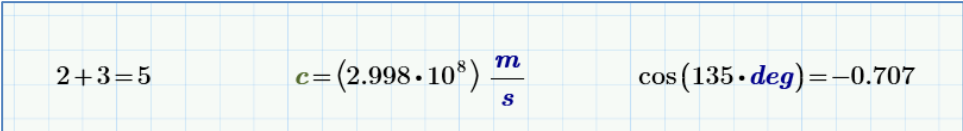
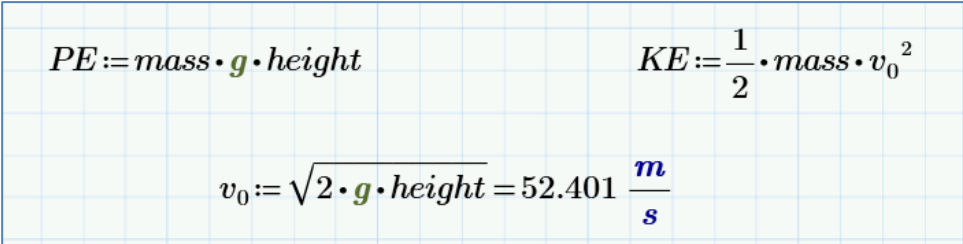
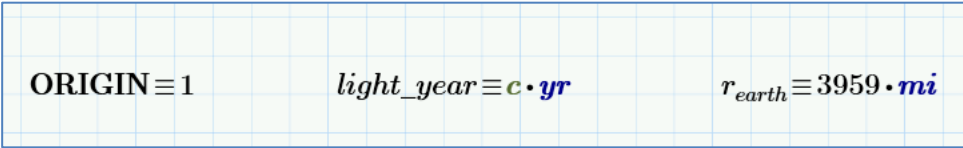


Equals Signs in Mathcad

Sign	Keyboard Shortcut	Explanation
=	=	<p>Evaluate numerically. Returns the result of a mathematical expression, function, variable, or matrix.</p> 
:=	:	<p>Definition. Assigns a value or expression to define a variable, function, or matrix / matrix element.</p> 
≡ (Triple equals)	<CTRL>+<SHIFT>+~	<p>Global definition. Same as a Definition except that the definition is valid throughout the entire worksheet, not just for everything after the expression in the worksheet. Useful for defining ORIGIN, new constants, and systems of units.</p> 

= (Thick equals)	<CTRL> +=	<p>Boolean operations and Solve Blocks.</p> <p>In Boolean operations, used to evaluate if the terms are equal.</p> <p>In Solve Blocks, used to define constraints.</p> <div data-bbox="978 302 1745 802" style="border: 1px solid black; padding: 10px; margin: 10px 0;"> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border-right: 1px solid black; padding-right: 5px; text-align: center;">Guess Values</td> <td style="padding-left: 5px;">$t := 3 \cdot s$</td> </tr> <tr> <td style="border-right: 1px solid black; padding-right: 5px; text-align: center;">Constraints</td> <td style="padding-left: 5px;">$v := 50 \cdot \frac{mi}{hr}$</td> </tr> <tr> <td style="border-right: 1px solid black; padding-right: 5px; text-align: center;">Solver</td> <td style="padding-left: 5px;">$g \cdot t = v$</td> </tr> <tr> <td style="border-right: 1px solid black; padding-right: 5px; text-align: center;"></td> <td style="padding-left: 5px;">$\frac{1}{2} \cdot g \cdot t^2 = h$</td> </tr> <tr> <td style="border-right: 1px solid black; padding-right: 5px; text-align: center;"></td> <td style="padding-left: 5px;">$\begin{bmatrix} t \\ v \end{bmatrix} := \mathbf{find}(t, v)$</td> </tr> </table> </div>	Guess Values	$t := 3 \cdot s$	Constraints	$v := 50 \cdot \frac{mi}{hr}$	Solver	$g \cdot t = v$		$\frac{1}{2} \cdot g \cdot t^2 = h$		$\begin{bmatrix} t \\ v \end{bmatrix} := \mathbf{find}(t, v)$
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	$\frac{1}{2} \cdot g \cdot t^2 = h$											
	$\begin{bmatrix} t \\ v \end{bmatrix} := \mathbf{find}(t, v)$											
→	<CTRL> + .	<p>Evaluate symbolically.</p> <p>Rather than return the numerical result of an expression, it returns an answer in terms of its variables.</p> <div data-bbox="884 915 1841 1073" style="border: 1px solid black; padding: 10px; margin: 10px 0;"> $\int_a^b e^x \cdot \sin(x) dx \rightarrow e^a \cdot \left(\frac{\cos(a)}{2} - \frac{\sin(a)}{2} \right) - \frac{e^b \cdot \cos(b)}{2} + \frac{e^b \cdot \sin(b)}{2}$ </div>										
←	{	<p>Programming Definition.</p> <p>Inside a program, it serves the same function as the Definition operator.</p> <div data-bbox="884 1151 1841 1377" style="border: 1px solid black; padding: 10px; margin: 10px 0;"> <pre> TossWinnerWinsGame(Toss, Winner) := count ← 0 for i ∈ 1..number_games if Toss_i = Winner_i count ← count + 1 return count </pre> </div>										