

Geometry, Measurement and Finance 10 – Conversions & Formulas

SI Length

1 cm = 10 mm
1 m. = 100 cm
1 km = 1000 m



2.54 cm = 1 in
1 m = 3.2808 ft
1 m = 1.0936 yd
1.6093 km = 1 mi

Imperial Length

1 ft. = 12 in.
1 yd = 3 ft.
1 mi. = 1760 yd

SI (metric)...

1 g = 1000 mg
1 kg = 1000 g
1 t = 1000 kg

Imperial...

28.4 g = 1 oz
1 kg = 2.2 lbs
1 t = 1.1 tn

Imperial...

1 lb = 16 oz
1 tn = 2000 lb

(Tonne)

$$1 \text{ m}^3 = 1000 \text{ L}$$

$$1 \text{ m} = 3.2808 \text{ ft}$$

SI Capacity: 1 L = 100 mL

1 kL = 1000 L

SI Volume: 1 cm³ = 1 mL

1000 cm³ = 1 L

1 m³ = 1000 L

TEMPERATURE CONVERSIONS...

$$C = \frac{5}{9}(F - 32)$$

$$F = \frac{9}{5}C + 32$$

CONVERTING COMMON COOKING UNITS

Imperial	SI
¼ teaspoon	1.25 mL
½ teaspoon	2.5 mL
1 teaspoon	5 mL
1 tablespoon (3 teaspoons)	15 mL
1 cup	250 mL
1 pint	568.2614 mL
1 quart (2 pt)	1.1365 L
1 gallon (4 qt)	4.5461 L

B
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CONVERTING US IMPERIAL TO SI UNITS

US Imperial	SI
1 fl oz	29.5735 mL
1 pt = 16 fl oz	473.176 mL or 0.473 L
1 qt = 2 pt	946.352 mL or 0.946 L
1 gal = 4 qt	3785.4 mL or 3.785 L

Pythagorean Theorem...

$$c^2 = a^2 + b^2$$

SURFACE AREA FORMULAS...

$$SA_{\text{prism}} = 2 \times A_{\text{base}} + \text{Area of the rectangular lateral faces}$$

$$SA_{\text{pyramid}} = A_{\text{base}} + \text{Area of the triangular lateral faces}$$

$$SA_{\text{cylinder}} = 2\pi r^2 + 2\pi r h$$

$$SA_{\text{cone}} = \pi r^2 + \pi r s$$

$$SA_{\text{sphere}} = 4\pi r^2$$

VOLUME FORMULAS...

$$V_{\text{prism}} = A_{\text{base}} \times \text{height}$$

$$V_{\text{pyramid}} = \frac{A_{\text{base}} \times \text{height}}{3}$$

$$V_{\text{cylinder}} = \pi r^2 h$$

$$V_{\text{cone}} = \frac{\pi r^2 h}{3}$$

$$V_{\text{sphere}} = \frac{4}{3} \pi r^3$$