

The example above shows white space after the opening and before the closing escape sequence. Such white space is optional.

You can use local string variables to construct the annotation text. For example:

```
static StrConstant kTeXOpen = "\\$WMTEX$"
static StrConstant kTeXClose = "\\$/WMTEX$"
static StrConstant kTeXFontSize = "\\Z18"

Function TeXTest()
    DoWindow/F TeXTestGraph
    if (V_Flag == 0)
        Display /N=TeXTestGraph /W=(35,45,339,154)
    endif

    String TeXFormula = "\\frac{3x}{2}"
    String annotationText = kTeXFontSize + kTeXOpen + TeXFormula + kTeXClose
    TextBox/C/N=TeXTest/A=MC/F=0 annotationText
End
```

For more examples open the Igor TeX Demo experiment by choosing File→Graphing Techniques→Igor TeX Demo.

By default, formulas use an inline style. You can switch to a larger style that is commonly used for formulas on their own line by adding "`\displaystyle`" at the start of the TeX formula.

Igor Supports a Subset of TeX

Igor does not contain a full LaTeX interpreter. Rather it uses code patterned after Knuth's TeX.web with a subset that supports the most common math syntax that an Igor user is likely to use. Formulas are drawn directly using Igor's normal text and line drawing code — Igor does not first create a picture or .dvi file.

Igor's subset supports LaTeX's `\frac` but does not support standard TeX's `\over` and does not support macros. If you discover syntax that Igor does not support but really should, please let us know.

You can use `\rm` to force letters to be upright (rather than italic.) This is useful in chemical formulas such as ethanol: `\rm CH3CH2OH`

Fonts Used with Igor TeX

For purposes of determining what font is used, each component of a TeX formula is classified as one of these:

- A Greek letter specified by a TeX code like `\alpha`, `\beta`, and `\gamma`
- A math symbol specified by a TeX code like `\neg`, `\prod`, `\sum`, and `\int`
- Other text (letters, numbers, function names, and anything else other than Greek letters and math symbols as defined above)

By default, Igor uses these fonts for components classified as Greek letters and math symbols:

Macintosh	Hiragino Sans with backups Cambria Math and Symbol
Windows	Symbol with backup Cambria Math

All other text is rendered using the font in effect in the annotation before the TeX formula.

The default Greek and math symbol fonts were chosen based on appearance and support for special characters such as square bracket extensions (used when building a tall square bracket).

You can override these defaults within a given annotation by storing a font name in text info variable 8 for Greek characters and text info variable 9 for math symbols. See **Text Info Variables** on page III-51. You can experiment with different fonts using the Igor TeX Demo experiment.