Mathematics

Measurements: Length, Mass, Capacity & Time

Length

Metric	Imperial	Mixed
1 cm = 10 mm	1 ft. = 12 inches	1 inch = 2.54 cm
1 m = 100 cm = 1000 mm	1 yd. = 3 ft.	1 ft. = 30 cm
1 km = 1000 m	1 furlong = 220 yds.	1 mi. = 1.6 km
1 mi. = 8 furlongs (5280 ft.)		

Mass

Metric	Imperial	Mixed
1 g = 1000 mg	1 lbs. = 16 oz.	1 oz. = 25 g
1 kg = 1000 g	1 cwt. = 100 lbs.	1 kg = 2.2 lbs.
1 t = 1000 kg	1 t = 200 cwt. (2240 lbs.)	

Capacity

Metric	Imperial	Mixed
1 ml = 1 cm^3	1 cup = 8 fl. oz.	1 fl. oz. = 28.4 ml or cm^3
1 l = 1000 ml (or cm^3)	1 pint = 2 cups or 16 fl. oz.	1 cup = 250 ml
I m^3 = 1000 l	1 quart = 2 pints	1 gal. = 4.55 l
1 gal. = 4 quarts		

Instructions: Convert into the units provided in brackets. Use the tables provided above. If any decimals, ***round to two (2) decimal places***.

1.) (a) 16.5 m =   *cm*   (b)   1.3 quarts =   *fl. oz.*

2.) (a) 2 t =   *mg*   (b)   6.8 m³ =   *cm³*

3.) (a) 3.4 furlong =   *ft.*   (b)   20.6 cwt. =   *oz.*

4.) (a) 35.4 ml =   *l*   (b)   2.25 cups =   *gal.*

5.) (a) 12 460 ft. =   *mi.*   (b)   13,500 g =   *kg*

6.) (a) 4.3 oz. =   *g*   (b)   3.75 cups =   *ml*

7.) (a) 6 lbs. =   *kg*   (b)   10 800 cm³ =   *cups*

8.) A tree cutter made 26 planks from a cedar tree. If each wooden plank was of length 30 ft, what is the total length of planks, in yards, was made from the tree?   *yds.*

9.) Mom made a drink for four (4) dozen adult family members that amounted to 5.6 gallons at a gathering. How much drink would each person receive in litres?   *l*

How much fluid ounces of drink did she make?   *oz.*

10.) 200 cyclists gathered for a 27 km marathon road race. How much miles would they cover?

mi.

A cyclist punctured both his tyres at once 11.5 miles in the race. How much metres remaining in the race for him?   *m.*

11.) A weightlifter was training using 1.3 hundredweight (cwt.). He added 2.1 cwt, but found it to be too heavy. He took off 1 ½ cwt. How much pounds remain for him to train with?   *lbs.*

12.) How many seconds are there in a fortnight?   *s.*