

LaTeX en GeoGebra

The screenshot shows the GeoGebra interface with the 'Vista Gráfica 2' view active. The main workspace displays several LaTeX-rendered mathematical objects:

- A table with columns x , $f(x)$, $g(x)$, $h(x)$, and $1/2$. The rows contain numerical values: (1, 6, 3, 2, $1/2$), (5, 8, 4, 1, a/b), (7, 0, 9, 3, $1/3$), and (2, 4, 3, 5, $2/4$).
- A table with columns x , -2 , -1 , 0 , 1 , 2 and a row $f(x)$ with values 4, 1, 0, 1, 4.
- A piecewise function definition:

$$y = \begin{cases} x^2 + 2x & \text{si } x < 0, \\ x^3 & \text{si } 0 \leq x < 1, \\ x^2 + x & \text{si } 1 \leq x < 2, \\ x^3 - x^2 & \text{si } x \geq 2. \end{cases}$$
- An augmented matrix:

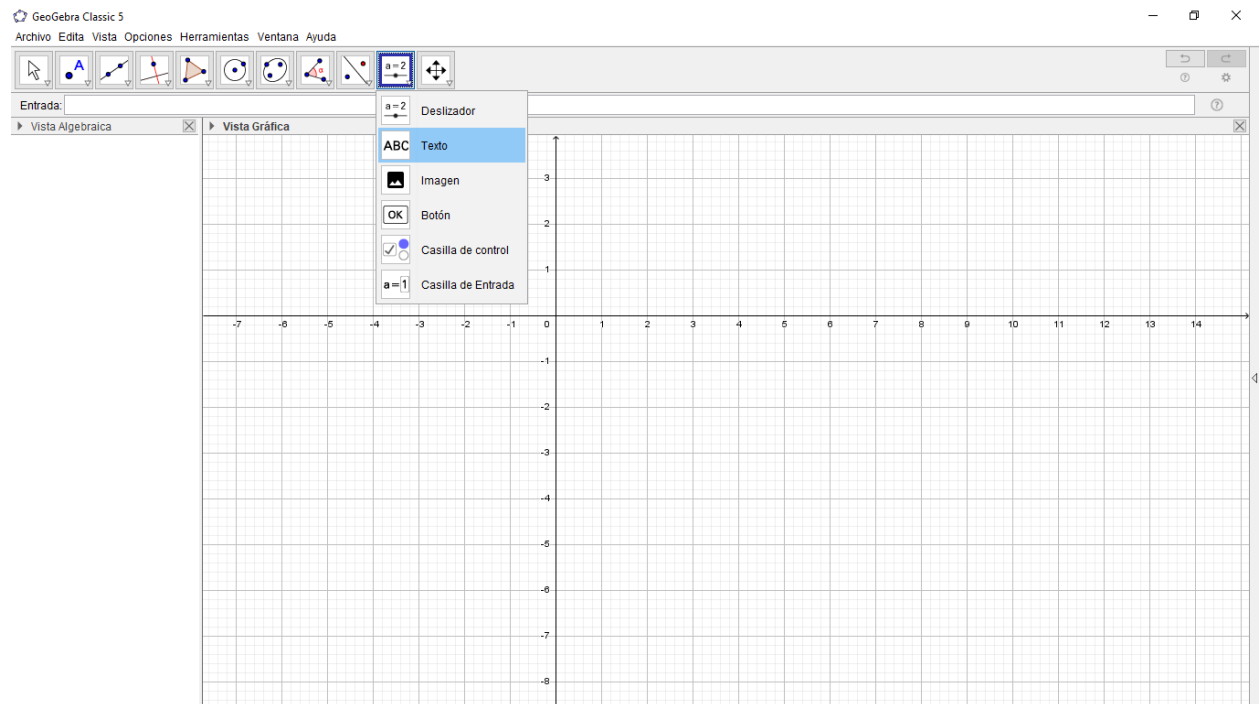
$$\begin{pmatrix} 1 & 0 & \cdots & 0 \\ 0 & 1 & \cdots & 0 \\ \vdots & \vdots & \ddots & \vdots \\ 0 & 0 & \cdots & 1 \end{pmatrix}$$
- The word "Geogebra" rendered in its characteristic font multiple times.
- A boxed equation: $u = 1$.
- A boxed system of linear equations:

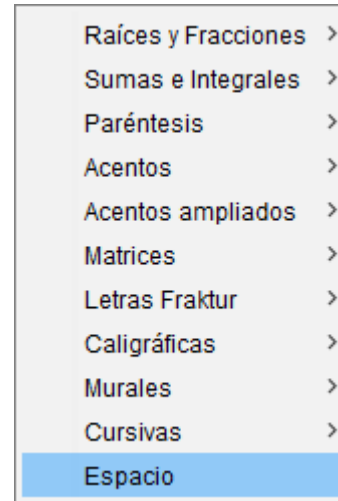
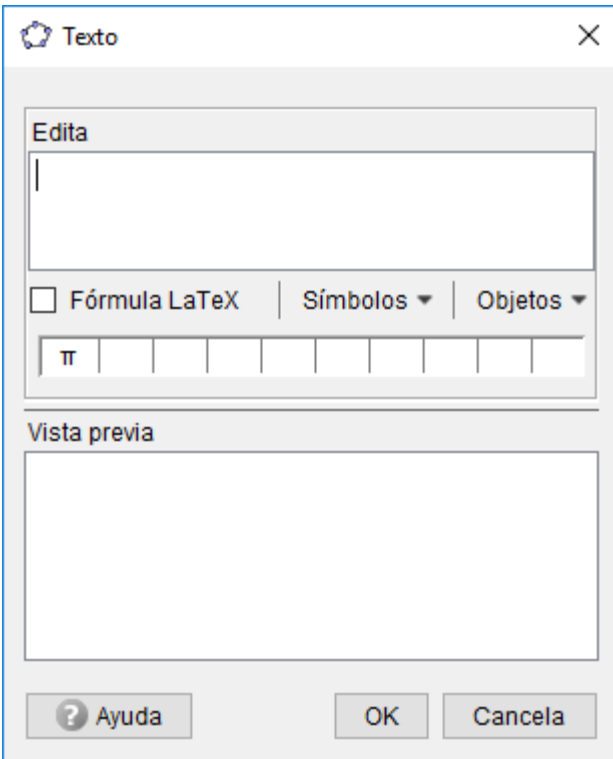
$$\begin{cases} x - y + z - t = 0 \\ 2x + 2y + 2z + 3t = 0 \end{cases}$$
- Two small tables:

a	b	a√b
0	0	0
0	1	1
1	0	1
1	1	1

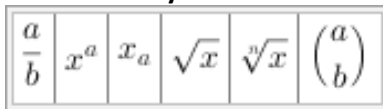
a	b	a^b
0	0	0
0	1	0
1	0	0
1	1	1
- A large augmented matrix:

$$\left(\begin{array}{ccc|ccc} 1 & 2 & 3 & 1 & 0 & 0 \\ 4 & 5 & 6 & 1 & 0 & 0 \\ 7 & 8 & 9 & 0 & 0 & 1 \end{array} \right)$$



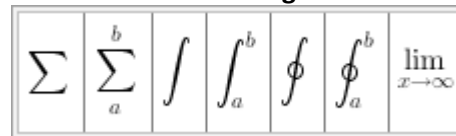


Raíces y Fracciones



$\frac{a}{b}$
 x^a
 x_a
 \sqrt{x}
 $\sqrt[n]{x}$
 $\binom{a}{b}$

Sumas e Integrales



\sum
 \sum_a^b
 \int
 \int_a^b
 \oiint
 \oiint_a^b
 $\lim_{x \rightarrow \infty}$

Paréntesis

$()$	$[]$	$\{\}$	\parallel	\equiv	$\langle \rangle$	$\lceil \rceil$
$\lfloor \rfloor$	\cup	\cap	\boxed{xx}	\mathbb{xx}	$\boxed{\boxed{xx}}$	\ovalbox{xx}

<code>\left(</code>	<code>\right)</code>	<code>\left\lfloor</code>	<code>\right\rfloor</code>
<code>\left[</code>	<code>\right]</code>	<code>\left\lgroup</code>	<code>\right\rgroup</code>
<code>\left\{</code>	<code>\right\}</code>	<code>\left\lmoustache</code>	<code>\right\rmoustache</code>
<code>\left </code>	<code>\right </code>	<code>\shadowbox{xx}</code>	
<code>\left\Vert</code>	<code>\right\Vert</code>	<code>\fbox{xx}</code>	
<code>\left\langle</code>	<code>\right\rangle</code>	<code>\doublebox{xx}</code>	
<code>\left\lceil</code>	<code>\right\rceil</code>	<code>\ovalbox{xx}</code>	

Acentos

\acute{x}	\grave{x}	\tilde{x}	\bar{x}	\check{x}	\grave{x}
\hat{x}	\vec{x}	\dot{x}	\ddot{x}	\mathring{x}	\mathring{x}

<code>\acute{x}</code>	<code>\hat{x}</code>
<code>\grave{x}</code>	<code>\vec{x}</code>
<code>\tilde{x}</code>	<code>\dot{x}</code>
<code>\bar{x}</code>	<code>\ddot{x}</code>
<code>\breve{x}</code>	<code>\mathring{x}</code>
<code>\check{x}</code>	<code>\mathring{x}</code>

Acentos ampliados

\overline{xx}	\underline{xx}	\overbrace{xx}	\underbrace{xx}	\overleftarrow{xx}	\overrightarrow{xx}
\overleftrightarrow{xx}	\underleftarrow{xx}	\underrightarrow{xx}	\overleftrightarrow{xx}	\widehat{xx}	\widetilde{xx}

<code>\overline{xx}</code>	<code>\overrightarrow{xx}</code>
<code>\underline{xx}</code>	<code>\underrightarrow{xx}</code>
<code>\overbrace{xx}</code>	<code>\overleftarrow{xx}</code>
<code>\underbrace{xx}</code>	<code>\underleftarrow{xx}</code>
<code>\overleftarrow{xx}</code>	<code>\widehat{xx}</code>
<code>\underleftarrow{xx}</code>	<code>\widetilde{xx}</code>

Matrices

a	b	c	a	b	c	a	b	c
a	b	c	a	b	c	d	e	f
a	b	c	a	b	c	d	e	f
a	b	c	a	b	c	d	e	f
a	b	c	a	b	c	d	e	f
a	b	c	a	b	c	d	e	f
a	b	c	a	b	c	d	e	f
a	b	c	a	b	c	d	e	f
a	b	c	a	b	c	d	e	f
a	b	c	a	b	c	d	e	f
a	b	c	a	b	c	d	e	f
a	b	c	a	b	c	d	e	f
a	b	c	a	b	c	d	e	f
a	b	c	a	b	c	d	e	f
a	b	c	a	b	c	d	e	f
a	b	c	a	b	c	d	e	f

```
\begin{array}{c}
a & b & c \\
\end{array}
```

```
\begin{array}{c}
a \\ b \\ c
\end{array}
```

```
\begin{array}{c}
a & b \\
c & d
\end{array}
```

```
\begin{array}{c}
a & b & c \\
d & e & f \\
g & h & i
\end{array}
```

Letras Fraktur

A	B	C	D	E	F	G	H	I	J	K	L	M
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
a	b	c	d	e	f	g	h	i	j	k	l	m
n	o	p	q	r	s	t	u	v	w	x	y	z

```
\mathfrak{A}
\mathfrak{B}
\mathfrak{C}
\mathfrak{D}
\mathfrak{E}
\mathfrak{F}
\mathfrak{G}
\mathfrak{H}
\mathfrak{I}
\mathfrak{J}
\mathfrak{K}
\mathfrak{L}
\mathfrak{M}
```

```
\mathfrak{N}
\mathfrak{O}
\mathfrak{P}
\mathfrak{Q}
\mathfrak{R}
\mathfrak{S}
\mathfrak{T}
\mathfrak{U}
\mathfrak{V}
\mathfrak{W}
\mathfrak{X}
\mathfrak{Y}
\mathfrak{Z}
```

```
\mathfrak{a}
\mathfrak{b}
\mathfrak{c}
\mathfrak{d}
\mathfrak{e}
\mathfrak{f}
\mathfrak{g}
\mathfrak{h}
\mathfrak{i}
\mathfrak{j}
\mathfrak{k}
\mathfrak{l}
\mathfrak{m}
```

```
\mathfrak{n}
\mathfrak{o}
\mathfrak{p}
\mathfrak{q}
\mathfrak{r}
\mathfrak{s}
\mathfrak{t}
\mathfrak{u}
\mathfrak{v}
\mathfrak{w}
\mathfrak{x}
\mathfrak{y}
\mathfrak{z}
```

Caligráficas

A	B	C	D	E	F	G	H	I	J	K	L	M
N	O	P	Q	R	S	T	U	V	W	X	Y	Z

$\backslash\mathrm{cal}\{A\}$	$\backslash\mathrm{cal}\{N\}$
$\backslash\mathrm{cal}\{B\}$	$\backslash\mathrm{cal}\{O\}$
$\backslash\mathrm{cal}\{C\}$	$\backslash\mathrm{cal}\{P\}$
$\backslash\mathrm{cal}\{D\}$	$\backslash\mathrm{cal}\{Q\}$
$\backslash\mathrm{cal}\{E\}$	$\backslash\mathrm{cal}\{R\}$
$\backslash\mathrm{cal}\{F\}$	$\backslash\mathrm{cal}\{S\}$
$\backslash\mathrm{cal}\{G\}$	$\backslash\mathrm{cal}\{T\}$
$\backslash\mathrm{cal}\{H\}$	$\backslash\mathrm{cal}\{U\}$
$\backslash\mathrm{cal}\{I\}$	$\backslash\mathrm{cal}\{V\}$
$\backslash\mathrm{cal}\{J\}$	$\backslash\mathrm{cal}\{W\}$
$\backslash\mathrm{cal}\{K\}$	$\backslash\mathrm{cal}\{X\}$
$\backslash\mathrm{cal}\{L\}$	$\backslash\mathrm{cal}\{Y\}$
$\backslash\mathrm{cal}\{M\}$	$\backslash\mathrm{cal}\{Z\}$

Murales

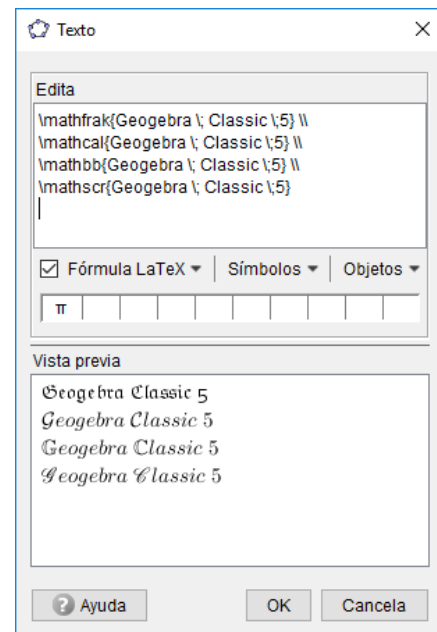
A	B	C	D	E	F	G	H	I	J	K	L	M
N	O	P	Q	R	S	T	U	V	W	X	Y	Z

$\backslash\mathrm{mathbb}\{A\}$	$\backslash\mathrm{mathbb}\{N\}$
$\backslash\mathrm{mathbb}\{B\}$	$\backslash\mathrm{mathbb}\{O\}$
$\backslash\mathrm{mathbb}\{C\}$	$\backslash\mathrm{mathbb}\{P\}$
$\backslash\mathrm{mathbb}\{D\}$	$\backslash\mathrm{mathbb}\{Q\}$
$\backslash\mathrm{mathbb}\{E\}$	$\backslash\mathrm{mathbb}\{R\}$
$\backslash\mathrm{mathbb}\{F\}$	$\backslash\mathrm{mathbb}\{S\}$
$\backslash\mathrm{mathbb}\{G\}$	$\backslash\mathrm{mathbb}\{T\}$
$\backslash\mathrm{mathbb}\{H\}$	$\backslash\mathrm{mathbb}\{U\}$
$\backslash\mathrm{mathbb}\{I\}$	$\backslash\mathrm{mathbb}\{V\}$
$\backslash\mathrm{mathbb}\{J\}$	$\backslash\mathrm{mathbb}\{W\}$
$\backslash\mathrm{mathbb}\{K\}$	$\backslash\mathrm{mathbb}\{X\}$
$\backslash\mathrm{mathbb}\{L\}$	$\backslash\mathrm{mathbb}\{Y\}$
$\backslash\mathrm{mathbb}\{M\}$	$\backslash\mathrm{mathbb}\{Z\}$

Cursiva

A	B	C	D	E	F	G	H	I	J	K	L	M
N	O	P	Q	R	S	T	U	V	W	X	Y	Z

$\backslash\mathrm{mathbb}\{A\}$	$\backslash\mathrm{mathscr}\{N\}$
$\backslash\mathrm{mathscr}\{B\}$	$\backslash\mathrm{mathscr}\{O\}$
$\backslash\mathrm{mathscr}\{C\}$	$\backslash\mathrm{mathscr}\{P\}$
$\backslash\mathrm{mathscr}\{D\}$	$\backslash\mathrm{mathscr}\{Q\}$
$\backslash\mathrm{mathscr}\{E\}$	$\backslash\mathrm{mathscr}\{R\}$
$\backslash\mathrm{mathscr}\{F\}$	$\backslash\mathrm{mathscr}\{S\}$
$\backslash\mathrm{mathscr}\{G\}$	$\backslash\mathrm{mathscr}\{T\}$
$\backslash\mathrm{mathscr}\{H\}$	$\backslash\mathrm{mathscr}\{U\}$
$\backslash\mathrm{mathscr}\{I\}$	$\backslash\mathrm{mathscr}\{V\}$
$\backslash\mathrm{mathscr}\{J\}$	$\backslash\mathrm{mathscr}\{W\}$
$\backslash\mathrm{mathscr}\{K\}$	$\backslash\mathrm{mathscr}\{X\}$
$\backslash\mathrm{mathscr}\{L\}$	$\backslash\mathrm{mathscr}\{Y\}$
$\backslash\mathrm{mathscr}\{M\}$	$\backslash\mathrm{mathscr}\{Z\}$



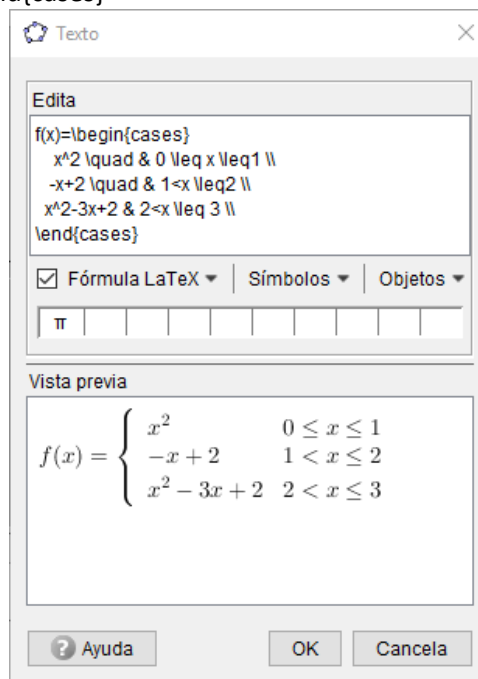
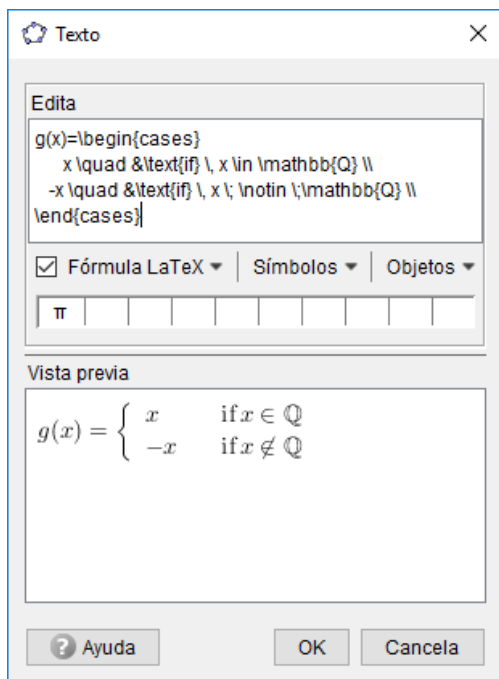
Espacio (Un espacio) $\backslash;$

Múltiples Espacios $\backslash\mathrm{hspace}\{1.0\mathrm{cm}\}$

Funciones Multipartes, por Partes, por Tramos, por Pedazos o por Intervalos

```
g(x)=\begin{cases}
x \quad & \text{if } \, x \in \mathbb{Q} \\
-x \quad & \text{if } \, x \notin \mathbb{Q} \\
\end{cases}
```

```
f(x)=\begin{cases}
x^2 \quad & 0 \leq x \leq 1 \\
-x+2 \quad & 1 < x \leq 2 \\
x^2-3x+2 \quad & 2 < x \leq 3 \\
\end{cases}
```



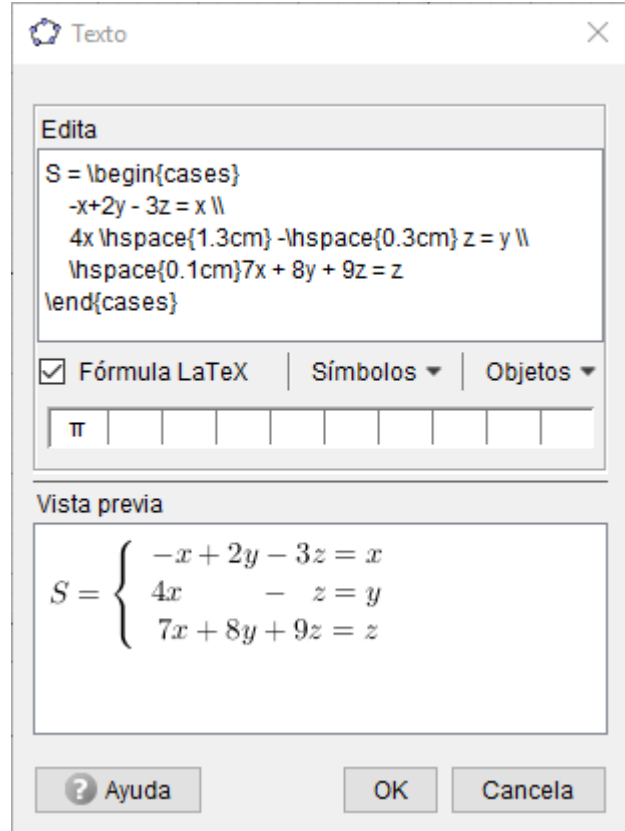
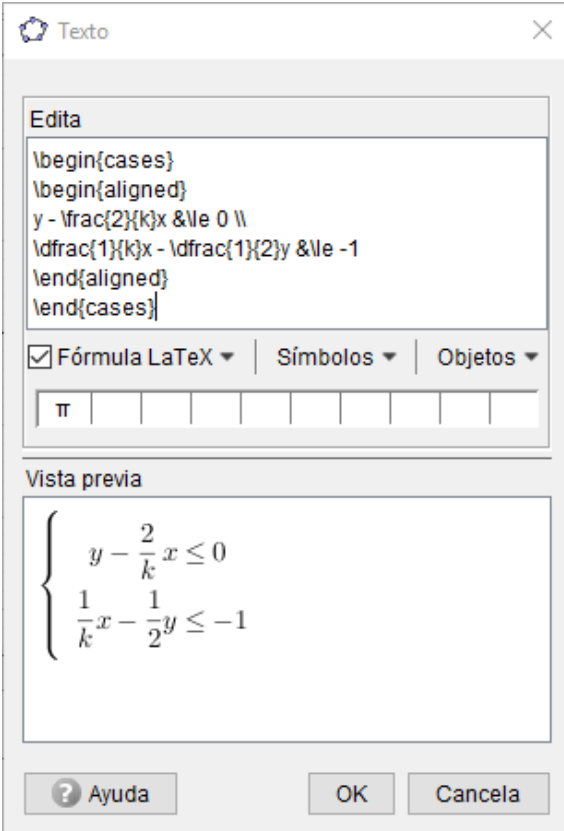
Símbolos Relacionales

\leq	<code>\leq</code>	\approx	<code>\simeq</code>	\subseteq	<code>\subseteq</code>	\doteq	<code>\doteq</code>
\geq	<code>\geq</code>	$ $	<code>\mid</code>	\supseteq	<code>\supseteq</code>	\frown	<code>\frown</code>
\equiv	<code>\equiv</code>	\ll	<code>\ll</code>	\cong	<code>\cong</code>	\in	<code>\in</code>
\models	<code>\models</code>	\gg	<code>\gg</code>	\Join	<code>\Join</code>	\ni	<code>\ni</code>
\prec	<code>\prec</code>	\asymp	<code>\asymp</code>	\sqsubset	<code>\sqsubset</code>	\propto	<code>\propto</code>
\succ	<code>\succ</code>	\parallel	<code>\parallel</code>	\sqsupset	<code>\sqsupset</code>	$=$	<code>=</code>
\sim	<code>\sim</code>	\subset	<code>\subset</code>	\neq	<code>\neq</code>	\vdash	<code>\vdash</code>
\perp	<code>\perp</code>	\supset	<code>\supset</code>	\smile	<code>\smile</code>	\dashv	<code>\dashv</code>
\preceq	<code>\preceq</code>	\approx	<code>\approx</code>	\sqsubseteq	<code>\sqsubseteq</code>	$<$	<code><</code>
\succeq	<code>\succeq</code>	\bowtie	<code>\bowtie</code>	\sqsupseteq	<code>\sqsupseteq</code>	$>$	<code>></code>

Sistemas de Ecuaciones

```
\begin{cases}
\begin{aligned}
y - \frac{2}{k}x &\le 0 \\
\frac{1}{k}x - \frac{1}{2}y &\le -1
\end{aligned}
\end{cases}
```

```
S=\begin{cases}
-x+2x-3z =x \\
4x \hspace{1.3cm} -\hspace{0.3cm} z = y \\
\hspace{0.1cm} 7x+8y+9z=z
\end{cases}
```



Letras Griegas y Hebreas

α	<code>\alpha</code>	λ	<code>\lambda</code>	τ	<code>\tau</code>	Π	<code>\Pi</code>
β	<code>\beta</code>	μ	<code>\mu</code>	θ	<code>\theta</code>	Ψ	<code>\Psi</code>
χ	<code>\chi</code>	ν	<code>\nu</code>	υ	<code>\upsilon</code>	Σ	<code>\Sigma</code>
δ	<code>\delta</code>	ω	<code>\omega</code>	ξ	<code>\xi</code>	Θ	<code>\Theta</code>
ϵ	<code>\epsilon</code>	ϕ	<code>\phi</code>	ζ	<code>\zeta</code>	Υ	<code>\Upsilon</code>
ϵ	<code>\varepsilon</code>	φ	<code>\varphi</code>	Δ	<code>\Delta</code>	Ξ	<code>\Xi</code>
η	<code>\eta</code>	π	<code>\pi</code>	Γ	<code>\Gamma</code>	\aleph	<code>\aleph</code>
γ	<code>\gamma</code>	ψ	<code>\psi</code>	Λ	<code>\Lambda</code>	\beth	<code>\beth</code>
ι	<code>\iota</code>	ρ	<code>\rho</code>	Ω	<code>\Omega</code>	\daleth	<code>\daleth</code>
κ	<code>\kappa</code>	σ	<code>\sigma</code>	Φ	<code>\Phi</code>	\beth	<code>\beth</code>

α	β	γ	δ	ϵ	ζ	η	θ	κ	λ	μ
ξ	ρ	σ	τ	φ	ϕ	χ	ψ	ω	Γ	Δ
Θ	Π	Σ	Φ	Ω	∞	\otimes	$\underline{\neq}$	\neq	\leq	\geq
\neg	\wedge	\vee	\rightarrow	\parallel	\perp	\in	\subseteq	\subset	\simeq	\approx
\supset	\circ	$\acute{\iota}$	π	e		\ll	\gg	€		

\times	\div	$-$	\cdot	\circ	\bullet	\pm	\mp
$\sqrt{\quad}$	\neq	\leq	\geq	\approx	\sim	\dagger	\equiv
$\#$	∞	\angle	\sphericalangle	\rightarrow	\perp	\parallel	\nparallel
\oplus	\ominus	\otimes	\oslash	\odot			

Símbolos ▾

- Básico >
- $\times \div -$ >
- ΑΒΓ >
- $\Sigma \vartheta \nabla$ >
- $\emptyset \cap \cup$ >
- $\forall \exists \beta$ >
- 0^{12} >
- $\leftarrow \uparrow \rightarrow$ >
- $\leftrightarrow \rightrightarrows$ >
- $\bigcirc \star \triangle$ >
- $\clubsuit \heartsuit \diamond$ >
- $\text{€} \text{£} \text{€}$ >
- $\leftarrow \rightarrow \Rightarrow$ >

A	B	Γ	Δ	E	Z	H	Θ
I	K	Λ	M	N	Ξ	O	Π
P	Σ	T	Υ	Φ	X	Ψ	Ω
α	β	γ	δ	ϵ	ζ	η	θ
ι	κ	λ	μ	ν	ξ	\omicron	ρ
σ	τ	υ	ϕ	χ	ψ	ω	φ
ϵ	ϑ	ς					

Σ	ϑ	∇	Δ	Π	Υ	Φ	Ψ
Υ	ϕ	∞					

\emptyset	\cap	\cup	\in	\notin	\subset	\supset	\subseteq
\neq	\supset	ϑ	\equiv	\neq	\subset	\supset	\supset
\mathbb{R}	\mathbb{Z}	\mathbb{J}	\mathbb{X}	\mathbb{P}	\mathbb{N}		

∇	\exists	β	$\underline{\neq}$	\equiv	\neq	\wedge	\vee
\oplus	\times	\simeq	τ	\perp	\subset	\therefore	\therefore

\leftarrow	\uparrow	\rightarrow	\downarrow	\leftrightarrow	\updownarrow	\nearrow	\nwarrow
\searrow	\swarrow	\leftarrow	\uparrow	\Rightarrow	\downarrow	\Leftrightarrow	\Leftrightarrow

0	1	2	3	4	5	6	7	8	9
+	-	=	()	n	o			
0	1	2	3	4	5	6	7	8	9
+	-	=	()					

\leftarrow	\hookrightarrow	\leftrightarrow	\rightleftarrows	\rightleftarrows	\rightleftarrows	\rightleftarrows	\rightleftarrows
\rightarrow	\leftarrow	\rightarrow	\rightarrow	\leftrightarrow	\leftrightarrow	\rightarrow	\rightarrow
\curvearrowright	\curvearrowleft	\leftarrow	\rightarrow	\uparrow	\downarrow	\rightarrow	\rightarrow
\downarrow	\downarrow	\neq	\neq	\neq	\neq	\neq	\neq
\leftarrow	\rightarrow	\neq	\neq	\neq	\neq	\neq	\neq

Símbolos ▾

- Básico >
- $\times \div -$ >
- ΑΒΓ >
- $\Sigma \vartheta \nabla$ >
- $\emptyset \cap \cup$ >
- $\forall \exists \beta$ >
- 0^{12} >
- $\leftarrow \uparrow \rightarrow$ >
- $\leftrightarrow \rightrightarrows$ >
- $\bigcirc \star \triangle$ >
- $\clubsuit \heartsuit \diamond$ >
- $\text{€} \text{£} \text{€}$ >
- $\leftarrow \rightarrow \Rightarrow$ >

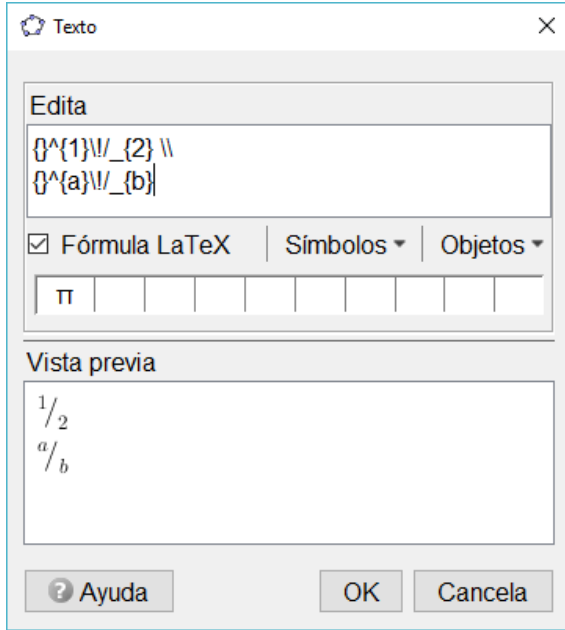
\bigcirc	\star	\triangle	\blacktriangle	\blacktriangle	\blacktriangleright	\blacktriangleright	∇
\blacktriangledown	\blacktriangledown	\blacktriangleleft	\blacktriangleleft	\blacklozenge	\blacklozenge	\blacksquare	\blacksquare

€	£	€	£	€	£	€	£
\mathbb{R}	\mathbb{W}	\mathbb{U}	\mathbb{G}	\mathbb{E}	\mathbb{K}	\mathbb{F}	\mathbb{J}

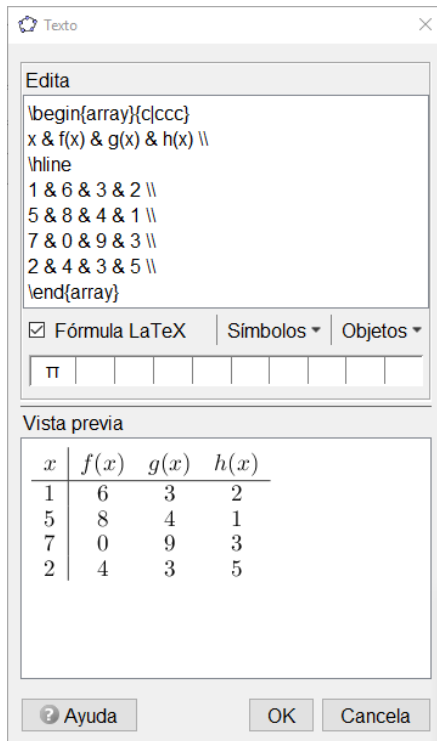
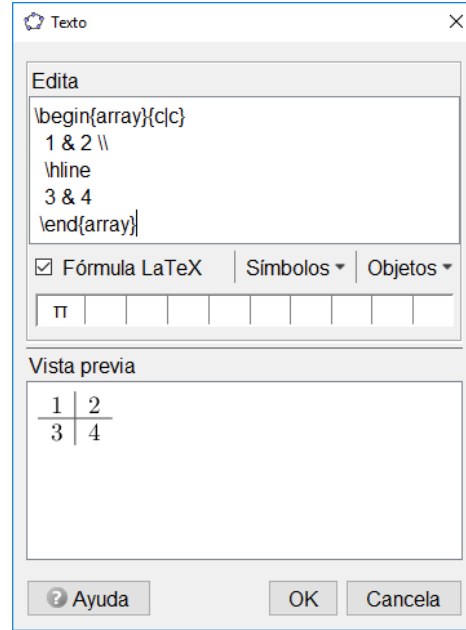
\clubsuit	\heartsuit	\diamond	\clubsuit	b	$\#$	$\#$
-------------	--------------	------------	-------------	-----	------	------

\leftarrow	\rightarrow	\Rightarrow	\Rightarrow	\Rightarrow	\Rightarrow
--------------	---------------	---------------	---------------	---------------	---------------

$\frac{1}{2}$ \\
 $\frac{a}{b}$



$\begin{array}{c|c} 1 & 2 \\ \hline 3 & 4 \end{array}$



$\begin{array}{c|ccc} x & f(x) & g(x) & h(x) \\ \hline 1 & 6 & 3 & 2 \\ 5 & 8 & 4 & 1 \\ 7 & 0 & 9 & 3 \\ 2 & 4 & 3 & 5 \end{array}$

```

\begin{array}{|c|c|c|c|c|c|}
\hline
x & -2 & -1 & 0 & 1 & 2 \\
\hline
f(x) & 4 & 1 & 0 & 1 & 4 \\
\hline
\end{array}

```

The screenshot shows the 'Texto' dialog box with the LaTeX code from the previous block in the 'Edita' field. The 'Fórmula LaTeX' checkbox is checked. Below the code editor is a symbol palette containing the Greek letter π . The 'Vista previa' section displays a rendered table:

x	-2	-1	0	1	2
$f(x)$	4	1	0	1	4

At the bottom of the dialog are buttons for '? Ayuda', 'OK', and 'Cancela'.

```

y = \begin{cases}
x^2+2x & \text{si } x < 0, \\
x^3 & \text{si } 0 \leq x < 1, \\
x^2+x & \text{si } 1 \leq x < 2, \\
x^3-x^2 & \text{si } x \geq 2.
\end{cases}

```

The screenshot shows the 'Texto' dialog box with the LaTeX code for a piecewise function in the 'Edita' field. The 'Fórmula LaTeX' checkbox is checked. Below the code editor is a symbol palette containing the Greek letter π . The 'Vista previa' section displays a rendered piecewise function:

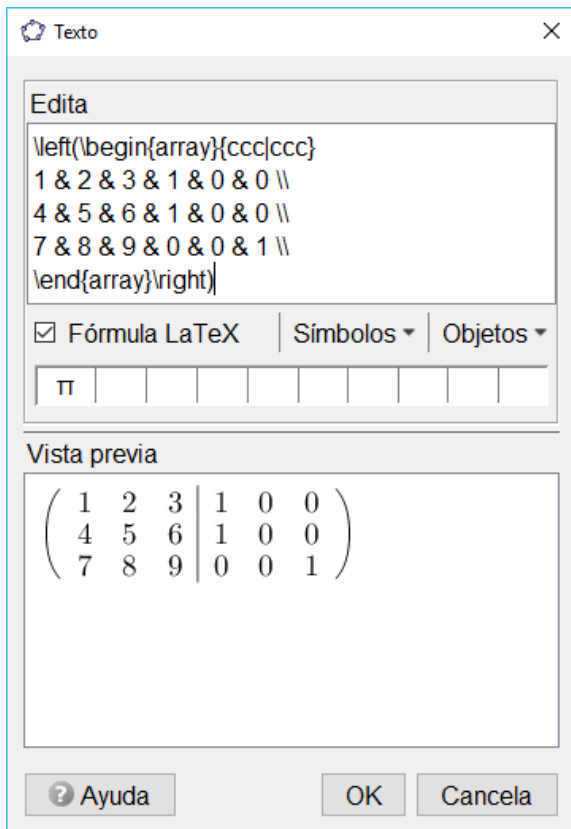
$$y = \begin{cases} x^2 + 2x & \text{si } x < 0, \\ x^3 & \text{si } 0 \leq x < 1, \\ x^2 + x & \text{si } 1 \leq x < 2, \\ x^3 - x^2 & \text{si } x \geq 2. \end{cases}$$

At the bottom of the dialog are buttons for '? Ayuda', 'OK', and 'Cancela'.

```

\left(\begin{array}{ccc|ccc}
1 & 2 & 3 & 1 & 0 & 0 \\
4 & 5 & 6 & 1 & 0 & 0 \\
7 & 8 & 9 & 0 & 0 & 1 \\
\end{array}\right)

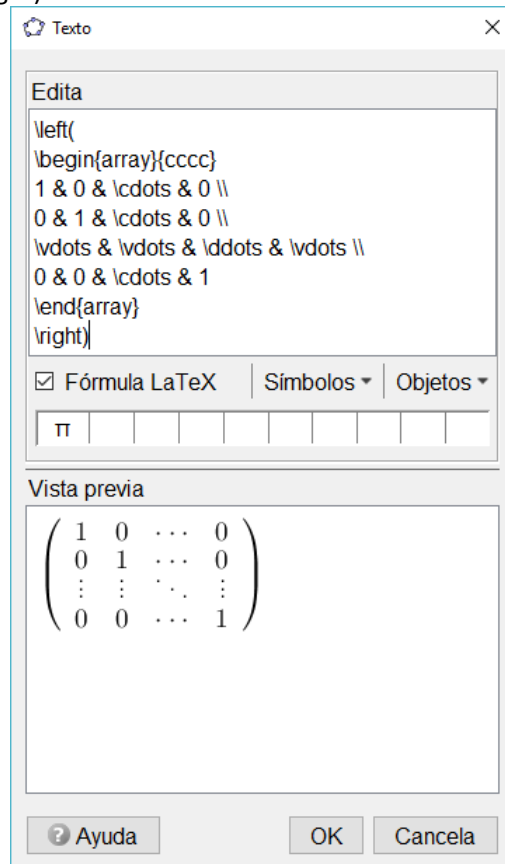
```



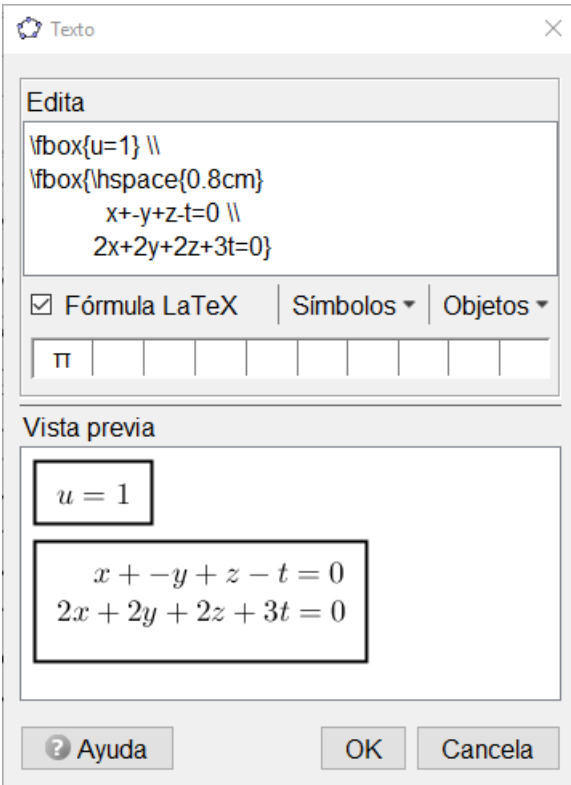
```

\left(
\begin{array}{cccc}
1 & 0 & \cdots & 0 \\
0 & 1 & \cdots & 0 \\
\vdots & \vdots & \ddots & \vdots \\
0 & 0 & \cdots & 1 \\
\end{array}
\right)

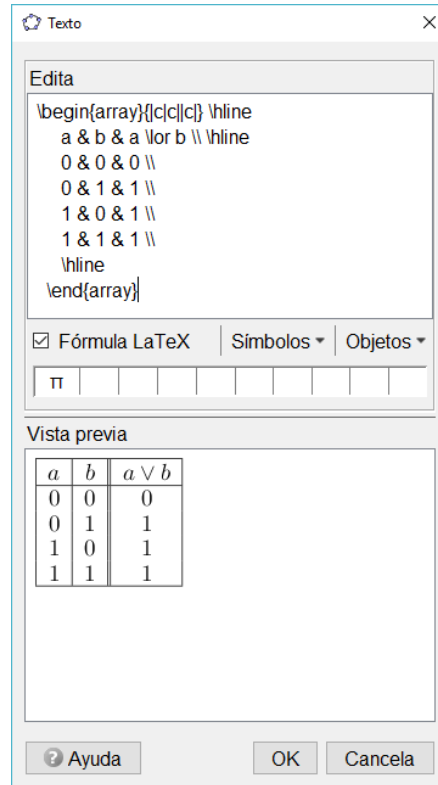
```



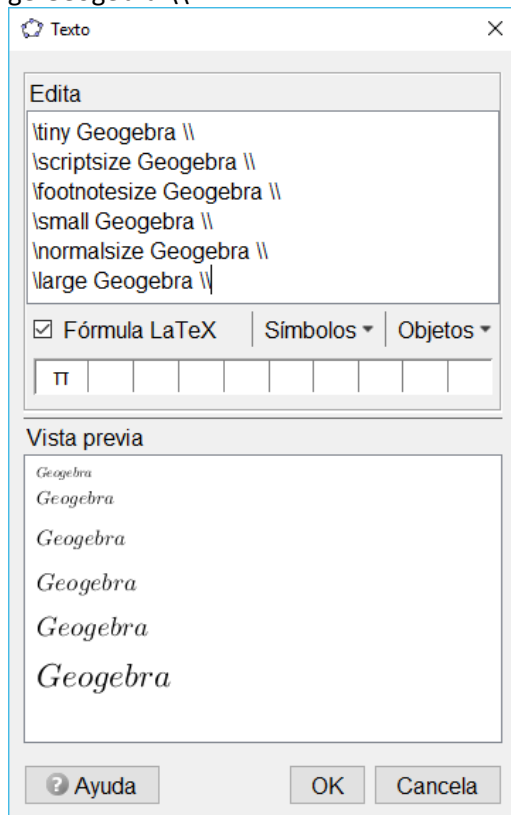
```
\fbox{u=1} \\
\fbox{\hspace{0.8cm}
  x+-y+z-t=0 \\
  2x+2y+2z+3t=0}
```



```
\begin{array}{|c|c|c|} \hline
  a & b & a \lor b \\ \hline
  0 & 0 & 0 \\
  0 & 1 & 1 \\
  1 & 0 & 1 \\
  1 & 1 & 1 \\
  \hline
\end{array}
```



`\tiny Geogebra \\
\scriptsize Geogebra \\
\footnotesize Geogebra \\
\small Geogebra \\
\normalsize Geogebra \\
\large Geogebra \\
\`



`\Large Geogebra \\
\LARGE Geogebra \\
\huge Geogebra \\
\Huge Geogebra \\
\`

