

# Keyword Reference

Keyword	Arguments	Description
Structure	<code>deck</code>	Begin a deck; end with "edeck"
	<code>def</code>	Define a function; end with "edef"
	<code>for</code>	Begin loop; end with "efor"
	<code>if</code>	Conditional; one of: a==b, a!=b, a>b, a<b, a>=b, a<=b, a<>b c
	<code>import</code>	import function found in a file
	<code>include</code>	Include the contents of a file
	<code>slide</code>	Begin a slide; end with "eslide"
	<code>edeck</code>	End the deck
	<code>edef</code>	End the defintion
	<code>efor</code>	End the for loop
Utility	<code>eif</code>	End the conditional
	<code>else</code>	Begin the else clause
	<code>canvas</code>	Define with dimensions of the canvas
	<code>content</code>	Embed content
	<code>dump</code>	Dump variables
Graphics	<code>grid</code>	Define a content grid
	<code>ruler</code>	draw a (x,y) ruler
	<code>acircle</code>	Circle with sized based on area
	<code>arc</code>	Elliptical arc centered at (x,y), dimensions (w,h) between angles a1 and a2
	<code>circle</code>	Circle centered at (x,y), diameter w
	<code>curve</code>	Quadratic Bezier Curve begin (bx,by), control (cx, cy), end (ex,ey)
	<code>ellipse</code>	Ellipse centered at (x,y), dimension (w,h)
	<code>hline</code>	Horizontal line begin at (x,y), length w
	<code>line</code>	Line between (x1,y1) and (x2,y2)
	<code>pill</code>	Pill shape beginning at (x,y), dimensions (w,h)
	<code>polygon</code>	Polygon with specified x, y coordinates
	<code>polyline</code>	Polyline with specified x, y coordinates
	<code>rect</code>	Rectangle centered at (x,y), dimensions (w,h)
	<code>rrect</code>	Rounded rectangle centered at (x,y), dimensions (w,h), corner radius r
	<code>square</code>	Square centered at (x,y), size w
	<code>star</code>	Star centered at (x,y), with sides, innner and outer sizes
	<code>vline</code>	Vertical line beginning at (x,y), h high

	Keyword	Arguments	Description
Text	<code>arctext</code>	"string" x y radius a1 a2 fontsize [font] [color] [opacity] [link]	Text on an arc, at fontsize, center (x,y), radius r, between a1. a2
	<code>btext</code>	"string" x y fontsize [font] [color] [opacity] [link]	Text beginning at (x,y), at fontsize
	<code>ctext</code>	"string" x y fontsize [font] [color] [opacity] [link]	Centered text beginning at (x,y), at fontsize
	<code>etext</code>	"string" x y fontsize [font] [color] [opacity] [link]	End-aligned text at (x,y), at fontsize
	<code>rtext</code>	"string" x y angle fontsize [font] [color] [opacity] [link]	Rotated text centered at (x,y), at angle and fontsize
	<code>text</code>	"string" x y fontsize [font] [color] [opacity] [link]	Text beginning at (x,y), at fontsize
	<code>textblock</code>	"string" x y w fontsize [font] [color] [opacity] [link]	Block of text beginning at (x,y), at fontsize, with width w
	<code>textblockfile</code>	"file" x y w fontsize [font] [color] [opacity] [link]	Block of text read for a file, beginning at (x,y), at fontsize, with width w
	<code>textcode</code>	"file" x y w fontsize [font] [color] [opacity]	Lines of code, read from a file, upper right corner at (x,y), margin at w
	<code>textfile</code>	"file" x y fontsize [font] [color] [opacity] [spacing]	Contents of a text file pper right corner at (x,y)
Lists	<code>blist</code>	x y fontsize [font] [color] [opacity] [spacing]	Bulleted list starting at (x,y), at fontsize
	<code>clist</code>	x y fontsize [font] [color] [opacity] [spacing]	Centered list starting at (x,y), at fontsize
	<code>list</code>	x y fontsize [font] [color] [opacity] [spacing]	List starting at (x,y), at fontsize
	<code>nlist</code>	x y fontsize [font] [color] [opacity] [spacing]	Numbered list starting at (x,y), at fontsize
	<code>li</code>	"item" [font] [color] [opacity]	List item
	<code>elist</code>		End the list
Images	<code>cimage</code>	"file" "caption" x y w h [scale] [link] capsiz	Captioned image; center (x,y), dimensions (w,h) (h=0, w is % of canvas width)
	<code>image</code>	"file" x y w h [scale] [link]	Image center at (x,y), dimensions (w,h) (h=0, w is % of canvas width)
Braces/ Brackets	<code>dbrace</code>	x y w bw bh [lw] [color] [opacity]	Downward pointing brace
	<code>dbracket</code>	x y w h [lw] [color] [opacity]	Downward pointing bracket
	<code>lbrace</code>	x y h bw bh [lw] [color] [opacity]	Left pointing brace
	<code>lbracket</code>	x y w h [lw] [color] [opacity]	Left pointing bracket
	<code>rbrace</code>	x y h bw bh [lw] [color] [opacity]	Right pointing brace
	<code>rbracket</code>	x y w h [lw] [color] [opacity]	Right pointing bracket
	<code>ubrace</code>	x y w bw bh [lw] [color] [opacity]	Upward facing brace
	<code>ubracket</code>	x y w h [lw] [color] [opacity]	Upward facing bracket

	<b>Keyword</b>	<b>Arguments</b>	<b>Description</b>
Arrows	<code>arrow</code>	<code>x1 y1 x2 y2 [lw] [aw] [ah] [color] [opacity]</code>	Arrow starting at (x1,y1), ending at (x2,y2), aw=width, ah=height
	<code>darrow</code>	<code>bx by bx xy ex ey [lw] [aw] [ah] [color] [opacity]</code>	Downward curved arrow; curve specified by (bx,by), (cx,cy), (ex,ey)
	<code>larrow</code>	<code>bx by bx xy ex ey [lw] [aw] [ah] [color] [opacity]</code>	Left curved arrow; curve specified by (bx,by), (cx,cy), (ex,ey)
	<code>rarrow</code>	<code>bx by bx xy ex ey [lw] [aw] [ah] [color] [opacity]</code>	Right curved arrow; curve specified by (bx,by), (cx,cy), (ex,ey)
	<code>uarrow</code>	<code>bx by bx xy ex ey [lw] [aw] [ah] [color] [opacity]</code>	Upward curved arrow; curve specified by (bx,by), (cx,cy), (ex,ey)
Charts	<code>dchart</code>	options...	Chart with specified options
	<code>legend</code>	"string" x y fontsize font color	Chart legend
Built-ins	<code>x=area</code>	expression	Assign an area
	<code>x=format</code>	"fmt" expr... (up to 5)	Assign formatting to expressions
	<code>x=polar</code>	x y radius angle	Assign polar coordinate centered at (x,y) at radius and angle (0-360)
	<code>x=polarx</code>	x y radius angle	Assign X-polar coordinate centered at (x,y) at radius and angle (0-360)
	<code>x=poly</code>	x y radius angle	Assign Y-polar coordinate centered at (x,y) at radius and angle (0-360)
	<code>x=random</code>	min max	Assign a random number between two values
	<code>x=substr</code>	"string" begin end	Assign a substring
	<code>x=vmap</code>	data min1 max1 min2 max2	Assign a value mapped to two ranges
Math	<code>x=cosine</code>	expression	Assign the cosine of expression
	<code>x=sine</code>	expression	Assign the sine of expression
	<code>x=sqrt</code>	expression	Assign the square root of expression
	<code>x=tangent</code>	expression	Assign the tangent of expression
	<code>geoarc</code>	"p1" "p2" [lw] [color] [opacity]	Draw arcs between points
Geographic	<code>geoborder</code>	"file" [lw] [color] [opacity]	Reads KML data from the specified file and renders the map borders
	<code>geoimage</code>	"loc" width height	Place an image at a geographical location
	<code>geolabel</code>	"loc" [size] [font] [color] [opacity]	Reads data from the specified file or location and renders the map labels
	<code>geoloc</code>	"loc" [align] [size] [font] [color] [opacity]	Reads data from the specified file or location and a make map point and labels
	<code>geomark</code>	"loc" [size] [color] [opacity]	Reads data from the specified file or location and renders map points
	<code>geopath</code>	"p1" "p2" [lw] [color] [opacity]	Draw line between points
	<code>geopathfile</code>	"file" [lw] [color] [opacity]	Reads data from the specified file and a make lines between points
	<code>georegion</code>	"file" [color] [opacity]	Reads KML data from the specified file and renders the map regions