

Typing answers to quiz questions

Example

Suggested syntax

Numbers

fractions

$$\frac{3}{7}$$

`3/7`

$$-\frac{1}{4}$$

`-1/4`

$$\frac{13}{3}$$

`13/3`

powers and surds

$$2^4$$

`2^4` or `16`

$$2^{-3}$$

`2^(-3)` or `1/(2^3)` or `1/8`

$$\left(\frac{2}{3}\right)^3$$

`(2/3)^3` or `8/27` or `(2^3)/(3^3)`

$$3^{1/5}$$

`3^(1/5)` or `root(3,5)`

$$\sqrt{5}$$

`sqrt(5)` or `5^(1/2)`

$$\sqrt[3]{5}$$

`5^(1/3)` or `root(5,3)`

Example	Suggested syntax
<i>logarithms</i>	
$\log_3 5$	<code>log(5,3)</code>
$\log_5 3$	<code>log(3,5)</code>
$\ln 6$	<code>ln(6)</code>
Algebraic expressions	
<i>addition and multiplication</i>	
$5x$	<code>5*x</code> or <code>x*5</code> (Note: <code>5x</code> will also work, but <code>x5</code> will not)
$x + y$	<code>x+y</code> or <code>y+x</code>
$5x + 3$	<code>5*x+3</code> or <code>3+5*x</code> or <code>3+x*5</code>
$x(2x + 3)$	<code>x*(2*x+3)</code> (Note: <code>x*(2x+3)</code> will also work but <code>x(2x+3)</code> will not)
<i>powers</i>	
x^2	<code>x^2</code>
x^{-3}	<code>x^(-3)</code> or <code>1/(x^3)</code> (Note: <code>x^-3</code> will not work)
$x^{1/3}$	<code>x^(1/3)</code> (Note: <code>x^1/3</code> will not work)

Example	Suggested syntax
$3x^2 + 2x^{-5} - \frac{1}{3}x^{1/3}$	<code>3*x^2+2*x^(-5)-(1/3)*x^(1/3)</code> (Note: <code>3x^2+2x^(-5)-(1/3)x^(1/3)</code> will also work)
$x^2 + 2xy + y^2$	<code>x^2+2*x*y+y^2</code> (Note: <code>x^2+2x*y+y^2</code> will also work but <code>x^2+2xy+y^2</code> will not)
$(x^2 + 3x - 2)^{1/3}$	<code>(x^2+3*x-2)^(1/3)</code>
2^{x^2+3}	<code>2^(x^2+3)</code>
$(-3)^{x^2+1}$	<code>(-3)^(x^2+1)</code> (Note: <code>-3^(x^2+1)</code> will not work)
<i>algebraic fractions</i>	
$\frac{y^2+7y-3}{(2y+1)^3}$	<code>(y^2+7*y-3)/((2*y+1)^3)</code>
$\frac{x^2+1}{y-1}$	<code>(x^2+1)/(y-1)</code>
<i>exponentials and logarithms</i>	
e^x	<code>e^x</code> or <code>exp(x)</code>
e^{x^2+3x-1}	<code>e^(x^2+3*x-1)</code> or <code>exp(x^2+3*x-1)</code>
$\ln x$	<code>ln(x)</code>
$\ln(3x^2 - 1)$	<code>ln(3x^2-1)</code>
$\log_2(x^3 - 3)$	<code>log(x^3-3,2)</code> or <code>ln(x^3-3)/ln(2)</code>

Example

Suggested syntax

Equations and inequalities

equations

$$x^2 - 3x + 2 = 0$$

$$x^2-3*x+2=0$$

$$e^{(x^2 + 3)} = 1$$

$$e^{(x^2+3)}=1 \text{ or } \exp(x^2+3)=1$$

inequalities

$$x > 5$$

$$x>5$$

$$x \leq 13$$

$$x<=13$$

$$3x + 5 \geq 0$$

$$3*x+5>=0$$

sets specified with inequalities

$$5 > x > 1 \text{ or } x \in (1, 5)$$

$$5>x>1 \text{ or } 1<x<5 \text{ or } x<5 \text{ and } x>1$$

$$2 \leq x < 7 \text{ or } x \in [2, 7)$$

$$2<=x<7 \text{ or } 7>x>=2 \text{ or } 2<=x \text{ and } x<7$$

$$x \in (-\infty, 3] \cup (7, \infty)$$

$$x<=-3 \text{ or } x>7$$
