

STRAIGHT LINE

INSULATION I, LP

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Insulation - Steam Tracing - Scaffold - Sewn Blankets

MEASUREMENT CONVERSIONS

1. To find circumference of circle -- multiply diameter by 3.1416
2. To find diameter of a circle -- multiply circumference by .31831
3. To find area of a circle -- multiply square of diameter by .7854
4. Area of a rectangle equals length multiplied by breadth
5. Doubling the diameter of a circle increases its area four times
6. To find area of a triangle -- multiply base by 1/2 perpendicular height
7. Area of ellipse equals product of both diameters times .7854
8. Area of a parallelogram equals base times altitude
9. To find side of an inscribed square, multiply diameter by 0.7071 or multiply circumference by 0.2251 or divide circumference by 4.4428
10. Side of an inscribed cube equals radius of sphere times 1.1547
11. To find side of an equal square, multiply diameter by .8862
12. Square. A side multiplied by 1.4142 equals diameter of its circumscribing circle
13. A side multiplied by 4.443 equals the circumference of its circumscribing circle
14. A side multiplied by 1.128 equals diameter of an equal circle
15. A side multiplied by 3.547 equals circumference of an equal circle
16. To find cubic inches in a ball, multiply cube of diameter by .5236
17. To find cubic contents of a cone, multiply area of base by 1/3 the altitude
18. Surface of frustrum of cone or pyramid equals sum of circumference of both ends times 1/2 slant height plus area of both ends
19. Contents of frustrum on cone or pyramid equals multiply area of two ends and get square root. Add the two areas and times 1/3 altitude
20. Doubling the diameter of a pipe increases its capacity four times
21. A gallon of water (U.S. Standard) weighs 8 1/3 lbs. and contains 231 cubic inches
22. A cubic foot of water contains 7 1/2 gallons, 1728 cubic inches, and weighs 62 1/2 lbs
23. To find the pressure in pounds per square inch of a column of water, multiply the height of the column in feet by .434
24. Steam rising from water at its boiling point (212 degrees F.) has a pressure equal to the atmosphere (14.7 lbs to the square inch)

Metric & English Units Metric Units

Milla = 1/1000
Centi = 1/100
Kilo = 1,000
Mega = 1,000,000
Used with meters, liters, grams, etc.

English Units

12 inches = 1 foot
3 feet = 1 yard
5,280 feet = 1 mile
144 square inches = 1 square foot
9 square feet = 1 square yard
1728 cubic inches = 1 cubic foot
27 cubic feet = 1 cubic yard
8 fluid oz. = 1 cup
2 cups = 1 pint
2 pints = 1 quart
4 quarts = 1 gal.
1 gal. = 231 cubic inches
1 cubic yard = 202 gals.
7.48 gals. = 1 cubic foot

Linear Conversion

Approximate Conversions to Metric Measures from English Units

When You Know

Multiply By

To Find

inches	25.4	millimeters
inches	2.54	centimeters
feet	30.5	centimeters
yards	0.91	meters
miles	1.61	kilometers

Approximate Conversations to English Units from Metric Units

When You Know	Multiply By	To Find
millimeters	0.039	inches
centimeters	0.39	inches
meters	3.28	feet
meters	1.09	yards
kilometers	0.62	miles

Area Conversions

Approximate Conversions to Metric Measures from English Units

When You Know	Multiply By	To Find
sq. inches	6.452	sq. centimeters
sq. feet	0.092	sq. meters
sq. yards	0.836	sq. meters
sq. miles	2.59	sq. kilometers

Approximate Conversations to English Units from Metric Units

When You Know	Multiply By	To Find
sq. centimeters	0.155	sq. inches
sq. meters	1.196	sq. yards
sq. kilometers	0.386	sq. miles

Volume Conversions

Approximate Conversions to Metric Measures from English Units

When You Know	Multiply By	To Find
cubic inches	16.0	millilitres
fluid ounces	29.6	millilitres
cups	0.24	liters
pints	0.473	liters
quarts	0.946	litres
gallons	3.791	liters
cubic feet	0.028	cubic meters
cubic yards	0.76	cubic meters
cubic feet	28.3	litres
cubic yards	764.5	litres

Approximate Conversations to English Units from Metric Units

When You Know	Multiply By	To Find
millilitres	0.06	cubic inches
millilitres	0.03	fluid ounces
litres	0.036	cubic feet
litres	2.1	pints
litres	1.06	quarts
litres	0.26	gallons
cubic meters	35.3	cubic feet
cubic meters	1.31	cubic yards

Weight Conversions

Approximate Conversions to Metric Measures from English Units

When You Know	Multiply By	To Find
ounces	28.3	grams
pounds	0.45	kilograms
short tons	0.91	metric ton

Approximate Conversions to English Units from Metric Units

When You Know	Multiply By	To Find
grams	0.035	ounces
kilograms	2.2	pounds
metric ton	1.1	short tons

Fahrenheit/Centigrade Conversion Table

Temperature			
Formula: Degree C = $\frac{\text{Degree F} - 32}{1.8}$		Formula: Degree F = $1.8 \times \text{Degree C} + 32$	
Fahrenheit	Centigrade	Fahrenheit	Centigrade
0	-17.8	110	43.3
5	-15	115	46.1
10	-12.2	120	48.9
15	-9.4	125	51.7
20	-6.7	130	54.4
25	-3.9	135	57.2
30	-1.1	140	60.0
32	0	145	62.8
35	1.7	150	65.6
40	4.4	155	68.3
45	7.2	160	71.1
50	10.0	165	73.9
55	12.8	170	76.7
60	15.6	175	79.4
65	18.3	180	82.2
70	21.1	185	85.0
75	23.9	190	87.8
80	26.7	195	90.6
85	29.4	200	93.3
90	32.2	205	96.1
95	35.0	210	98.9
100	37.8	212	100.0

Areas and Volumes (Formulas)

CIRCLE

Area = Square of Radius x 3.1416 or Square of Diameter x 0.7854

Circumference = Diameter x 3.1416

Diameter = Circumference x .3183

SQUARE

Area = Square of side

Diagonal = Side x 1.4142

Side = Diagonal x 0.7071

RECTANGLE

Area = Length x Width

Diagonal = Square root of sum of squares of Width and Length

TRIANGLE

Area = Base x 1/2 of Perpendicular Height

Area of Surface = Square of Side x 6

Volume = Cube of Side

Diagonal = Side x 1.732

CYLINDER

Area of Curved Surface = Diameter x Length x 3.1416

Volume = Square of (Diameter x Length) x 0.7854