

Mathquill commands

| command | output | command | output | command | output | command | output |
|-------------|------------------------------------|------------|-----------------------|---------------|------------------------|------------|------------------------|
| mathrm | a | mathit | a | mathbf | a | mathsf | a |
| mathtt | a | unit | a | solution | a | extramot | a |
| underline | \underline{a} | bar | \bar{a} | overline | \overline{a} | red | a |
| blue | a | green | a | violet | a | orange | a |
| _ | a | subscript | a | ^ | a | supscript | a |
| superscript | a | fraction | $\frac{a}{b}$ | cfrac | $\frac{a}{b}$ | dfrac | $\frac{a}{b}$ |
| frac | $\frac{a}{b}$ | over | $\frac{a}{b}$ | √ | \sqrt{a} | sqrt | \sqrt{a} |
| nthroot | $\sqrt[n]{b}$ | lbrace | $\{a\}$ | lang | $\langle a \rangle$ | langle | $\langle a \rangle$ |
| rbrace | $\{a\}$ | rang | $\langle a \rangle$ | rangle | $\langle a \rangle$ | lparen | (a) |
| lbracket | $[a]$ | lbrack | $[a]$ | rparen | (a) | rbracket | $[a]$ |
| rbrack | $[a]$ | rpipe | $ a $ | lpipe | $ a $ | abs | $ a $ |
| norm | $\ a\ $ | openBoth | $]a, b[$ | closed | $[a, b]$ | openLeft | $]a, b[$ |
| openRight | $[a, b[$ | openleft | (a, b) | openright | $[a, b)$ | openboth | (a, b) |
| Integral | $\int_a^b c \, d$ | Int | $\int_a^b c \, d$ | IntegralSubst | $\int_a^b \frac{c}{d}$ | Intsubst | $\int_a^b \frac{c}{d}$ |
| BigSum | $\sum_a^b c$ | Sum | $\sum_a^b c$ | BigProd | $\prod_a^b c$ | Prod | $\prod_a^b c$ |
| textmd | a | textup | a | textrm | a | textnormal | a |
| text | a | textsl | a | textit | a | emph | a |
| italics | a | italic | a | em | a | textbf | a |
| bold | a | strong | a | textsf | a | sf | a |
| texttt | a | tt | a | textsc | A | uppercase | A |
| lowercase | a | binomial | $\binom{a}{b}$ | binom | $\binom{a}{b}$ | choose | $\binom{a}{b}$ |
| cases | $\begin{cases} a \\ b \end{cases}$ | case | $\{a \, b\}$ | determ | $ a $ | matrix | (a) |
| vector | a | editable | \boxed{a} | f | f | prime | ' |
| @ | undefined | & | $\&$ | % | $\%$ | omega | ω |
| psi | ψ | chi | χ | tau | τ | sigma | σ |
| rho | ρ | xi | ξ | nu | ν | mu | μ |
| kappa | κ | iota | ι | theta | θ | eta | η |
| zeta | ζ | delta | δ | gamma | γ | beta | β |
| alpha | α | phi | ϕ | varphi | φ | phiv | φ |
| epsilon | ϵ | varepsilon | ε | epsiv | ε | varpi | ϖ |
| piv | ϖ | varsigma | ς | sigmav | ς | sigmaf | ς |
| thetasym | ϑ | vartheta | ϑ | thetav | ϑ | upsilon | υ |
| upsilon | υ | digamma | Υ | Gammad | Υ | gammad | Υ |
| varkappa | \varkappa | kappav | \varkappa | varrho | ϱ | rhov | ϱ |
| π | π | pi | π | lambda | λ | Upsih | Υ |

command output command output command output command output

| | | | | | | | |
|----------------|-----------------|-------------|-----------------|------------|-----------------|-------------|-----------------|
| upsih | Υ | Upsi | Υ | Upsilon | Υ | forall | \forall |
| Omega | Ω | Psi | Ψ | Phi | Φ | Sigma | Σ |
| Pi | Π | Xi | Ξ | Lambda | Λ | Theta | Θ |
| Delta | Δ | Gamma | Γ | + | + | - | - |
| - | - | plusminus | \pm | plusmn | \pm | pm | \pm |
| \pm | \pm | minusplus | \mp | mnplus | \mp | mp | \mp |
| cdot | \cdot | sdot | \cdot | = | = | lt | < |
| gt | > | otimes | \otimes | oplus | \oplus | equiv | \equiv |
| cong | \cong | sim | \sim | notin | \notin | times | \times |
| divides | \div | divide | \div | div | \div | \div | \div |
| neq | \neq | ne | \neq | \neq | \neq | lowast | * |
| loast | * | star | * | ast | * | therefore | \therefore |
| therefor | \therefore | because | \because | cuz | \because | propto | \propto |
| prop | \propto | approx | \approx | asymp | \approx | \approx | \approx |
| < | < | > | > | leq | \leq | le | \leq |
| \leq | \leq | geq | \geq | ge | \geq | \geq | \geq |
| in | \in | isin | \in | contains | \ni | ni | \ni |
| doesnotcontain | \notin | notcontains | \notin | niton | \notin | notni | \notin |
| subset | \subset | sub | \subset | superset | \supset | supset | \supset |
| sup | \supset | notsubset | $\not\subset$ | nsupset | $\not\subset$ | notsub | $\not\subset$ |
| nsub | $\not\subset$ | notsuperset | $\not\supset$ | nsuperset | $\not\supset$ | notsupset | $\not\supset$ |
| nsupset | $\not\supset$ | notsup | $\not\supset$ | nsup | $\not\supset$ | subseteq | \subseteq |
| subsete | \subseteq | subeq | \subseteq | sube | \subseteq | supseteq | \supseteq |
| supsete | \supseteq | supseteq | \supseteq | supsete | \supseteq | supeq | \supseteq |
| supe | \supseteq | notsubseteq | $\not\subseteq$ | notsubsete | $\not\subseteq$ | nsubseteq | $\not\subseteq$ |
| nsubsete | $\not\subseteq$ | notsubeq | $\not\subseteq$ | notsube | $\not\subseteq$ | nsubeq | $\not\subseteq$ |
| nsube | $\not\subseteq$ | notsupseteq | $\not\supseteq$ | notsupsete | $\not\supseteq$ | nsupseteq | $\not\supseteq$ |
| nsupsete | $\not\supseteq$ | notsupseteq | $\not\supseteq$ | notsupsete | $\not\supseteq$ | nsupseteq | $\not\supseteq$ |
| nsupsete | $\not\supseteq$ | notsupeq | $\not\supseteq$ | notsupe | $\not\supseteq$ | nsupeq | $\not\supseteq$ |
| nsupe | $\not\supseteq$ | summation | \sum | sum | \sum | Σ | Σ |
| product | \prod | prod | \prod | \prod | \prod | coproduct | \coprod |
| coprod | \coprod | integral | \int | int | \int | \int | \int |
| Naturals | \mathbb{N} | naturals | \mathbb{N} | N | \mathbb{N} | Probability | \mathbb{P} |
| probability | \mathbb{P} | Projective | \mathbb{P} | projective | \mathbb{P} | Primes | \mathbb{P} |
| primes | \mathbb{P} | P | \mathbb{P} | Integers | \mathbb{Z} | integers | \mathbb{Z} |

| command | output | command | output | command | output | command | output |
|----------------|-------------------|---------------------|-----------------------|------------------|---------------------|---------------------|--------------------|
| Z | \mathbb{Z} | Rationals | \mathbb{Q} | rationals | \mathbb{Q} | Q | \mathbb{Q} |
| Reals | \mathbb{R} | reals | \mathbb{R} | R | \mathbb{R} | ComplexPlane | \mathbb{C} |
| Complexplane | \mathbb{C} | complexplane | \mathbb{C} | Complexes | \mathbb{C} | complexes | \mathbb{C} |
| Complex | \mathbb{C} | complex | \mathbb{C} | C | \mathbb{C} | Quaternions | \mathbb{H} |
| quaternions | \mathbb{H} | Hamiltonian | \mathbb{H} | H | \mathbb{H} | NN | \mathbb{N} |
| PP | \mathbb{P} | ZZ | \mathbb{Z} | QQ | \mathbb{Q} | RR | \mathbb{R} |
| CC | \mathbb{C} | HH | \mathbb{H} | AA | \mathbb{A} | BB | \mathbb{B} |
| DD | \mathbb{D} | EE | \mathbb{E} | FF | \mathbb{F} | GG | \mathbb{G} |
| II | \mathbb{I} | JJ | \mathbb{J} | KK | \mathbb{K} | LL | \mathbb{L} |
| MM | \mathbb{M} | OO | \mathbb{O} | SS | \mathbb{S} | TT | \mathbb{T} |
| UU | \mathbb{U} | VV | \mathbb{V} | XX | \mathbb{X} | YY | \mathbb{Y} |
| emsp | | quad | | qqquad | | , | , |
| : | : | ; | ; | diamond | \diamond | bigtriangleup | \triangle |
| ominus | \ominus | uplus | \uplus | bigtriangledown | ∇ | sqcap | \sqcap |
| triangleleft | \triangleleft | sqcup | \sqcup | triangleright | \triangleright | odot | \odot |
| bigcirc | \bigcirc | dagger | \dagger | ddagger | \ddagger | wr | \wr |
| amalg | \sqcup | models | \models | prec | $<$ | succ | $>$ |
| preceq | \preceq | succeq | \succeq | simeq | \simeq | mid | $ $ |
| ll | \ll | gg | \gg | parallel | \parallel | nparallel | \nparallel |
| bowtie | \bowtie | sqsubset | \sqsubset | sqsupset | \sqsupset | smile | \smile |
| sqsubsetq | \sqsubseteq | sqsupseteq | \sqsupseteq | doteq | \doteq | frown | \frown |
| vdash | \vdash | dashv | \dashv | Vdash | \Vdash | nmid | \nmid |
| square | \square | longleftarrow | \longleftarrow | longrightarrow | \longrightarrow | Longleftarrow | \Lleftarrow |
| Longrightarrow | \Rightarrow | longleftrightharrow | \longleftrightarrow | updownarrow | \updownarrow | Longleftrightharrow | \Lleftrightarrow |
| Updownarrow | \Updownarrow | mapsto | \mapsto | nearrow | \nearrow | hookleftarrow | \hookleftarrow |
| hookrightarrow | \hookrightarrow | searrow | \searrow | leftharpoonup | \leftharpoonup | rightharpoonup | \rightharpoonup |
| swarrow | \swarrow | leftharpoondown | \leftharpoondown | rightharpoondown | \rightharpoondown | nwarrow | \nwarrow |
| ldots | \dots | cdots | \cdots | vdots | \vdots | ddots | \ddots |
| surd | $\sqrt{\quad}$ | triangle | \triangle | ell | ℓ | top | \top |
| flat | \flat | natural | \natural | sharp | \sharp | wp | \wp |
| bot | \perp | clubsuit | \clubsuit | diamondsuit | \diamondsuit | heartsuit | \heartsuit |
| spadesuit | \spadesuit | oint | \oint | bigcap | \bigcap | bigcup | \bigcup |
| bigsqcup | \sqcup | bigvee | \vee | bigwedge | \bigwedge | bigodot | \odot |
| bigotimes | \otimes | bigoplus | \oplus | biguplus | \uplus | lfloor | \lfloor |
| rfloor | \rfloor | lceil | \lceil | rceil | \rceil | slash | $/$ |

| command | output | command | output | command | output | command | output |
|----------------|--------|-----------------|---------|---------------|--------|----------------|---------|
| opencurlybrace | { | closecurlybrace | } | caret | ^ | underscore | _ |
| backslash | \ | vert | | perpendicular | ⊥ | perp | ⊥ |
| del | ∇ | nabla | ∇ | hbar | ℏ | angstrom | Å |
| Angstrom | Å | circle | ◦ | circ | ◦ | ring | ◦ |
| bullet | • | bull | • | smallsetminus | \ | setminus | \ |
| neg | ¬ | ¬ | ¬ | not | ¬ | hellipsis | ... |
| ellipsis | ... | hellip | ... | ellip | ... | dots | ... |
| ... | ... | downarrow | ↓ | dnarrow | ↓ | dnarr | ↓ |
| darr | ↓ | converges | ↓ | Downarrow | ⇓ | dnArrow | ⇓ |
| dnArr | ⇓ | dArr | ⇓ | uparrow | ↑ | uarr | ↑ |
| diverges | ↑ | Uparrow | ↑ | uArr | ↑ | to | → |
| rightarrow | → | rarr | → | implies | ⇒ | Rightarrow | ⇒ |
| rArr | ⇒ | gets | ← | leftarrow | ← | larr | ← |
| impliedby | ⇐ | Leftarrow | ⇐ | lArr | ⇐ | leftrightarrow | ↔ |
| larr | ↔ | harr | ↔ | iff | ⇔ | Leftrightarrow | ⇔ |
| lRarr | ⇔ | hArr | ⇔ | real | ℜ | Real | ℜ |
| Re | ℜ | Imaginary | ℑ | imaginary | ℑ | imagin | ℑ |
| image | ℑ | imag | ℑ | Im | ℑ | partial | ∂ |
| part | ∂ | infinity | ∞ | infty | ∞ | infin | ∞ |
| inf | ∞ | alephsym | ℵ | aleph | ℵ | alefsym | ℵ |
| alef | ℵ | exists | ∃ | exist | ∃ | xists | ∃ |
| xist | ∃ | wedge | ∧ | land | ∧ | and | ∧ |
| vee | ∨ | lor | ∨ | or | ∨ | varnothing | ∅ |
| nothing | ∅ | Oslash | ∅ | oslash | ∅ | emptyset | ∅ |
| empty | ∅ | O | ∅ | o | ∅ | union | ∪ |
| cup | ∪ | intersection | ∩ | intersect | ∩ | cap | ∩ |
| degree | ° | deg | ° | angle | ∠ | ang | ∠ |
| lim | lim | hcf | hcf | gcf | gcf | gcd | gcd |
| lcm | lcm | mod | mod | max | max | min | min |
| dim | dim | det | det | proj | proj | span | span |
| log | log | lg | lg | ln | ln | arcsinh | arcsinh |
| asinh | asinh | arcsin | arcsin | asin | asin | sinh | sinh |
| sin | sin | arccosh | arccosh | acosh | acosh | arccos | arccos |
| acos | acos | cosh | cosh | cos | cos | arctanh | arctanh |
| atanh | atanh | arctan | arctan | atan | atan | tanh | tanh |

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| | | | | | | | |
|---------|---------|----------|----------|--------|--------|-----------|-----------|
| tan | tan | arcsech | arcsech | asech | asech | arcsec | arcsec |
| asec | asec | sech | sech | sec | sec | arccosech | arccosech |
| acosech | acosech | arccosec | arccosec | acosec | acosec | cosech | cosech |
| cosec | cosec | arcsch | arcsch | acsch | acsch | arccsc | arccsc |
| acsc | acsc | csch | csch | csc | csc | arccotanh | arccotanh |
| acotanh | acotanh | arccotan | arccotan | acotan | acotan | cotanh | cotanh |
| cotan | cotan | arccoath | arccoath | acoath | acoath | arccot | arccot |
| acot | acot | coth | coth | cot | cot | | |