

**PTC<sup>®</sup>**

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**PTC<sup>®</sup> Mathcad Prime<sup>®</sup> 3.1  
Keyboard Shortcuts**

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# Regions

## Inserting Regions

Operator/Command	Description	Keyboard Shortcut
Area	Inserts a collapsible area you can collapse or expand to toggle the display of your work.	Ctrl+Shift+A
Excel Component	Inserts an excel component.	Ctrl+Shift+E
Image	Inserts an image.	Ctrl+4
Include Worksheet	Inserts variable and function definition from another worksheet.	Ctrl+Shift+W
Math	Inserts a math region.	Ctrl+Shift+M
Solve Block	Inserts a solve block.	Ctrl+1
Table	Inserts a table.	Ctrl+6
Text Block	Inserts a text block.	Ctrl+Shift+T
Text Box	Inserts a text box.	Ctrl+T

## Working with Regions

Description	Keyboard Shortcut
Moves the cursor to the beginning of the expression.	Home
Moves the cursor to the end of the expression.	End
Moves the cursor to the left of the selected expression or to the beginning of the selected word.	Ctrl+Left Arrow
Moves the cursor to the right of the selected expression or to the end of the selected word.	Ctrl+Right Arrow
Moves the cursor to the next placeholder.	Right Arrow
Moves the cursor to the previous placeholder.	Left Arrow
Recalculates the selected or active region.	F5
Separates the selected regions horizontally.	Ctrl+F8
Separates the selected regions vertically.	Ctrl+F3
Toggles the active region selection.	Ctrl+Enter
Inside a text region, inserts a new line above or below depending on the position of the cursor.	Shift+Enter

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## Math

Operator/Command	Description	Keyboard Shortcut
Greek Letters	Adds a Greek letter.	corresponding Latin letter, Ctrl+G
$i$ or $j$	Indicates imaginary units.	Ii or Ij
Insert String	Inserts a string.	"
Subscripts	Toggles the baseline of a text.	Ctrl+-
Toggle Labels	Toggles the label type.	Ctrl+Q

## Constants

Operator/Command	Description	Keyboard Shortcut
$\gamma$	Euler's constant/number	g, Ctrl+G
$\infty$	Infinity	Ctrl+Shift+Z
$\pi$	Pi	p, Ctrl+G

## Plots

Operator/Command	Description	Keyboard Shortcut
XY Plot	Inserts an XY Plot.	Ctrl+2
3D Plot	Inserts a 3D Plot.	Ctrl+3
Contour Plot	Inserts a Contour Plot.	Ctrl+5
Polar Plot	Inserts a Polar Plot.	Ctrl+7
All Plots	Inserts a new axis expression into the active axis expression list.	Shift+Enter

# Operators

## Algebra Operators

Operator/Command	Description	Keyboard Shortcut
$ x $	Absolute Value	
$x + y$	Addition	+
$ x $	Determinant	
$\frac{x}{y}$	Division	/
$y^x$	Exponentiation	^
$n!$	Factorial	!
$x \div y$	In-line Division	Ctrl+/ /
$(x)$	Matched pair of parentheses	(
$x \cdot y$	Multiplication and Dot Product	*
$x - y$	Negation and Subtraction	-
,	Separate arguments of a function	, Comma
$\sqrt[n]{x}$	Square Root and Nth Root	\
$x\%$	Percent	%

## Calculus Operators

Operator/Command	Description	Keyboard Shortcut
$A \circledast B$	Circular Convolution	Ctrl+Shift+V
$\frac{d^2}{dt^2} f(t)$	Derivative	Ctrl+Shift+D



Operator/Command	Description	Keyboard Shortcut
$\int_a^b f(x) dx$	Integral	Ctrl+Shift+I
$A * B$	Linear Convolution	Ctrl+Shift+L
$g := f'$	Prime	Ctrl+' (Apostrophe)
$\prod_{j=m}^n X$	Product	Ctrl+Shift+#
$\sum_{j=m}^n X$	Summation	Ctrl+Shift+\$

### Comparison Operators


Operator/Command	Description	Keyboard Shortcut
$x = y$	Equal To	Ctrl+=
$x > y$	Greater Than	>
$x \geq y$	Greater Than or Equal To	>= Ctrl+0
$x \neq y$	Inequality	< >
$x \in y$	Is Element Of	Ctrl+F7
$x < y$	Less Than	<
$x \leq y$	Less Than or Equal To	<= Ctrl+9
$x \oplus y$	Logical Exclusive OR	Ctrl+Shift+%
$x \wedge y$	Logical AND	Ctrl+Shift+&

Operator/Command	Description	Keyboard Shortcut
$\neg x$	Logical NOT	Ctrl+Shift+!
$x \vee y$	Logical OR	Ctrl+Shift+@



### Definition and Evaluation Operators

Operator/Command	Description	Keyboard Shortcut
$x := a$	Definition	: Colon
$x = 1$	Evaluation	=
$x \equiv b$	Global Definition	Ctrl+Shift+~

### Engineering Operators

Operator/Command	Description	Keyboard Shortcut
$\overline{x}$	Complex Conjugate	Ctrl+Shift+_
$x^\circ$	Degree	° Hold down Alt and press 0176
	Scaling	Ctrl+Shift+U
$x \angle y$	Polar	Ctrl+Shift+P


### Symbolic Operators

Operator/Command	Description	Keyboard Shortcut
	Symbolic Evaluation	Ctrl+. (period)
	Limit	Ctrl+L
Cursor at end of a symbolic keyword	Adds a new line with a keyword placeholder.	Shift+Enter

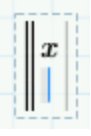
## Vector and Matrix Operators

Operator/Command	Description	Keyboard Shortcut
$u \times v$	Cross Product	Ctrl+8
$[ ]$	Matrix	[ Ctrl+M
$M^{(j)}$	Matrix Column	Ctrl+Shift+C
$M_{i,j}$	Matrix Index	[
$M^{-1}$	Matrix Inverse	^-1
$\widehat{M}^i$	Matrix Row	Ctrl+Shift+R
$M^T$	Matrix Transpose	Ctrl+Shift+T
$\ M\ $	Norm	Ctrl+Shift+
$x..z$	Range	.. Two periods
$x,y..z$	Step Range	, Comma
$\vec{M}$	Vectorize	Ctrl+Shift+^

## Programming Operators

Operator/Command	Description	Keyboard Shortcut
	Program	]
$\ x \leftarrow y\ $	Local Assignment	{
$\text{if } w\ $ $\ x\ $	If	}



Operator/Command	Description	Keyboard Shortcut
<pre>if w      x else      y</pre>	Else	Ctrl+Shift+}
<pre>if w      x else if y      z</pre>	Else If	Ctrl+;
<pre>if w      x also if y      z</pre>	Also If	Ctrl+Shift+?
<pre>while x      y</pre>	While Loop	Ctrl+] ]
<pre>for x ∈ 0..5      y</pre>	For Loop	Ctrl+Shift+"
<pre>   break  </pre>	Break	Ctrl+Shift+{
<pre>   continue  </pre>	Continue	Ctrl+Shift+:
<pre>   return   </pre>	Return	Ctrl+\
<pre>try      x on error      y</pre>	Try / On Error	Ctrl+[

Operator/Command	Description	Keyboard Shortcut
	Adds a new line to the program.	Enter
	Pressing Ctrl+J after a program word, changes the word into an operator.	Ctrl+J

## Matrices and Tables

Operator/Command	Description	Keystroke
Insert Left/Right	Inserts a column to the left or to the right according to the cursor's location.	Shift+Space
Insert Above/Below	Inserts a row above or below depending on the location of the cursor.	Shift+Enter

## General

Operator/Command	Description	Keystroke
Calculate Worksheet	Recalculates the worksheet.	Ctrl+F5
Functions, open dialog box	Opens the <b>Functions</b> dialog box.	F2
Add Page Break	Inserts a page break.	Ctrl+Enter
	Opens the Help Center.	F1
	Closes the current document.	Ctrl+W