Geometry, Measurement and Finance 10 – Conversions & Formulas

IMPORTANT CONVERSIONS...

SI Length ⟷ **Imperial Length**

SI Length		Imperial Length
1 cm = 10 mm	1 m = 1.0936 yd	1 ft. = 12 in.
1 m. = 100 cm	1 mi. = 1.6093 km	1 yd = 3 ft.
1 km = 1000 m	1 in. = 2.54 cm	1 mi. = 1760 yd

SI Capacity: 1 L = 1000 mL, 1 kL = 1000 L
SI Volume: 1 cm^3 = 1 mL

SI (metric)...
1 g = 1000 mg
1 kg = 1000 g
1 t = 1000 kg

1 kg = 2.2 lbs

Imperial...
1 lb = 16 oz
1 tn = 2000 lb

1 oz = 28.4 g

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

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

SURFACE AREA FORMULAS...

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

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

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

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

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

Pythagorean Theorem...

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

VOLUME FORMULAS...

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

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

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

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

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