

MEASUREMENT ASSIGNMENT-
USE YOUR CONVERSION CHART TO COMPLETE THE FOLLOWING

Part 1- Measurement

1) Use the table below to convert the following measures into the desired units then fill in the blanks.

A) 6 feet = _____ inches

6×12

B) 5 yards = _____ inches

$5 \times 3 = 15 \text{ ft}$

$15 \times 12 =$

C) 12 miles = _____ kilometers

12×1.6

D) 34 inches = _____ cm

34×2.54

E) 25 °C = _____ °F

$(25 \times \frac{9}{5}) + 32$

F) 4 gallons = _____ pints

$4 \times 4 = 16$

$16 \times 2 = 32$

G) 38 litres = _____ gallons

38×0.22

H) 5000 mm = _____ meters

5

1 gal = 4 quart
 1 quart = 2 p.

2) Mary's personal trainer recommended she drink 3 quarts of water per day. Mary bought a case of 250ml bottles of water. How many bottles should she drink each day to equal 2 quarts?

$2 \text{ quarts} = 4 \text{ pints} = 2.27 \text{ litres} = 2273 \text{ ml} \div 250 = 9 \text{ bottles}$

1 pint = 0.568

3) If you bought a 24 foot ladder, how many meters would it be?

$24 \times 0.3048 \text{ m} = 7.3 \text{ m}$

4) How many square feet is a house that measures 42 squared meters?

$1 \text{ ft} = 0.3048 \text{ m}$
 $1 \text{ ft}^2 = 0.1161 \text{ m}^2$

5) Joe is 1.75 meters tall, How tall is Joe in feet?

6) Sally has a full 2 gallon jug of Windex. How many 1 pint bottles can she fill?

7) How many pounds are in 88 ounces?.

8) Eric is 5' 7" tall. How many inches tall is Eric?

9) How many pounds are in 2.5 kilograms?

10) Water boils at 100 °C. What temperature would this be in Fahrenheit?.

11) If the temperature is 74 °F. What temperature would this be in Celsius?

$1 \text{ gallon} = 4 \text{ quarts}$
 $0.25 \text{ gallon} = 1 \text{ quart}$

Measurement Assignment

1) A) 1 ft = 12 inches
6 = x

$$\frac{1}{6} = \frac{12}{x}$$

$$x = \underline{72 \text{ inches}}$$

B) 1 yard = 3 feet
5 yd = x

$$\frac{1}{5} = \frac{3}{x}$$

$$x = \underline{15 \text{ ft}}$$

1 ft = 12 inches
15 = x

$$\frac{1}{15} = \frac{12}{x}$$

$$x = (12)(15) = \underline{180 \text{ inches}}$$

C) 1 mile = 1.6 km
12 = x

$$\frac{1}{12} = \frac{1.6}{x}$$

$$x = (12)(1.6) = \underline{19.6 \text{ km}}$$

D) 1 inch = 2.54 cm
34 = x

$$\frac{1}{34} = \frac{2.54}{x}$$

$$x = (34)(2.54) = \underline{86.4 \text{ cm}}$$

E) $25^{\circ}\text{C} \rightarrow C \times 2 + 30 = F \text{ temp}$
 $25 \times 2 + 30 = \underline{80^{\circ}\text{F}}$

F) 1 gallon = 4 quarts
4 gallons = 16 quarts

1 quart = 2 pints
16 quarts = 32 pints

G) 1 gallon = 3.79 L
x = 38 L

$$\frac{1}{x} = \frac{3.79}{38}$$

$$38 = 3.79x$$

$$\frac{38}{3.79} = x$$

$$x = \underline{10 \text{ gallons}}$$

H) 1 cm = 10 mm
500 cm = 5000 mm

1 m = 100 cm
5 m = 500 cm

2) 4 quarts = 3.79 L
2 quarts = x

$$\frac{4}{2} = \frac{3.79}{x}$$

$$4x = (2)(3.79)$$

$$x = \underline{1.89 \text{ L}}$$

$$\frac{1.89 \text{ L}}{250 \text{ mL}} = \frac{1892 \text{ mL}}{250 \text{ mL}} = 7.5 \text{ bottles}$$

$$3) \quad 1 \text{ yard} = 3 \text{ feet} \quad 1 \text{ yd} = 0.9144 \text{ m}$$

$$x = 24 \text{ feet} \quad 8 \text{ yd} = x$$

$$\frac{1}{x} = \frac{3}{24}$$

$$\frac{1}{8} = \frac{0.9144}{x}$$

$$x = 8 \text{ yards}$$

$$x = 8 \times 0.9144 = 7.3 \text{ m}$$

$$4) \quad 1 \text{ yd} = 0.9144 \text{ m}$$

$$x = 42 \text{ m}$$

~~$$1 \text{ yard} = 3 \text{ feet}$$~~
~~$$= x$$~~

~~$$\frac{1}{x} = \frac{0.9144}{42}$$~~
~~$$\frac{42}{0.9144} = \frac{0.9144 x}{0.9144}$$~~
~~$$x =$$~~

Easier

$$1 \text{ yard} = 3 \text{ feet}$$

$$1 \text{ yard} = 0.9144 \text{ m}$$

$$3 \text{ feet} = 0.9144 \text{ m}$$

$$x = 42 \text{ m}$$

$$6.48 \text{ m} = 21.26 \text{ ft}$$

$$42 \text{ m} = 138 \text{ ft}$$

$$\frac{3}{x} = \frac{0.9144}{42}$$

$$(42 \text{ m})^2 = (138 \text{ ft})^2$$

~~$$\frac{(3)(42)}{0.9144} = \frac{0.9144 x}{0.9144}$$~~

$$42 \text{ m}^2 = (6.48 \text{ m})(6.48 \text{ m})$$

~~$$138 \text{ ft} = x$$~~

$$42 \text{ m}^2 = (21.25 \text{ ft})(21.25 \text{ ft})$$

~~$$(137.79 \text{ ft} = 42 \text{ m})$$~~

$$42 \text{ m}^2 = 452 \text{ ft}^2$$

$$5) \quad 3 \text{ feet} = 0.9144 \text{ m}$$

$$x = 1.75$$

$$\frac{3}{x} = \frac{0.9144}{1.75}$$

$$\frac{(3)(1.75)}{0.9144} = \frac{0.9144 x}{0.9144}$$

$$x = 5.74 \text{ m}$$

$$6) \quad \text{If } 1 \text{ gallon} = 4 \text{ quarts}$$

$$\text{then } 0.25 \text{ gallon} = 1 \text{ quart}$$

$$\text{and } 1 \text{ quart} = 2 \text{ pints}$$

$$\therefore 0.25 \text{ gallon} = 2 \text{ pints}$$

$$2 \text{ gallon} = x$$

$$\frac{0.25}{2} = \frac{2}{x}$$

$$\frac{0.25 x}{0.25} = \frac{4}{0.25}$$

$$x = 16 \text{ pints}$$

$$7) \quad 1 \text{ lb} = 16 \text{ oz}$$

$$x = 88$$

$$\frac{1}{x} = \frac{16}{88} \Rightarrow 88 = 16x \Rightarrow x = \frac{88}{16} = 5.5 \text{ lb}$$

8)

$$1 \text{ ft} = 12 \text{ inches}$$

$$1' = 12''$$

$$5' = x$$

$$\frac{1}{5} = \frac{12}{x}$$

$$x = (12)(5) = 60$$

$$5 \text{ feet} = 60 \text{ inches}$$

$$5' = 60''$$

$$\text{So } 5'7''$$

$$\text{Equals } 60'' + 7''$$

$$67 \text{ inches}$$

$$\underline{5'7'' = 67''}$$

9)

$$1 \text{ kg} = 2.2 \text{ lbs}$$

~~2.5~~

$$2.5 \text{ kg} = x$$

$$\frac{1}{2.5} = \frac{2.2}{x}$$

$$x = (2.2)(2.5) = \underline{\hspace{2cm}}$$

10)

$$C \times 2 + 30 = F^\circ \text{ temp}$$

$$(100)(2) + 30 = F^\circ \text{ temp}$$

$$\underline{230^\circ \text{ F}}$$

11)

$$(F - 30) \div 2 = C \text{ temp}$$

$$(74 - 30) \div 2 = C \text{ temp}$$

$$44 \div 2 = 22^\circ \text{ C}$$

