

American & Metric Conversions

- *These calculations are for converting between the American measurement system and the Metric measurement system.*

Length – You must first change your American measurement into inches, yards, or miles; or your Metric measurement to centimeters, meters, or kilometers.

- To change from *inches* to *centimeters*, multiply by:..... 25.4
- To change from *centimeters* to *inches*, multiply by:..... 0.3937
- To change from *yards* to *meters*, multiply by:..... 0.9144
- To change from *meters* to *yards*, multiply by:..... 1.094
- To change from *miles* to *kilometers*, multiply by:..... 1.609
- To change from *kilometers* to *miles*, multiply by:..... 0.6214

Example: Change 5 miles to kilometers - $5 \cdot 1.609 = 8.045$ kilometers

Capacity – You must first change your American measurement into quarts, gallons, or cups; or your Metric measurement to liters.

- To change from *quarts* to *liters*, multiply by:..... 0.9464
- To change from *liters* to *quarts*, multiply by:..... 1.0567
- To change from *gallons* to *liters*, multiply by:..... 3.7854
- To change from *liters* to *gallons*, multiply by:..... .26417
- To change from *cups* to *liters*, multiply by:..... 0.2366
- To change from *liters* to *cups*, multiply by:..... 4.2268

Example: Change 8 liters to gallons – $8 \cdot .26417 = 2.11336$ gallons

Mass – You must first change your American measurement into pounds or ounces; or your Metric measurement to kilograms or grams.

- To change from *pounds* to *kilograms*, multiply by:..... 0.4536
- To change from *kilograms* to *pounds*, multiply by:..... 2.205
- To change from *ounces* to *grams*, multiply by:..... 28.349
- To change from *grams* to *ounces*, multiply by:..... 0.0353

Example: Change 25 kilograms to pounds – $25 \cdot 2.205 = 55.125$ pounds