \text{ ft.}$

Weight / Mass

 $1 \text{ oz.} \approx 28.35 \text{ q}$

1 lb. \approx 0.45 kg

 $1 \, \text{q} \approx 0.04 \, \text{oz}.$

 $1 \text{ kg} \approx 2.2 \text{ lb}.$

Capacity

1 at. ≈ 0.95 L

1 gal. ≈ 3.79 L

 $1 L \approx 1.06 \text{ qt}.$

 $1L \approx 0.26$ gal.

Convert the measurements using the relationships provided in the tables. If needed, round your answer to the nearest tenth.

4.
$$3 \text{ m} \approx 9.8 \text{ ft.}$$

5.
$$4 \text{ kg} \approx 8.8 \text{ lb.}$$

7.
$$10 \text{ cm} \approx 3.9 \text{ in.}$$

8.
$$45 g \approx 1.8$$
 oz.

9.
$$12 L \approx 12.7$$
 qt.

13.
$$3 \text{ cm} \approx 1.2 \text{ in.}$$

14. 312 kg
$$\approx$$
 686.4 lb.

15. 9 L
$$\approx$$
 9.5 qt.