# ptc ${ }^{\circ}$ mathcad prime* 

Keyboard Shortcuts
Mathcad Prime 4.0

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## Regions

Inserting Regions

| Operator/Command | Description | Keyboard Shortcut |
| :--- | :--- | :--- |
| Area | Inserts an area that <br> you can collapse or <br> expand to toggle the <br> display of your work. | $\mathrm{Ctrl+Shift+A}$ |
| Excel Component | Inserts an excel <br> component. | $\mathrm{Ctrl+Shift+E}$ |
| Image | Inserts an image. | Ctrl+4 |
| Include Worksheet | Inserts variable and <br> function definition <br> from another <br> worksheet. | $\mathrm{Ctrl+Shift+W}$ |
| Math | Inserts a math region. | Ctrl+Shift+M |
| Object | Inserts an object in <br> your worksheet to | $\mathrm{Ctrl+Shift+O}$ |
| embed content from <br> another application. |  |  |
| Solve Block | Inserts a solve block. | Ctrl+1 |
| Table | Inserts a table. | Ctrl+6 |
| Text Block | Inserts a text block. | $\mathrm{Ctrl+Shift+T}$ |
| Text Box | Inserts a text box. | $\mathrm{Ctrl+T}$ |

## Working with Regions

| Description | Keyboard Shortcut |
| :--- | :--- |
| Moves the cursor to the beginning of the <br> expression. | Home |
| Moves the cursor to the end of the expression. | End |
| Moves the cursor to the left of the selected <br> expression or to the beginning of the selected <br> word. | Ctrl+Left Arrow |
| Moves the cursor to the right of the selected <br> 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 |


| Description | Keyboard Shortcut |
| :--- | :--- |
| Toggles the active region selection. | Ctrl+Enter |
| Inside a text region, inserts a new line above or <br> below depending on the position of the cursor. | Shift+Enter |

## Math

| Operator/Command | Description | Keyboard Shortcut |
| :--- | :--- | :--- |
| Greek Letters | Adds a Greek letter. | corresponding Latin letter, <br> Ctrl+G |
| $i$ or $j$ | Indicates imaginary <br> units. | li or 1 j |
| Insert String | Inserts a string. | " |
| Subscripts | Toggles the baseline <br> of a text. | Ctrl+- |
| Toggle Labels | Toggles the label <br> type. | Ctrl+Q |

## Constants

| Operator/Command | Description | Keyboard Shortcut |
| :--- | :--- | :--- |
| $\gamma$ | Euler's constant/ <br> 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 <br> Plot. | Ctrl+5 |
| Polar Plot | Inserts a Polar Plot. | Ctrl+7 |
| All Plots | Inserts a new axis <br> expression into the <br> active axis expression <br> list. | Shift+Enter |

## Operators

## Algebra Operators

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

## Equation Break Operators

| Operator | Description | Keyboard Shortcut |
| :--- | :--- | :--- |
| $+\downarrow$ | Equation Break Addition | Ctrl+Shift++ |
| $-\downarrow$ | Equation Break <br> Subtraction | Ctrl+Shift+- |
| $\cdot \downarrow$ | Equation Break <br> Multiplication | Ctrl+Shift+* |


| Operator | Description | Keyboard Shortcut |
| :--- | :--- | :--- |
| $\div \downarrow$ | Equation Break In-line <br> Division | Ctrl+Shift $+/$ |
| $\checkmark$ | Toggle between regular <br> and Equation Break <br> Operators. | Ctrl+Shift+Enter |

## Calculus Operators

| Operator/Command | Description | Keyboard Shortcut |
| :--- | :--- | :--- |
| $A \circledast B$ | Circular Convolution | Ctrl+Shift+V |
| $\frac{d^{2}}{d t^{2}} f(t)$ | Derivative | Ctrl+Shift+D |
| $\int_{a}^{b} f(x) d x$ | Integral | Ctrl+Shift+I |
| $A * B$ | Linear Convolution | Ctrl+Shift+L |
| $g:=f^{\prime}$ | Product | Ctrl+' (Apostrophe) |
| $\prod_{j=m}^{n} X$ | Summation | Ctrl+Shift+\$ |
| $\sum_{j=m}^{n} X$ |  |  |

## Comparison Operators

| Operator/Command | Description | Keyboard Shortcut |
| :--- | :--- | :--- |
| $x=y$ | Equal To | Ctrl+= |
| $x>y$ | Greater Than | $>$ |
| $x \geq y$ | Greater Than or <br> Equal To | $>=$ |
| $\mathrm{Ctrl}+0$ |  |  |


| Operator/Command | Description | Keyboard Shortcut |
| :--- | :--- | :--- |
| $x \neq y$ | Inequality | $<>$ |
| $x \in y$ | Is Element Of | Ctrl+F7 |
| $x<y$ | Less Than | $<$ |
| $x \leq y$ | Less Than or Equal <br> To | $<=$ <br> Ctrl+9 |
| $x \oplus y$ | Logical Exclusive OR | Ctrl+Shift+\% |
| $x \wedge y$ | Logical AND |  |
| $\neg x$ | Logical NOT | Ctrl+Shift+! |
| $x \vee y$ | Logical OR | Ctrl+Shift+@ |

Definition and Evaluation Operators

| Operator/Command | Description | Keyboard Shortcut |
| :--- | :--- | :--- |
| $x:=a$ | Definition | Colon <br> $x=1$ |
| Evaluation | $=$ |  |
| $x \equiv b$ | Global Definition | Ctrl+Shift $+\sim$ |

## Engineering Operators

| Operator/Command | Description | Keyboard Shortcut |
| :--- | :--- | :--- |
| $\bar{x}$ | Complex Conjugate | Ctrl+Shift+( |
| $\boldsymbol{x}^{\circ}$ | Degree | Hold down Alt and press <br> 0176 |
| $\mathbf{5} \cdot \boldsymbol{y}$ | Scaling | Ctrl+Shift+U |
| $x \angle y$ | Polar | Ctrl+Shift+P |

## Symbolic Operators

| Operator/Command | Description | Keyboard Shortcut |
| :--- | :--- | :--- |
| $\rightarrow$ | Symbolic Evaluation | Ctrl+. (period) |
| $\lim ^{\prime} \rightarrow$ | Limit | Ctrl+L |
| Cursor at end of a symbolic <br> keyword | Adds a new line with <br> a keyword <br> placeholder. | Shift+Enter |

## Vector and Matrix Operators

| Operator/Command | Description | Keyboard Shortcut |
| :---: | :---: | :---: |
| $u \times v$ | Cross Product | Ctrl+8 |
| [ ] | Matrix | $\begin{aligned} & {[ } \\ & \mathrm{Ctrl}+\mathrm{M} \end{aligned}$ |
| $M^{\langle j\rangle}$ | Matrix Column | Ctrl+Shift+C |
| $M_{i, j}$ | Matrix Index | [ |
| $M^{-1}$ | Matrix Inverse | $\wedge-1$ |
| $M^{\widehat{i}}$ | Matrix Row | Ctrl+Shift+R |
| $M^{\text {T }}$ | 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 | \{ |
| $\begin{array}{r} \text { if } w \\ \\| x \end{array}$ | If | \} |
| $\begin{array}{r} \text { if } w \\ \\| x \\ \text { else } \\ \\| y \end{array}$ | Else | Ctrl+Shift + |
| $\begin{aligned} & \text { if } w \\ & \\| x \\ & \text { else if } y \\ & \\| z \end{aligned}$ | Else If | Ctrl+; |
| $\begin{aligned} & \text { if } w \\ & \\| x \\ & \text { also if } y \\ & \\| z \end{aligned}$ | Also If | Ctrl+Shift+) |
| while $x$ $\\| y$ | While Loop | Ctrl+] |
| $\begin{aligned} & \text { for } x \in 0 . .5 \\ & \\| y \end{aligned}$ | For Loop | Ctrl+Shift+" |
| \||break | Break | Ctrl+Shift+ |
| \||continue | Continue | Ctrl+Shift+: |
| \||return 『| | Return | Ctrl+\} |


| Operator/Command | Description | Keyboard Shortcut |
| :--- | :--- | :--- |
| try <br> on error <br> $\\| y$ | Try / On Error | Ctrl+[ |
| $\\| x$ | Adds a new line to <br> the program. | Enter |
| $\\|$ | Pressing Ctrl+J after <br> a program word, <br> changes the word into <br> an operator. | Ctrl+J |

## Matrices and Tables

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

## General

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

