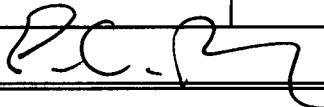


SOFTWARE RELEASE NOTICE

1. SRN Number: GHGC-SRN-203		
2. Project Title: Use on Multiple Project		Project No. 20-1402-861
3. SRN Title: MathCad Version 8.0 Professional		
4. Originator/Requestor: B. Mabrito		Date: 9/07/99
5. Summary of Actions		
<input checked="" type="checkbox"/> Release of new software <input type="checkbox"/> Release of modified software: <ul style="list-style-type: none"> <input type="checkbox"/> Enhancements made <input type="checkbox"/> Corrections made <input type="checkbox"/> Change of access software <input type="checkbox"/> Software Retirement 		
6. Persons Authorized Access		
Name	Read Only/Read-Write	Addition/Change/Delete
Debra Hughson	RO	A
CNWRA staff	RO	A
7. Element Manager Approval: English Pearcy 		Date: 9/29/99
8. Remarks: Acquired software: Not to be modified.		

Memo to Bruce Mabrito
Regarding TOP-018 Control of MathCad
From Debra L. Hughson
Sept. 20, 1999



MathCad 8.0 Professional for the Windows NT/95/98 platform falls under the category of "ACQUIRED/EXISTING SOFTWARE Not to be modified" in Table 1 of TOP-018, Revision 6, Change 0, Page 7 of 27 and thus has the requirements of Acceptance Testing, Configuration Control, Design Verification & Release, and Software Validation Test Plan (SVTP).

ACCEPTANCE TESTING

The acceptance testing requirement of TOP-018 is for installation testing only.

Status: MathCad 8.0 Professional can be installed by executing *setup.exe* from the software CD.

CONFIGURATION CONTROL, DESIGN VERIFICATION & RELEASE

The MathCad 8.0 Professional version User's Manual accompanies the software package. On-line help is also available.

MathCad is designed to be an interactive computing environment. Users enter mathematical formulas in standard notation much as they would be written on paper. Combining computational features with the text and graphics capabilities of MathCad 8.0 allows for construction of interactive documents for performing calculations complete with explanation and formatting.

SOFTWARE VALIDATION TEST PLAN

Included below are sample calculations performed using MathCad 8.0 Professional.

The following is an example of simple arithmetic

$a := 2$	$b := 5$	$c := \frac{3}{2}$	$d := \sqrt{-1}$
$a \cdot b = 10$	$a \cdot c = 3$	$b \cdot c = 7.5$	
$d^2 = -1$	$b \cdot d = 5i$	$\text{Re}(b \cdot d) = 0$	$\text{Im}(b \cdot d) = 5$

Calculus Examples

$$\int_{-\infty}^1 e^x dx = 2.718$$

$$\int_0^{\infty} e^{-x} dx = 1$$

$$\frac{d^2}{dx^2} e^{-(2 \cdot x)} \rightarrow 4 \cdot \exp(-2 \cdot x)$$

$$x := \pi$$

$$\int \sin(x) dx \rightarrow -\cos(x) = 1$$

$$\frac{d}{dx} x^2 \rightarrow 2 \cdot x$$

In the examples above user defined assignments (input) are indicated by =: and calculations performed by the software (output) are indicated by just = or an arrow. I have selected examples that you can verify by inspection to see that the program is producing correct results.

Examples are available in the online help for using the programming features of MathCad 8.0 Professional. Refer to the documentation for a complete guide to internal functions and capabilities.

SUPPORTING DOCUMENTS

Attached are TOP-018 Software Summary Form and Software Release Notice