History

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Chapter 1

History

1.1 mathX History

History

V1.00 (96-11-10)

This is the first public version of mathX. It has been written to replace my old program Graph2D. The keyfiles of the registered users of Graph2D can be used for mathX, too: Just move the "Graph2D.key" from your Graph2D drawer to your mathX drawer and rename it to "mathX.key".

mathX is a completely new written program, so there is no exact list of changes between Graph2D and mathX. mathX looks similar to Graph2D, so I hope that Graph2D users won't have difficulties in using mathX now. Please read documentation anyway!

So what are the most important news?

* mathX uses rational numbers instead of floating point numbers. This will give maximum precision in all symbolic operations like derivation, evaluation, etc. Despite that the speed of numerical operations like discussion, graph drawing, etc. has been increased significantly.

* Heavily improved simplifications.

* Support of matrices and vectors. There is a new LinAlg menu featuring calculation of determinante and inverse, solving of linear systems, characteristical polynom.

* 2D graph has new features and settings: logarithmical display, optional autorange, color and linestyle selectable for everything, ...
  You can define a range and step for an optional 2nd argument of a function.

* Functions - they're called expressions now - can be dragged' n'dropped from or to every window. Furthermore you do not have to give give a name to every stupid function: just enter for example "3*x^2-x+2" and let it draw, discuss it, ...

* All text fields are able to handle mathematical expressions if they make sense: for example in the 2D graph settings field "x axis from" you can enter an expression like "-2*pi".

* Bubble help is available for all GUI elements. Just don’t move your mouse pointer for some seconds and you will see short help texts.

* SIRDS graph algorithm has been rewritten to run much faster. Take a look at it! There was also a little error in the 3D effect that has been fixed.

* Term display looks better now thanks to a size sensitive line thickness and smaller exponents.