4 SageTeX

4.1 SageTeX and `latexmk`

`latexmk` is a versatile utility for building LaTeX documents. It automatically learns about the inter-dependencies of all documents and generated intermediate files. It uses this information to run and repeatedly re-run various tools to produce a working final document.

To make it work well with SageTeX, the file `latexmkrc` in the current directory defines additional dependencies and instructions.

For more information, type a terminal `man latexmk`.

To enable SageTeX in combination with `latexmk`, this page explains how to modify the `latexmkrc` file:

`https://github.com/dandrake/sagetex/wiki`

Little caveat: to make it work in this demo, a small wrapper script "`run-sagetex.py`" handles the filename and calling in order to work with SageTeX correctly.

4.2 SageTeX Demo

1 + 1 = **??**

?? $\rightarrow$ **??**

Raw Strings:

Defining a function g:

```
a = 2
b = 3
x = var('x')
g = a * sin(b * x) + sqrt(x)
```

And a plot of $g =$ **??** from $[0, 10]$:

??