

## ▼ **Help For:** Introduction to the **calc** package

by **Harald Pleym**, Porsgrunn, Norway

[www.hpleym.no](http://www.hpleym.no)

### **Calling Sequence:**

*<function>(args)*

## ▼ **Description:**

The **calc** package contains 112 procedures with accompanying help pages.

- The procedures are designed to help students understand and educators to present basic material from calculus and advanced calculus
- The many visualization procedures go far beyond Maple's built-in visualization tools
- The procedures are user friendly and without the need to understand and know the subtleties of Maple's plotting and other base 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.

### **> with(calc):**

- The functions available are:

[Arrow](#), [AutonomSys](#), [BezierAnim](#), [BezierCurve](#), [BodePlot](#), [CLTcont](#), [CLTdiscr](#), [ChiSqProbPlot](#), [CircMembrane](#), [CircleInversion](#), [ClassCritPoints](#), [ComplexRoots](#), [ConfIntCompMeansD](#), [ConfIntCompMeansT](#), [ConfIntCompMeansZ](#), [ConfIntP](#), [ConfIntT](#), [ConfIntTwoP](#), [ConfIntVar](#), [ConfIntVarRatio](#), [ConVolution](#), [ConfIntZ](#), [Cycloid](#), [CylindricalCoord](#), [dAlembert](#), [Decryption](#), [Differentiate](#), [DirDiff](#), [Dsolve](#), [Duffing](#), [EigenVectors](#), [Encryption](#), [EpiTrochoid](#), [EpiTrochoidComp](#), [Evolute](#), [Evolvent](#), [ExpForm](#), [ExpMatrix](#), [FProbPlot](#), [FluxIntegral](#), [FourierAnim](#), [FourierPlot](#), [FourierSinCosPlot](#), [Grid](#), [GumbelProbPlot](#), [HappyFace](#), [Hatch](#), [HatchPolar](#), [HatchXPlot](#), [HatchYPlot](#), [HeatEquation1D](#), [HeatEquation2D](#), [HistoGram](#), [HopfBifurcation](#), [HypoTrochoid](#), [LaplaceEq](#), [LaplaceFDM](#), [LNormalProbPlot](#), [LevelSurfaceAnimation](#), [LineIntegral](#), [LinearDependence](#), [Lissajous](#), [LogisticProbPlot](#), [Lorenz](#), [LyingTank](#), [MassSpringSystem](#), [MassStiffness](#), [MatrixExp](#), [N\\_SidedPolygon](#), [Newton](#), [NewtonComplex](#), [NewtonMultiVar](#), [NewtonPlot](#), [NormalProbPlot](#), [OneFactorAnova](#), [OsculatingCircle](#), [OsculatingCircleAnim](#), [PascalsTriangle](#), [Pendulum](#), [PeriodicFunc](#), [PlotData](#), [PolynomFactor](#), [ProbTable](#), [ProjMatrix](#), [Projectile](#), [QuantileTable](#), [Radar](#), [Reflection](#), [RemProdTerm](#), [Rossler](#), [SeaShell](#), [SlopePredictor](#), [SphericalCoord](#), [SpiralPattern](#), [SpringMassCouplet](#), [StandardNormalTable](#), [Surfaceintegral](#), [TabularForm](#), [TangentNormal](#), [Tank](#), [TaylorAnimation](#), [TheTruthTable](#), [tProbPlot](#), [Trajectory](#), [TrigForm](#), [TwoFactorAnova](#), [VanDerPol](#), [VarParam](#), [VibratingMembran](#), [VibratingString](#), [WeibProbPlot](#), [ZtestPower](#)

- For more information on a particular function, invoke help for that function with the command *<function>*

► **Copyright © 2009 by Harald Pleym**

▼ **Help For:** Introduction to the **calplot** package.

**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 are updated for use with current versions of Maple by **Harald Pleym**

**Calling Sequence:**

<function>(args)

▼ **Description:**

- To use a **calplot** function, load the calplot package with either the **read** command, or, if the package has been installed in a library, with the command **with(calplot)**. 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.

**> with(calplot):**

- The functions available are:

[drdtplot](#) [dtdrplot](#), [dxdyplot](#) [dydxplot](#)

[drdtdzplot](#) [drdzdtpplot](#) [dtdrdzplot](#) [dtdzdrplot](#) [dzdrdtplot](#) [dzdtdrplot](#)

[dxdydzplot](#) [dxdzdyplot](#) [dydxdzplot](#) [dydzdxplot](#) [dzdxdyplot](#) [dzdydxplot](#)

[dpdtdphiplot](#) [dpdphidtpplot](#) [dtdpdphiplot](#) [dtdphidppplot](#) [dphidpdtplot](#) [dphidtdpplot](#)

[regionplot2d](#), [regionplot3d](#), [rotxplot](#) [rotyplot](#), [rtgraphplot](#) [trgraphplot](#)

[xygraphplot](#) [yxgraphplot](#)

- For more information on a particular function, invoke help for that function with the command ? <function>

▼ **Copyright (c) 2012 by Harald Pleym**