

Sheet1

Trigonometric	Hyperbolic	Area	Temperatures	Trigonometric
-----	-----	-----	-----	-----
sin(x)	SINH(X)	Circle	C to Fahrenh.	@SIN(C4)
COS(X)	COSH(X)	-----	C to Kelvine	@COS(C4)
TAN(X)	TANH(X)	Volume	C to Rankine	@TAN(C4)
ASIN(X)	CTANH(X)	-----	C to Reaumur	@ASIN(C4)
ACOS(X)	SECH(X)	Cube	F to Centi.	@ACOS(OUT)
ATAN(X)	CSCH(X)	Sphere	F to Kelvine	@ATAN(OUT)
SEC(X)	ASINH(X)	-----	F to Rankine	1/@COS(C4)
CSC(X)	ATANH(X)	Perimeter	F to Reaumur	1/SIN(OUT)
COT(X)	ACTANH(X)	-----	K to Centi.	1/@TAN(OUT)
ASEC(X)	ASECH(X)	Circle	K to Fahrenh.	@ACOS(1/OUT)
ACSC(X)	ACSCH(X)		K to Rankine	@ASIN(1/OUT)
ACOT(X)			K to Reaumur	@PI/2-@ATAN(OUT)
			Ra. to Centi.	
			Ra. to Fahre.	
			Ra. to Kelvin	
			Ra. to Reaumu	
			Re. to Centi.	
			Re. to Fahre.	
			Re. to Kelvin	
			Re. to Rankin	

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Hyperbolic	Area	Temperatures
0.5*(@EXP(C4)-@EXP(C4))	@PI*T^2	+1.8*OUT+32
0.5*(@EXP(C4)+@EXP(-C4))	-----	+OUT+273.15
(@EXP(OUT)-@EXP(-OUT))/(@EXP(OUT)+@EXP(-OUT))	Volume	+1.8*OUT+491.67
(@EXP(OUT)+@EXP(-OUT))/(@EXP(OUT)-@EXP(-OUT))	-----	+0.8*OUT
2/(@EXP(OUT)+@EXP(-OUT))	+out^3	+5*(OUT-32)/9
2/(@EXP(OUT)-@EXP(-OUT))	+4*@pi*out^3/3	+5*(OUT-32)/9+273.15
@LN(OUT+@SQRT(OUT^2+1))	-----	+OUT+459.67
0.5*@LN((1+OUT)/(1-OUT))	Perimeter	+0.8*(5*(OUT-32)/9)
0.5*@LN((OUT+1)/(OUT-1))	-----	+OUT-273.15
@LN(1/OUT+@SQRT(1/(OUT^2)-1))	@pi*OUT*2	+1.8*OUT-459.67
@LN(1/OUT+@SQRT(1/(OUT^2)+1))		+1.8*OUT
+RG1^RG2		+0.8*OUT-218.52
		+5*OUT/9-273.15
		+OUT-459.67
		+5*OUT/9
		+4*OUT/9-218.52
		+1.25*OUT
		+2.25*OUT+32
		+1.25*OUT+273.15
		+2.25*OUT+491.67

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Trigonometric

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This function calculates the sine function  
fnssss

Hyperbolic

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Area

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Circle area where the radius=out

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Volume

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Perimeter

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Temperatures	Length units	Area units	Volume units	Mass
Centigrade to Fahrenheit	Angstrom	meter^2	Bushel (US)	Cental (UK)
Centigrade to Kelvine	Centimeter	millimeter^2	Bushel (UK)	Dram,av.
Centigrade to Rankine	Decameter	centimeter^2	centimeter^3	Grain
Centigrade to Reaumur	Decimeter	decimeter^2	decimeter^3	Gram
Fahrenheit to Centigrade	Dis. of siriu	decameter^2	Dry pint	Hund.weight.s
Fahrenheit to Kelvin	Foot	hectometer^2	Dry quart	Hund.weight
Fahrenheit to Rankine	Inch	kilometer^2	Fluid dr (US)	Hund.weight.l
Fahrenheit to Reaumur	Hectometer	Circular inch	Fluid dr (UK)	Kilogram
Kelvin to Centigrade	Light year	inch^2	Fluid oz (US)	Metric ton
Kelvin to Fahrenheit	Kilometer	yard^2	Fluid oz (UK)	Microgram
Kelvin to Rankine	Knot(UK)	Foot^2	Foot^3 (US)	Miligram
Kelvin to Reaumur	Knot(INTL.)	Acre	Foot^3 (UK)	Ounce,av.
Rankine to Centigrade	Meter	Mile^2	Gallon (US)	Pound,av.
Rankine to Fahrenheit	Micrometer	-----	Gallon (UK)	Ton (UK)
Rankine to Kelvin	Mile(US)	Acceleration	Gill (US)	Ton long (US)
Rankine to Reaumur	Mile(UK)	-----	Gill (UK)	Ton short(US)
Reaumur to Centigrade	Milimeter	cm/sec^2	inch^3 (US)	-----
Reaumur to Fahrenheit	Nanometer	Foot/sec^2	inch^3 (UK)	Troy weight
Reaumur to Kelvin	Parsec	Galilei	Liter	-----
Reaumur to Rankine	Siriometer	km/hour/sec	Liquid pt(US)	Carat
	X-unit	Meter/sec^2	Liquid qt(US)	Dram,ap (US)
	Yard(US)	Mile/hour/sec	meter^3	Drachm,ap(UK)
	Yard(UK)	-----	Micrometer^3	Grain
	-----	Angular accel	milimeter^3	Gram
	Pressure	-----	Minim (US)	Ounce,troy
	-----	Degree/sec^2	Minim (UK)	Pennyweight
	Atm. (tech.)	Grade/sec^2	Peck (US)	Pound,troy
	Atm.(physic.)	Radian/sec^2	Peck (UK)	Pound,av
	Bar	rev/min/sec	Pint (UK)	Scruple,ap
	Foot-water	rev/min^2	Quart (UK)	-----
	gr-force/cm^2	-----	yard^3 (US)	Force
	Inch-water	Energy	yard^3 (UK)	-----
	Inch-mercury	-----	-----	Dyne
	Lb-force/ft^2	BTU	Power	Grain-force
	Lb-force/in^2	Calorie	-----	Gram-force
	kg-force/m^2	Centimeter^-1	BTU/sec	kg-force
	Milibar	Degree Kelvin	Calorie/sec	Kilopond
	mm of water	Electron-volt	Erg/sec	Newton
	mm of mercury	Erg	Horsepower	Pond
	Newton/m^2	Gram	Kilo-watt	Poundal (US)
	Ton-forc/ft^2	Hpower-hour	Meter-kgf/sec	Pound-force
		Joule	Watt	
		Kilo-calorie	-----	
		Kwatt-hour	Work	
		Liter-atm	-----	
		Mass unit	BTU*second	
		Meter-kg-forc	Calorie*sec	

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Ryberg	Erg*second
Second^-1	eV*second
	Joule*second
	Meter-kgf*sec
	Plank's const

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Plane angles	Length units	Area units	Volume units	Mass	Angles	
Cent.minute	0.00000001		10000	35239.27667212	45359.24	0.009
Cent.second	1		0.01	39368.8022956	1.771845	0.00009
Degree	1000		1	1	0.06479892	1
Minute	10		100	1000.028	1	0.016
Rad	1.541873E+019		1000000	550.752567552	45359.24	57.29578
Right angle	30.48		100000000	1101.227833516	50802.35	90
revolution	2.54		10000000000	3.69671350508	50802.35	360
Second	10000		5.067057	3.551633442952	1000	0.9
-----	9.46053E+017		6.451626	29.57370804064	1000000	-----
Spher. angles	100000		8361.307	28.41306554356	0.000001	Spher. angles
-----	185318.1		929.0341	28317.02	0.001	-----
Square degree	185200		40468730	28316.7	28.34953	1
Square grade	100		25899980000	3785.434989212	453.5924	0.81
Steradian	0.0001		-----	4546.090286964	1016047	3826.806
-----	160934.7	Acceleration		118.2981122544	1016047	-----
Velocity	160934.1	-----		142.0652777164	907184.9	Velocity
-----	0.1		1	16.38716	-----	-----
cm/sec	0.0000001		30.48	16.38698	Troy weight	0.01
Feet/minute	3.083745E+018		1	1000	-----	0.00508
Feet/sec	1.495042E+019		27	473.1793486508	0.2	0.3048
Kilometer/hr	1.002E-11		100	946.3850980408	3.887935	0.27
Kilometer/sec	91.44018		44.704	1000000	3.887935	1000
Knots (Intl.)	91.43984	-----		1E-12	0.06479892	0.514
Knots (UK)	-----	Angular accel		0.001	1	0.5147724
Meter/sec	Pressure	-----		0.06161188508448	31.10348	1
Meter/minute	-----		10	0.05919388738244	1.555174	0.016
Miles/hour	98066.65		9	8809.820668072	373.2418	44.704
Miles/sec	101325		572.9578	9092.180573928	453.5924	1609.344
-----	100000		60	568.2613108712	1.295978	-----
Ang. velocity	2988.983		1	1136.522821748	-----	Ang. velocity
-----	98.0665	-----		764559.4	Force	-----
Grades/minute	249.0824	Energy		764550.9	-----	3.6
Grades/sec	3386.395	-----		-----	1	216
rad/minute	47.88027	1.17473587E-11	Power		63.54603	229.1831
rad/sec	6894.758	4.656996575E-14	-----		980.665	1.375099
rev/day	9.80665		0	1055.8	980665	1
rev/hour	100		0	4.1855	980665	24
rev/minute	9.806375		0	0.0000001	100000	1440
rev/sec	133.3224		0	735.4988	980.665	86400
	1		1	1000	13825.52	
	1072518	2.9460702194E-08		9.80665	448222	
		1.1E-14		1		
		4.656996575E-11	-----			
		0.0000000400554	Work			
		1.1274237667E-12	-----			
		0		1055.8		
		1.09113691225E-13		4.1855		

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0	0.0000001
0	0
	1
	9.80665
	0

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Area

-----

	Square meter		Rectangle
	Square millimeter		Ellipse
	Square centimeter		Parabola
	Square decimeter		Polygon 1
Distance of sirius	Square decameter	Hundredweight,short (US)	Polygon 2
	Square hectometer	Hundredweight (UK)	Polygon 3
	Square kilometer	Hundredweight,long (US)	Triag_area
			Circle sector



Square centimeter

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Volume	Perimeter
Cone	Ellipse
Cylinder	Polygon 2
Paraboloid	Polygon 3
Torus	

Area
+E118*G118
+@PI*A*B
+2*A*B/3
+E118*G118^2/@TAN(@PI/E118)/4
0.5*E118*G118^2*@SIN(2*@PI/E118)
+E118*G118^2*@TAN(@PI/E118)
0.5*E118*G118
+A^2*B/2

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Volume

Perimeter

-----  
 $\pi r_1^2 r_2 / 3$

-----  
 $2\pi \sqrt{0.5(r_1^2 + r_2^2)}$

$\pi r_1^2 r_2$

$2r_1 r_2 \sin(\pi/r_1)$

$\pi r_1^2 r_2 / 2$

$2r_1 r_2 \tan(\pi/r_1)$

$\pi^2 (E118 + G118)(E118 - G118)^2 / 4$

Area

-----

Ellipse of semi-major axis RG1 and semi-minor axis RG2

Segment of a parabola with height RG1 and base RG2

Regular polygon of RG1 sides each of length RG2

Regular polygon of RG1 sides inscribed in a circle of radius RG2

Regular polygon of RG1 sides circumscribing a circle of radius RG2

TRIANGLE AREA: GIVEN, ALTITUDE=RG1 AND BASE=RG2

Sector of a circle of radius RG1 and angle RG2 (RADIANS)

Volume

-----

Right cone of base radius  $R_{G1}$  and height  $R_{G2}$

Right cylinder of radius  $R_{G1}$  and height  $R_{G2}$

Paraboloid of revolution of radius  $R_{G1}$  and height  $R_{G2}$

Torus of inner radius  $R_{G1}$  and outer radius  $R_{G2}$

Perimeter

-----

Ellipse of semi-major axis  $RG1$  and semi-minor axis  $RG2$

Regular polygon of  $RG1$  sides inscribed in a circle of radius  $RG2$

Regular polygon of  $RG1$  sides circumscribing a circle of radius  $RG2$

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Area	Radius	Volume
PARALLELOGRAM	CIR. IN TRIAN	Ellipsoid
TRAPEZOID	TRIAN. IN CIR	

Area  
+E118\*G118\*@SIN(rg3)  
+0.5\*A\*(B+C)

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Radius

Volume

$$\frac{A \cdot B \cdot C}{\sqrt{0.5(A+B+C) \cdot 0.5(B+C-A) \cdot 0.5(A+C-B) \cdot 0.5(A+B-C)}} \quad \frac{4 \cdot \pi \cdot r_1 \cdot r_2 \cdot r_3}{3}$$



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Area

-----

Parallelogram area with BASE=RG1, SIDE=RG2, ANGLE=RG1

Trapezoid of altitude (RG1) and parallel sides RG2 and RG3

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Radius

-----

Radius of a circle inscribed in a triangle of sides  $RG_1, RG_2, RG_3$   
Radius of a circle circumscribing a triangle of sides  $RG_1, RG_2, RG_3$

Volume

-----

Ellipsoid of semi-axes  $RG_1, RG_2, RG_3$

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mmmmmmmmmm

mmmmmmmmmm

mmmmmmmmmm

mmmmmmmmmm

mmmmmmmmmm

SSSS

mmmmmmmmmm

SSSS

mmmmmmmmmm

mmmmmmmmmm

SUM  
AVG  
MAX  
MIN  
STD  
VAR  
COUNT  
RANGE

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@SUM(FA1..FA8192)  
@AVG(FA1..FA8192)  
@MAX(FA1..FA8192)  
@MIN(FA1..FA8192)  
@STD(FA1..FA8192)  
@VAR(FA1..FA8192)  
@COUNT(FA1..FA8192)  
@MAX(FA1..FA8192)-@MIN(FA1..FA8192)  
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calculate the sum of a list of numbers  
Calculate the average of a list of values  
Find the largest value in the list  
Find the smallest value in a list of numbers  
Calculate the standard deviation of the list of values  
Calculate the variance of the values in the list