

# PostScript Quick Reference v2.0

## Numerical operators

num <sub>1</sub> num <sub>2</sub>	<b>add</b> sum	num <sub>1</sub> + num <sub>2</sub>
num <sub>1</sub> num <sub>2</sub>	<b>sub</b> difference	num <sub>1</sub> - num <sub>2</sub>
num <sub>1</sub> num <sub>2</sub>	<b>mul</b> product	num <sub>1</sub> * num <sub>2</sub>
num <sub>1</sub> num <sub>2</sub>	<b>div</b> quotient	num <sub>1</sub> / num <sub>2</sub>

## Stack operators

any	<b>pop</b> -	discard top element
any <sub>1</sub> any <sub>2</sub>	<b>exch</b> any <sub>2</sub> any <sub>1</sub>	exchange top two elements
any	<b>dup</b> any any	duplicate top element

## Graphics state operators

-	<b>gsave</b> -	save graphics state
-	<b>grestore</b> -	restore graphics state
num	<b>setlinewidth</b> -	set current line width
num	<b>setlinecap</b> -	set shape of line ends (0=butt, 1=round, 2=square)
num	<b>setlinejoin</b> -	set type of corners (0=miter, 1=round, 2=bevel)
num	<b>setgray</b> -	set color to gray value (0=black to 1=white)

## Coordinate system operators

tx ty	<b>translate</b> -	translate user space
sx sy	<b>scale</b> -	scale user space
angle	<b>rotate</b> -	rotate user space

## Path construction operators

x y	<b>moveto</b> -	set current point
dx dy	<b>rmoveto</b> -	relative moveto
x y	<b>lineto</b> -	append straight line
dx dy	<b>rlineto</b> -	relative lineto
x y r ang <sub>1</sub> ang <sub>2</sub>	<b>arc</b> -	counterclockwise arc
-	<b>newpath</b> -	initialize path to empty
-	<b>closepath</b> -	connect subpath to starting point
string bool	<b>charpath</b> -	append character outline to path
-	<b>currentpoint</b> x y	return current point coordinate

## Painting operators

- **stroke** - draw line along current path
- **fill** - fill path with current color
- **erasepage** - paint current page white

## Device setup and output operators

- **showpage** - output and reset current page
- **copypage** - output current page

## Character and font operators

- |            |                        |  |
|------------|------------------------|--|
| key        | <b>findfont</b> font   | return font dict                               |
| font scale | <b>scalefont</b> font' | scale <i>font</i> to produce new <i>font</i> ' |
| font       | <b>setfont</b> -       | set font dictionary                            |
| string     | <b>show</b> -          | print characters of string                     |

## Control operators

- |                    |                 |  |
|--------------------|-----------------|--|
| init incr lim proc | <b>for</b> -    | execute <i>proc</i> with values from <i>init</i> by steps of <i>incr</i> to <i>lim</i> |
| int proc           | <b>repeat</b> - | repeat <i>proc</i> <i>int</i> times  |