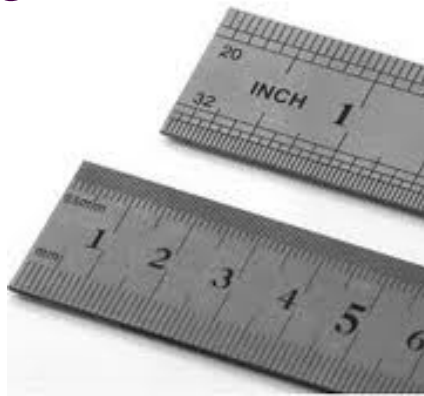


Converting Measurements



SI \longleftrightarrow IMPERIAL

Please Add the following:

IMPORTANT CONVERSIONS...

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
1m = 3.2808ft		
SI Capacity: 1 L = 1000 mL 1 kL = 1000 L SI Volume: 1 cm ³ = 1 mL		

SI (metric)...		Imperial...
1 g = 1000 mg	1 kg = 2.2 lbs	1 lb = 16 oz
1 kg = 1000 g		1 tn = 2000 lb
1 t = 1000 kg		

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

Determine the following:

a) $15 \text{ m} = \underline{\hspace{2cm}} \text{ yd}$

b) $29 \text{ mi} = \underline{\hspace{2cm}} \text{ km}$

c) $49 \text{ ft} = \underline{\hspace{2cm}} \text{ m}$



You may use
ratios
or the
conversion factor.

a) 15 m = _____ yd



Conversion Factor want
have

yd
m

1.0936

$$15 \times \frac{1.0936}{1}$$

16.404 yd

b) 29 mi = _____ km



Conversion Factor want
have
km
mi

$$29 \times \frac{1.6093}{1} \frac{1.6093}{1}$$

46.6697

46.67 km

c) 49 ft = _____ m



Conversion Factor

want
have

m
ft
1

3.2808

$$49 \times \frac{1}{3.2808}$$

$$\frac{49}{3.2808}$$

$$14.94 \text{ m}$$

Giselle would like to replace the carpet in her living room. She used her imperial tape measure to measure the room, and the dimensions were 12 ft by 15 ft. When she went to the carpet store, she found the price of the carpet was \$24.99/m² (taxes included). She cannot order less than a full square metre of carpet.

a) What is the total amount of carpeting needed?

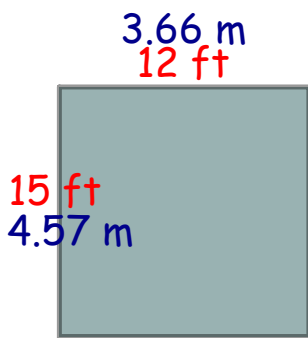


Hint:

Convert the ft to m pronto!!

b) How much will it cost?

Giselle would like to replace the carpet in her living room. She used her imperial tape measure to measure the room, and the dimensions were 12 ft by 15 ft. When she went to the carpet store, she found the price of the carpet was \$24.99/m² (taxes included). She cannot order less than a full square metre of carpet.



a) What is the total amount of carpeting needed?

Hint:
Convert the ft to m pronto!!

$$12 \times \frac{1}{3.2808} = 3.66 \text{ m}$$

$$15 \times \frac{1}{3.2808} = 4.57 \text{ m}$$

$$A = L \times W$$

$$A = 3.66 \times 4.57$$

$$A = 16.73 \text{ m}^2$$

$$17 \text{ m}^2$$

b) How much will it cost?

$$17 \times \$24.99$$

$$\$424.83$$

Check out page 159.

