Formulas

Item	Hint	Example
Perimeter		
Of an item with straight sides	• Add the lengths of all of the sides.	6 ft 3 ft $6 + 3 + 6 + 3 = 18$ The perimeter is 18 ft.
Of a circle (The perimeter of a circle is also called the circumference.)	• Multiply the diameter by 3.14.	The diameter is 4 m. $4 \times 3.14 = 12.56$ The circumference is approximately 12.6 m. 4 m
Area		
Of a rectangle or square	• Multiply the length by the width. • The answer will be in square units. The answer here is 49 square metres or 49 m².	length = 7 m width = 7 m $7 \times 7 = 49$ The area is 49 m². 7 m
Of a triangle	• Multiply the base by the height. • Divide the answer by 2. • Show the answer in square units.	base = 1.80 m height = 4 m $1.80 \times 4 = 7.2$ $7.2 \div 2 = 3.6$ The area is 3.6 m². 4 m 1.80 m
Of a circle	• Square the radius. • Multiply by 3.14. • Show the answer in square units.	The diameter is 3 m. The radius is half the diameter, or 1.5 m. $1.5 \times 1.5 = 2.25$ $2.25 \times 3.14 = 7.065$ m The area is approximately 7.1 m². 3 m
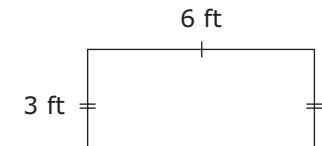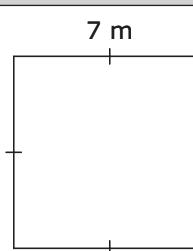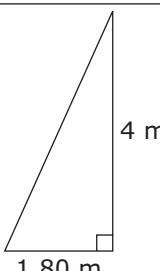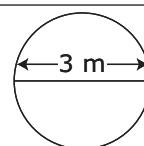
Conversion Tables

Metric Length

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

Metric	Imperial
1 mm	0.0393 in.
1 cm	0.393 in.
1 m	3.28 ft
1 km	0.621 mi $\frac{5}{8}$ mi

Imperial Length

inch → foot → yard → mile
12 in. = 1 ft   3 ft = 1 yd
36 in. = 1 yd   5280 ft = 1 mi
                          1760 yd = 1 mi

Imperial	Metric
1 in.	25.4 mm
1 in.	2.54 cm
1 ft	30.48 cm 0.305 m
1 mi	1.609 km $\frac{8}{5}$ km

Metric Capacity

mL → L
    1 mL = 1 cc
1000 mL = 1 L

Metric	Imperial
1 mL	0.034 oz
1 L	33.81 oz
1 L	4.23 cups
1 L	2.11 pints
1 L	1.07 quarts
1 L	0.26 gallon

Imperial Capacity (United States)

ounce → cup → pint → quart → gallon
  8 oz = 1 cup   2 cups = 1 pint
32 oz = 1 quart   2 pints = 1 quart
4 quarts = 1 gallon

Imperial	Metric
1 oz	29.57 mL
1 cup	236.56 mL
1 pint	473.12 mL
1 quart	0.95 L
1 gallon	3.79 L

Metric Weight

mg → g → kg → tonne
1000 mg = 1 g
    100 g = 1 kg
  1000 kg = 1 tonne (or 1 metric ton)

Metric	Imperial
1 g	0.0353 oz
1 kg	2.2046 lb

Imperial Weight (United States)

ounce → pound → ton
   16 oz = 1 lb
2000 lb = 1 T

Metric	Imperial
1 oz	28.35 g
1 lb	0.4536 kg

Note that 1 metric ton does not equal 1 Imperial ton!