

Mathomatic version 16.0.4 Quick Reference Card		
Command	Usage	Notes
approximate	approximate [equation-number-ranges]	"repeat approximate" approximates more, like calculate.
calculate	calculate ["factor"] [equation-number-range] [variable iterations]	"repeat calculate" repeatedly prompts for any input.
clear	clear [equation-number-ranges]	Tip: Use "clear all" to quickly restart Mathomatic.
code	code ["c" or "java" or "python" or "integer"] [equation-number-ranges]	Related commands: simplify, optimize, and variables
compare	compare ["symbolic" "approx"] equation-number ["with" equation-number]	This command may be preceded with "repeat" for full simplify.
copy	copy ["select"] [equation-number-ranges]	With select, the first copy is made the current equation.
derivative	derivative ["nosimplify"] variable or "all" [order]	Alternate name for this command: differentiate
display	display ["factor"] ["simple" or "mixed"] [equation-number-ranges]	Display expressions in pretty, 2D multi-line fraction format.
divide	divide [base-variable] [dividend divisor]	"repeat divide" repeatedly prompts for any input.
echo	echo [text]	This command may be preceded with "repeat".
edit	edit [file-name]	Editor name in EDITOR environment variable.
eliminate	eliminate variables or "all" ["using" equation-number]	This command may be preceded with "repeat".
extrema	extrema [variable] [order]	Helps with finding the minimums and maximums.
factor	factor ["number" [integers]] or ["power"] [equation-number-range] [variables]	Alternate name for this command: collect
for	for variable start end [step-size]	Same syntax as the sum and product commands.
fraction	fraction ["numerator" "denominator"] [equation-number-range]	This command may be preceded with "repeat".
help	help [topics or command-names]	Alternate name for this command: ?
imaginary	imaginary [variable]	Related command: real
integrate	integrate ["constant" or "definite"] variable [order [lower and upper-bounds]]	Alternate name for this command: integral
laplace	laplace ["inverse"] variable	This command only works with polynomials.
limit	limit variable expression	This limit command is experimental.
list	list ["export" or "maxima" or "gnuplot" or "hex"] [equation-number-ranges]	Options to export expressions to other math programs.
nintegrate	nintegrate ["trapezoid"] variable [partitions [lower and upper-bounds]]	This command cannot integrate over singularities.
optimize	optimize [equation-number-range]	Split up equations into smaller, more efficient equations.
pause	pause [text]	Display a line of text and wait for user to press the Enter key.
plot	plot [equation-number-ranges] [xyz-ranges] [gnuplot-expressions,]	Plots variable x; if expression contains y, do a 3D surface plot.
product	product variable start end [step-size]	Related command: sum
push	push [equation-number-ranges or text-to-push]	Available only if readline is enabled.
quit	quit [exit-value]	Alternate name for this command: exit
read	read [file-name or directory]	"repeat read" will read in a file repeatedly until failure.
real	real [variable]	Related command: imaginary
replace	replace [variables ["with" expression]]	This command may be preceded with "repeat".
roots	roots root real-part imaginary-part	"repeat roots" repeatedly prompts for any input.
save	save file-name	Related command: read
set	set [{"no"} option [value]] ...	"set" by itself will show all current option settings.
simplify	simplify ["sign" "symbolic" "quick[est]" "fraction"] [equation-number-ranges]	This command may be preceded with "repeat" for full simplify.
solve	solve ["verify" or "verifiable"] [equation-number-range] [{"for"} expression]	The verify options check all returned solutions for correctness.
sum	sum variable start end [step-size]	Related command: product
tally	tally ["average"] [equation-number-ranges]	Add entries, specified and prompted for, showing total.
taylor	taylor ["nosimplify"] variable order point	Compute the Taylor series expansion of the current expression.
unfactor	unfactor ["count" "fraction" "quick" "power"] [equation-number-range]	Alternate name for this command: expand
variables	variables ["c" "java" "integer" "count"] [equation-number-ranges]	Related command: code
version	version ["status"]	Display Mathomatic version, status, and compiler information.

Anything enclosed by straight brackets **[like this]** means it is optional and may be omitted.

For more information, visit www.mathomatic.org