



## Version 4.04 Release Notes

### New Functionality:

Mac OS X and all Windows platforms except Win95 and NT4 now support high-resolution anti-aliased graphics as a display option. **This option is not enabled by default.** If you use *Sketchpad* on a comparatively "fast" computer, we recommend trying this option. See **Help | Menu Reference | Edit Menu | Advanced Preferences | System Preferences** for more information.

The new **Label** command allows you to relabel an entire group of objects at once. See **Help | Menu Reference | Display Menu | Label** for more information.

Shift+Enter now aligns a group of selected text objects (captions, measurements, parameters, calculations, functions, and action buttons) so their left edges are aligned and their vertical spacing is even. See **Help | Advanced Topics | Advanced Text Topics | Aligning Text Objects** for details.

Shift+**Save As** now acts as a shortcut for **Save as HTML**, automatically choosing the *JavaSketchpad* file format and automatically targeting your most recent applet save directory. (Windows) You can use a command line to specify a folder for *Sketchpad* to use when you first open or save a sketch. See **Help | Advanced Topics | Tips for Experts** for details.

You may now construct the locus of a colorized point on a path without first having to show the colorized point's uncolorized parent.

### New Sample Documents:

Samples | Sketches | Calculus | Integration.gsp

Samples | Sketches | Fun | Lifes Highway.gsp

Samples | Sketches | Advanced | Complex Numbers.gsp

### Revised Sample Documents:

Samples | Sketches | Advanced | Riemann Sums.gsp (added construction advice)

Samples | Sketches | Advanced | Dynamical Systems.gsp (added a page on Julia sets)

Samples | Sketches | Investigations | Poincare.gsp (improved several hyperbolic tools)



Minor changes in many other samples.

**Bugs Fixed:**

(Windows) Cleaned up minor drawing glitches in Iterate dialog box.

(Mac OS 9) Internet Explorer problems ("No such device or address") interpreting *Sketchpad* URLs for Link buttons, Help, and *JavaSketchpad* preview have been resolved.

Eliminated obscure crash saving some documents containing freshly pasted pictures.

Symbolic derivative of arccosine is now correct.

(Mac OS X) Mousewheels now work again. (Mousewheel scrolls vertically; hold down Shift to scroll horizontally.)

Lines constructed by "Plot Measurement" in *Sketchpad* V3 files now open properly in V4.

Other minor bugs fixed.

**JavaSketchpad Improvements:**

*Sketchpad* no longer exports style or label information for objects that *JavaSketchpad* will never display.

Removed numerical instabilities with intersections of some near-vertical lines.

Applets containing constructions with hundreds of objects now start many times faster than previously.

Applet animation around polygons now works in both directions.

Circles constructed by center & radial distance measurement no longer crash applet at startup.

Measurements that display "value only" no longer export with a bogus prefix digit (i.e. , show "33" when the correct value is "3").