

# g2 Cheat Sheet

## Creating g2 object

Constructor call	Returns
<b>g2</b> ( [Optional] object <b>arguments</b> )	<i>g2</i>
<b>Optional Properties of arguments</b>	
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> ( )	<i>stroke()</i>
<b>fill</b> ( )	<i>fill()</i>
<b>drw</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**  
**style**( string **name**, string | float | int **value** [, Continuable] )

Name	Alternative	Type
<b>fs</b>	<b>fillStyle</b>	string
<b>ls</b>	<b>strokeStyle</b>	string
<b>lw</b>	<b>lineWidth</b>	float
<b>lc</b>	<b>lineCap</b>	string
<i>Values: "butt", "round", "square"</i>		
<b>lj</b>	<b>lineJoin</b>	string
<i>Values: "round", "bevel", "miter"</i>		
<b>ml</b>	<b>miterLimit</b>	float
<b>ld</b>	<b>lineDash</b>	array
<b>lo</b>	<b>lineDashOffset</b>	int
<b>lm</b>	<b>lineMode</b>	string
<i>Values: "normal"</i>		
<b>shx</b>	<b>shadowOffsetX</b>	float
<b>shy</b>	<b>shadowOffsetY</b>	float
<b>shb</b>	<b>shadowBlur</b>	float
<b>shc</b>	<b>shadowColor</b>	string
<b>thal</b>	<b>textAlign</b>	string
<i>Values: "start", "end", "left", "right", "center"</i>		
<b>tval</b>	<b>textBaseline</b>	string
<i>Values: "top", "hanging", "middle", "alphabetic", "ideographic", "bottom"</i>		
<b>fof</b>	<b>fontFamily</b>	string
<b>foz</b>	<b>fontSize</b>	float
<b>foc</b>	<b>fontColor</b>	string
<b>fow</b>	<b>fontWeight</b>	string
<b>fos</b>	<b>fontStyle</b>	string
<b>foznosc</b>	<b>fontSizeNonScalable</b>	bool
<b>lwnosc</b>	<b>lineWidthNonScalable</b>	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>trf0</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>