

Conversions between measurement systems

English (customary) → SI (metric) conversions using the following equivalents:

- 1 inch (in) = 2.54 centimeters (cm)
- 2.2 pounds (lb) = 1 kilogram (kg)
- 1 quart (qt) = 0.95 liter (L)
- 1 mile (mi) = 1.6 kilometers (km)

Examples:

- 13 in = ? cm
 - $13 \text{ in} \times \frac{2.54 \text{ cm}}{1 \text{ in}} = 33 \text{ cm or } 3.3 \times 10^1 \text{ cm}$
- 130 lb = ? kg
 - $130 \text{ lb} \times \frac{1 \text{ kg}}{2.2 \text{ lb}} = 59 \text{ kg or } 5.9 \times 10^1 \text{ kg}$
- 4.5 qt = ? L
 - $4.5 \text{ qt} \times \frac{0.95 \text{ L}}{1 \text{ qt}} = 4.3 \text{ L}$
- 20.0 mi = ? km
 - $20.0 \text{ mi} \times \frac{1.6 \text{ km}}{1 \text{ mi}} = 32.0 \text{ km}$

SI (metric) → English (customary) conversions using the same equivalents:

- 55 kg = ? lb
 - $55 \text{ kg} \times \frac{2.2 \text{ lb}}{1 \text{ kg}} = 120 \text{ lb or } 1.2 \times 10^2 \text{ lb}$
- 47 in = ? cm
 - $27 \text{ in} \times \frac{2.54 \text{ cm}}{1 \text{ in}} = 69 \text{ cm}$
- 2.0 L = ? qt
 - $2.0 \text{ L} \times \frac{1 \text{ qt}}{0.95 \text{ L}} = 2.1 \text{ L}$
- 3.9 km = ? mi
 - $3.9 \text{ km} \times \frac{1 \text{ mi}}{1.6 \text{ km}} = 2.4 \text{ mi}$