

## ShowTools

### ShowTools

**ShowTools** [/A/W=*winName*] [*toolName*]

The ShowTools operation puts a tool palette for drawing along the left hand side of the target or named graph or control panel, and optionally activates the named tool.

#### Flags

/A Sizes window automatically to make extra room for the tool palette. This preserves the proportion and size of the actual graph area.

/W=*winName* Shows tool palette in the named window. This must be the first flag specified when used in a Proc or Macro or on the command line.

*winName* must be either the name of a top-level window or a path leading to an exterior panel window (see **Exterior Control Panels** on page III-443).

#### Parameters

If you specify a *toolName* (which can be one of: normal, arrow, text, line, rect, rrect, oval, or poly) the named tool is activated. Specifying the “normal” tool has the same effect as issuing the GraphNormal command for a graph that has the drawing tools selected.

#### Details

The activated tool is not highlighted until the top graph or control panel becomes the topmost (activated) window. Use DoWindow/F to bring a window to the top (or “front”).

#### See Also

The **DoWindow**, **GraphNormal**, **GraphWaveDraw**, **GraphWaveEdit**, and **HideTools** operations.

## SinIntegral

**SinIntegral(z)**

The SinIntegral(z) function returns the sine integral of z.

If z is real, a real value is returned. If z is complex then a complex value is returned.

The SinIntegral function was added in Igor Pro 7.00.

#### Details

The sine integral is defined by

$$Si(z) = \int_0^z \frac{\sin(t)}{t} dt.$$

IGOR computes the SinIntegral using the expression:

$$Si(z) = z_1 F_2 \left( \frac{1}{2}; \frac{3}{2}, \frac{3}{2}; -\frac{z^2}{4} \right).$$

#### References

Abramowitz, M., and I.A. Stegun, "Handbook of Mathematical Functions", Dover, New York, 1972. Chapter 5.

#### See Also

**CosIntegral**, **ExpIntegralE1**, **hyperGPFQ**

## sign

**sign(num)**

The sign function returns -1 if num is negative or 1 if it is not negative.