

SOLVING CAPABILITIES	8	2000	2001	2001<i>i</i>	11	12	13	14.0	15.0
Define and evaluate variables and functions numerically or symbolically	*	*	*	*	*	*	*	*	*
Linear and non-linear system solving and optimization solve blocks	*	*	*	*	*	*	*	*	*
Solve systems with hundreds of variables and constraints, in matrix or individual equation notation		*	*	*	*	*	*	*	*
Fast ODE solver for stiff systems and differential algebraic systems (Radau)				*	*	*	*	*	*
Systems of ODEs in solve blocks			*	*	*	*	*	*	*
New and improved ODE algorithms (Adams, BDF)								*	*
Statespace function								*	*
1D PDE solvers in solve blocks					*	*	*	*	*
Live symbolic (algebraic) evaluation, including expansion, factorization, transforms	*	*	*	*	*	*	*	*	*
New and enhanced symbolics capabilities, including vectorization, solve fully, piecewise integral solutions, new and enhanced keywords, etc.								*	*
Multiple root-finding algorithms, including symbolic methods		*	*	*	*	*	*	*	*
Local functions in programs						*	*	*	*

APPLICATION CUSTOMIZATION & EXTENSIBILITY	8	2000	2001	2001<i>i</i>	11	12	13	14.0	15.0
User-defined functions created in C, C++ or FORTRAN	*	*	*	*	*	*	*	*	*
Embed or link any OLE-compliant application or ActiveX control	*	*	*	*	*	*	*	*	*
Use OLE Automation & Visual Basic® to call Mathcad	*	*	*	*	*	*	*	*	*
Software Development Kit (SDK) for building custom components			*	*	*	*	*	*	*
Mathcad Custom Controls			*	*	*	*	*	*	*
Scriptable object component for reuse and deployment of components			*	*	*	*	*	*	*
Automation interface for scripting Mathcad worksheets				*	*	*	*	*	*
Mathcad Automation access from internal scriptable objects					*	*	*	*	*
Automation access to XML Metadata and region content						*	*	*	*
Web controls (scriptless, save state)						*	*	*	*
Previous version compatibility switches							*	*	*

GRAPHING & VISUALIZATION	8	2000	2001	2001<i>i</i>	11	12	13	14.0	15.0
Bar charts, x-y, polar, vector, contour, scatter, and surface plots	*	*	*	*	*	*	*	*	*
Animation capabilities	*	*	*	*	*	*	*	*	*
Trace & Zoom	*	*	*	*	*	*	*	*	*
2D and 3D QuickPlot™ and plot annotation		*	*	*	*	*	*	*	*
Open GL™ 3-D graphs	*	*	*	*	*	*	*	*	*
Image Viewer with support for BMP, GIF, JPG, PCX, TARGA, PGM, TIFF			*	*	*	*	*	*	*
2nd Y-axis for 2D plots						*	*	*	*
Positionable legends for 2D plots						*	*	*	*
Grid and marker color selectors						*	*	*	*
Full color palette for traces, new symbols, symbol frequency							*	*	*
Axis number formatting								*	*
Negative radii on polar plots								*	*
Box plots									*
Effects plots									*
Pareto plots									*

FILE FORMATS, PUBLISHING & WEB SUPPORT	8	2000	2001	2001<i>i</i>	11	12	13	14.0	15.0
Save as XML						*	*	*	*
Compressed images and files						*	*	*	*
Calculated results saved in XML						*	*	*	*
Save as HTML	*	*	*	*	*	*	*	*	*
HTTP File Open support					*	*	*	*	*
Save files in older file formats			*	*	*	*	*	*	*
Save to RTF, retaining region positioning for MS Word					*	*	*	*	*

RESOURCES	8	2000	2001	2001<i>i</i>	11	12	13	14.0	15.0
References tables, key formulas and constants	*	*	*	*	*	*	*	*	*
PlanetPTC Community - Mathcad Web-based forum	*	*	*	*	*	*	*	*	*
Technical support	*	*	*	*	*	*	*	*	*
Online tutorials and discipline-specific examples	*	*	*	*	*	*	*	*	*
Easy-to-use online Help with Search and Index		*	*	*	*	*	*	*	*
Adaptable QuickSheets demonstrating standard analyses and tasks		*	*	*	*	*	*	*	*
New Solving and Optimization E-book								*	*
Localized Help and Documentation								*	*
Online Developer's Reference			*	*	*	*	*	*	*
FLEXlm license management								*	*
Programming tutorial							*	*	*
Rewritten, reorganized and reformatted Help						*	*	*	*

MICROSOFT STANDARDS AND OS SUPPORT	8	2000	2001	2001<i>i</i>	11	12	13	14.0	15.0
Microsoft® Windows 95	*	*	*						
Microsoft® Windows NT 4 (Service Pack 6 or higher)	*	*	*	*	*				
Microsoft® Windows 98 (Service Pack 2)	*	*	*	*	*				
Microsoft® Windows XP support				*	*	*	*	*	*
Microsoft® Windows ME support			*	*	*				
Microsoft® Office 2000 compatibility			*	*	*	*	*		
Microsoft® Office 2003 compatibility							*	*	*
Microsoft® Windows XP/Office XP support				*	*	*	*	*	*
Microsoft® Windows Vista support								*	*
Microsoft® Windows 7 support									*
Microsoft® Office 2007 support									*
ActiveX support		*	*	*	*	*	*	*	*

ADDITIONAL TOOLS AVAILABLE	8	2000	2001	2001<i>i</i>	11	12	13	14.0	15.0
Civil, Electrical, and Mechanical Engineering Libraries	*	*	*	*	*	*	*	*	*
Knovel Math –comprehensive Roark's and Hicks' reference content									*
Data Analysis Extension Pack					*	*	*	*	*
Signals, Image Processing, and Wavelets Extension Packs	*	*	*	*	*	*	*	*	*
Solving and Optimization Extension Pack	*	*	*	*	*	*	*		
Licensing with maintenance	*	*	*	*	*	*	*	*	*
PTC Gold Maintenance Support	*	*	*	*	*	*	*	*	*
Mathcad On-site Training Courses					*	*	*	*	*
Web-based Training Courses		*	*	*	*	*	*	*	*
VisSim Plus					*	*	*		