Help For: Introduction to the calc package by Harald Pleym, Porsgrunn, Norway www.hpleym.no Copyright (c) 2021 by Harald Pleym

Calling Sequence:

<function>(args)

Description:

- The **calc** package contains some specialized commands in addition to all other Maple packages and commands.
- To use a **calc** function, load the **calc** package with the command **with(calc)**. Invoke a function with a call *<function>(args)* where *<function>* is the name of the function, and *args* are the appropriate arguments for the function.

• The functions available are:

> *with(calc)* #150 functions

[AreaBetweenCurves, Arrow, AsympTotes, AutonomSys, BalanceChemEquation, BezierAnim,

BezierCurve, BinomialDistribution, BodePlot, CLTcont, CLTdiscr, CenterOfMassLamina, CenterOfMassParticles, CentroidOfPlaneWire, ChiSqProbPlot, CircMembrane, CircleInversion, ClassCritPoints, ComplexRoots, ConVolution, ConfIntCompMeansD, ConfIntCompMeansT, ConfIntCompMeansZ, ConfIntP, ConfIntT, ConfIntTwoP, ConfIntVar, ConfIntVarRatio, ConfIntZ, CramersRule, Cycloid, CylindricalCoord, Decryption, DiagonalizableMatrix, Differentiate, DirDiff, Dsolve, Duffing, EigenVectors, Encryption, EpiTrochoid, EpiTrochoidComp, Evolute, Evolvent, ExpForm, ExpMatrix, ExponentialDistribution, FProbPlot, FibonacciNumbers, FindRoots, FluxIntegral, FourierAnim, FourierPlot, FourierSinCosPlot, GammaProbPlot, GerschGorin, GumbelProbPlot, HappyFace, Hatch, HatchPolar, HatchXPlot, HatchYPlot, HeatEquation1D, HeatEquation2D, HistoGram, HopfBifurcation, HyperGeomDistribution, HypoTrochoid, IntByParts, InverseFunction, LNormalProbPlot, LaplaceEq, LaplaceFDM, LengthOfArc, LevelSurfaceAnimation, LineIntegral, LinearDependence, Lissajous, LogisticProbPlot, Lorenz, LyingTank, MarkovChains, MassSpringSystem, MassStiffness, MatrixDE, MatrixEquation, *MatrixExp*, *MultipleRegression*, *N* SidedPolygon, Newton, NewtonComplex, NewtonMultiVar, NewtonPlot, NormalProbPlot, NumericalIntegration, OneFactorAnova, OrthogonalMatrix, OsculatingCircle, OsculatingCircleAnim, PartialFraction, PascalsTriangle, Pendulum, PeriodicFunc, PlotData, PoissonDistribution, PolynomFactor, PolynomialDivision, PolynomialInterP, ProbTable, ProjMatrix, Projectile, QRLeastSquares, QuadraticSurfaces, QuantileTable, Radar, ReducedSingularValueDecomp, Reflection, RegressionFit, RemProdTerm,

Rossler, RotationSurface, RotationVolume, SeaShell, SingularValueDecomp, SlopePredictor, SphericalCoord, SpiralPattern, SplineFunc, SpringMassCouplet, StandardNormalTable, StemLeafDiagram, Substitution, Surfaceintegral, TabularForm, TangentNormal, TangentPlaneNormal, Tank, TaylorAnimation, TheTruthTable, Trajectory, TrigForm, TwoFactorAnova, VanDerPol, VarParam, VibratingMembrane, VibratingString, WeibProbPlot, ZtestPower, dAlembert, tProbPlot]

• For more information on a particular function, invoke help for that function with the command ? *sfunction*>

Help For: Introduction to the calcplot package.

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Note: The package was originally written for Maple 4 by **Tim Murdoch**, Department of Mathematics, Washington and Lee University, Lexington, Virginia, USA. He has permitted me to use the package. All procedures have been updated for all versions of Maple by **Harald Pleym**

Calling Sequence:

<function>(args)

Description:

• To use a **calcplot** function, load the calcplot package with the command **with(calcplot)**. Invoke the function with a call *<function>(args)* where *<function>* is the name of the function, and *args* are the appropriate arguments for the function.

• The functions available are:

- > with(calcplot) # 30 functions [dpdphidtplot, dpdtdphiplot, dphidpdtplot, dphidtdpplot, drdtdzplot, drdtplot, drdzdtplot, dtdpdphiplot, dtdphidpplot, dtdrdzplot, dtdrplot, dtdzdrplot, dxdydzplot, dxdyplot, dxdzdyplot, dydxdzplot, dydxplot, dydzdxplot, dzdrdtplot, dzdtdrplot, dzdxdyplot, dzdydxplot, regionplot2d, regionplot3d, rotxplot, rotyplot, rtgraphplot, trgraphplot, xygraphplot, yxgraphplot]
- For more information on a particular function, invoke help for that function with the command ? *<function>*