SVG Cheat Sheet Cheat Sheet

by beccam via cheatography.com/33170/cs/10320/

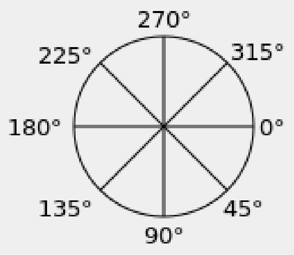
Basic Shapes

line	`<line x1="start-x" y1="start-y" x2="end-x" y2="end-y"/>`
rectangle	`<rect x="left-x" y="top-y" width="width" height="height"/>`
circle	`<circle cx="center-x" cy="center-y" r="radius"/>`
ellipse	`<ellipse cx="center-x" cy="center-y" rx="x-radius" ry="y-radius"/>`
polygon	`<polygon points="points-list"/>`
polyline	`<polyline points="points-list"/>`

Transformations

`translate(x, y)`	moves *x* horizontally, *y* vertically
`scale(xFactor, yFactor)`	multiplies by *xFactor* and *yFactor*
`scale(factor)`	equivalent to `scale(factor, factor)`
`rotate(angle, centerX, centerY)`	rotates by *angle* degrees with center of rotation `(centerX, centerY)`
`rotate(angle)`	equivalent to `rotate(angle, 0, 0)`
`skewX(angle)`	skews *x*-coordinates by *angle* degrees
`skewY(angle)`	skews *y*-coordinates by *angle* degrees
`matrix(a b c d e f)`	specifies a transformation matrix of six values

Angle Measurements



Angle measurements increase clockwise, starting from the positive*x*-axis.

Grouping and Referencing Objects

grouping	`<g id="id" style="attributes">` `</g>`
use a group	`<use xlink:href="#id" x="x1" y="y1"/>`
defining groups without displaying	`<defs>` `</defs>`
symbol	`<symbol id="id" style="attributes" preserveAspectRatio="attributes" viewBox="x1 y1 x2 y2">` `</symbol>`

Clipping and masking

clipping	
`<clipPath>`	`id`, `clipPathUnits`
`<use xlink:href="#imageid" style="clip-path: url(#pathid);"/>`	
masking	
`<mask>`	`id`, `x`, `y`, `width`, `height`
`clipPathUnits` `maskUnits` `maskContentUnits`	`objectBoundingBox`, `userSpaceOnUse`
`style`	`mask: url(#maskid)`
	`fill-opacity: 0.0-1.0`
	`fill: color`; white specified for opacity only

Filters

`<filter>`	`x`, `y`, `width`, `height`
`filterUnits` `primitiveUnits`	`objectBoundingBox`, `userSpaceOnUse`
`<feGaussianBlur>`	can create a drop shadow
`in`	`SourceAlpha`, `SourceGraphic`
`stdDeviation`	`blur` or `x-blur y-blur`

Gradients

attributes	
`spreadMethod`	`pad`
	`repeat`
	`reflect`
`gradientTransform`	`skewX`
	`skewY`
	`rotate`
`<linearGradient>` attributes	
`x1 y1 x2 y2`	`="`*`0-100%`*`"`
`<radialGradient>` attributes	
`cx cy r fx fy`	`="`*`0-100%`*`"`
elements	
`<stop>`	`offset="`*`0-100%`*`"`
	`stop-color:`
	`stop-opacity:` *`0.0-1.0`*

Stroke Attributes

`style="`*`attribute`*`:`*`value`*`"`	specify stroke attributes in `style`
`stroke`	stroke color; default is `none`
`stroke-width`	width of stroke; default is `one`
`stroke-opacity`	a value between `0.0` (transparent) and `1.0` (opaque, the default)
`stroke-dasharray`	a list of the lengths of dashes and gaps; default is `none`
`stroke-linecap`	specifies shape of endpoints: `butt` (default), `round`, or `square`
`stroke-linejoin`	specifies shape of corners: `miter` (pointed, the default), `round`, or `bevel` (flat)
`stroke-miterlimit`	maximum ratio of length of the miter point to width of the lines; default is `4`

Fill Attributes

`style="`*`attribute`*`:`*`value`*`"`	specify fill attributes in `style`
`fill`	fill color; default is `black`
`fill-opacity`	a value between `0.0` (transparent) and `1.0` (opaque, the default)
`fill-rule`	determines whether a point is inside a shape; `nonzero` (default) or `evenodd`

Paths

`<path d="`*`command arguments`*`"/>`

uppercase commands: absolute coordinates

lowercase commands: relative coordinates

Command	Arguments	Effect
`M m`	*`x y`*	move to (*x*, *y*)
`L l`	*`x y`*	line to (*x*, *y*)
`Z`		close path
`H h`	*`x`*	horizontal line to *x*
`V v`	*`y`*	vertical line to *y*
`A a`	*`rx ry x-axis-rotation large-arc sweep x y`*	elliptical arc to (*x*, *y*); points lie on ellipse with *x*-radius *`rx`*, *y*-radius *`ry`*, rotated *`x-axis-rotation`* degrees; if arc < 180°, *`large-arc`* is `0`; if arc direction is positive, *`sweep`* is `1`
`Q q`	*`x1 y1 x y`*	quadratic Bézier curve to (*x*, *y*) using control point (*x1*, *y1*)

Paths (cont)

`T` `t`	*x y*	quadratic Bézier curve to (*x*, *y*) using reflection of previous `Q`'s control pt
`C` `c`	*x1 y1 x2 y2 x y*	cubic Bézier curve to (*x*, *y*) using control pt 1 (*x1*, *y1*) and control pt 2 (*x2*, *y2*)
`S` `s`	*x2 y2 x y*	cubic Bézier curve to (*x*, *y*) using reflection of previous `C`'s control pt for control pt 1 and (*x2*, *y2*) for control pt 2

Text

`<text x="`*x*`" y="`*y*`">displayed</text>`	"`d`" baseline (*x*, *y*)
`font-family`	`serif, sans-serif, monospace, fantasy, cursive`
`font-size`	`pt, em, ex, %`
`font-weight`	`bold, normal`
`font-style`	`italic, normal`
`text-decoration`	`none, underline, overline, line-through`
`word-spacing`	*+length*, `normal`, *-length*
`letter-spacing`	*+length*, `normal`, *-length*
`text-anchor`	`start, middle, end`
`textLength`	*value*
`lengthAdjust`	`spacing` (def), `spacingAndGlyphs`
`writing-mode`	`tb`
`glyph-orientation-vertical`	`0` (`letter-spacing:-#`), `90` (def)
`direction`	`rtl`, `ltr`

Text (cont)

`unicode-bidi`	`bidi-override`
`<text>` `<textPath xlink:href="#`*path-id*`">text</textPath>` `</text>`	
`startOffset=""`	*val*, *val*%
`<tspan style="`*attributes*`">spanned text</tspan>`	
`dx="`*x*`"` or `dy="`*y*`"`	offset chars by *x* or *y*
`x="`*x*`"` or `y="`*y*`"`	place chars at *x* or *y*
`rotate="`*angle*`"`	rotate chars by *angle*
`baseline-shift`	`super, sub, em, %`
`xml:space=""`	`default`, `preserve`