

# g2 Cheat Sheet

## Creating g2 object

Constructor call	Returns
<b>g2</b> ( [Optional] object <b>arguments</b> )	<i>g2</i>
Optional Properties of <i>arguments</i>	
object <b>zoom</b> : float <b>scl</b> , float <b>x</b> , float <b>y</b>	<i>Initial zoom</i>
object <b>pan</b> : float <b>dx</b> , float <b>dy</b>	<i>Initial pan</i>
object <b>trf</b> : float <b>x</b> , float <b>y</b> , float <b>scl</b>	<i>Initial transform</i>
bool <b>cartesian</b>	<i>Cartesian coordinates</i>

## Path commands (@returns g2)

Command	Canvas / Comment
<b>p</b> ( )	<i>beginPath()</i>
<b>m</b> ( float <b>x</b> , float <b>y</b> )	<i>moveTo()</i>
<b>l</b> ( float <b>x</b> , float <b>y</b> )	<i>lineTo()</i>
<b>q</b> ( float <b>x1</b> , float <b>x2</b> , float <b>x</b> , float <b>y</b> )	<i>quadraticCurveTo()</i>
<b>c</b> ( float <b>x1</b> , float <b>y1</b> , float <b>x2</b> , float <b>y2</b> , float <b>x</b> , float <b>y</b> )	<i>bezierCurveTo()</i>
<b>z</b> ( )	<i>closePath()</i>
<b>a</b> ( float <b>dw</b> , float <b>x</b> , float <b>y</b> )	<i>Arc command</i>

## Rendering commands (@returns g2)

Command	Canvas / Comment
<b>stroke</b> ( [Optional] object <b>p</b> )	<i>stroke()</i>
<b>fill</b> ( [Optional] object <b>p</b> )	<i>fill()</i>
<b>drw</b> ( [Optional] object <b>p</b> )	<i>stroke() and fill()</i>
<b>clr</b> ( )	<i>Clear Canvas</i>
<b>grid</b> ( [Optional] string <b>color</b> , float <b>size</b> )	<i>Show grid</i>

## Managing commands

Returns	Command	Comment
<i>g2</i>	<b>cpy</b> ( object <b>g</b> )	<i>Copy command queue</i>
<i>g2</i>	<b>del</b> ( )	<i>Delete commands</i>
<i>string</i>	<b>dump</b> ( [Optional] string <b>space</b> )	<i>Show command queue</i>
<i>g2</i>	<b>exe</b> ( object <b>ctx</b> , [Optional] object <b>g</b> )	<i>Execute / Render</i>

## Style commands (@returns g2)

Command		
<b>style</b> ( object <b>arguments</b> )		
Properties of arguments object		
Name	Alternative	Type
fs	fillStyle	string
ls	strokeStyle	string
lw	lineWidth	float
lc	lineCap	string
	Values: "butt", "round", "square"	
lj	lineJoin	string
	Values: "round", "bevel", "miter"	
ml	miterLimit	float
ld	lineDash	array
lo	lineDashOffset	int
lm	lineMode	string
	Values: "normal"	
shx	shadowOffsetX	float
shy	shadowOffsetY	float
shb	shadowBlur	float
shc	shadowColor	string
thal	textAlign	string
	Values: "start", "end", "left", "right", "center"	
tval	textBaseline	string
	Values: "top", "hanging", "middle", "alphabetic", "ideographic", "bottom"	
fof	fontFamily	string
fоз	fontSize	float
foc	fontColor	string
fow	fontWeight	string
fos	fontStyle	string
foznosc	fontSizeNonScalable	bool
lwnosc	lineWidthNonScalable	bool

## Element commands (@returns g2)

Command	Canvas / Comment
<b>lin</b> ( float <b>x1</b> , float <b>y1</b> , float <b>x2</b> , float <b>y2</b> )	<i>Draw line</i>
<b>rec</b> ( float <b>x</b> , float <b>y</b> , float <b>b</b> , float <b>h</b> )	<i>Draw rectangle</i>
<b>cir</b> ( float <b>x</b> , float <b>y</b> , float <b>r</b> )	<i>Draw circle</i>
<b>arc</b> ( float <b>x</b> , float <b>y</b> , float <b>r</b> , float <b>w</b> , float <b>dw</b> )	<i>Draw arc</i>
<b>ply</b> ( array <b>parr</b> , [Optional] bool <b>closed</b> )	<i>Draw polygon</i>
<b>txt</b> ( string <b>s</b> , float <b>x</b> , float <b>y</b> , float <b>maxWidth</b> )	<i>fillText()</i>
<b>img</b> ( string <b>uri</b> , [Optional] float <b>x</b> , float <b>y</b> , float <b>b</b> , float <b>h</b> , float <b>xoff</b> , float <b>yoff</b> , float <b>dx</b> , float <b>dy</b> )	<i>Draw image</i>

## Structuring commands (@returns g2)

Command	Comment
<b>beg</b> ( [Optional] float <b>x</b> , float <b>y</b> , float <b>w</b> , float <b>scl</b> )	<i>Begin subcommands</i>
<b>end</b> ( )	<i>End subcommands</i>
<b>use</b> ( object <b>g</b> , [Optional] float <b>x</b> , float <b>y</b> , float <b>w</b> , float <b>scl</b> )	<i>Referencing external g2</i>

## Viewport commands

Returns	Command	Comment
<i>g2</i>	<b>cartesian</b> ( )	<i>Cartesian coordinates</i>
<i>g2</i>	<b>pan</b> ( float <b>dx</b> , float <b>dy</b> )	<i>Pan viewport</i>
<i>g2</i>	<b>zoom</b> ( float <b>scl</b> , [Optional] float <b>x</b> , float <b>y</b> )	<i>Zoom viewport</i>
<i>g2</i>	<b>trf</b> ( float <b>x</b> , float <b>y</b> , float <b>scl</b> )	<i>Transform viewport</i>
<i>object</i>	<b>pntToUsr</b> ( float <b>x</b> , float <b>y</b> , float <b>h</b> )	<i>Point to User {x, y}</i>
<i>object</i>	<b>vecToUsr</b> ( float <b>x</b> , float <b>y</b> )	<i>Vector to User {x, y}</i>