

Math 235: Calculus Lab

Prof. Doug Hundley

Olin 234

Week 3

This week:

- ▶ More about LaTeX.
- ▶ A few more notes about Maple.
- ▶ Homework this week: A couple of Maple problems- Write up solutions in LaTeX.

A note about quotation marks:

I said, "Let there be light"...

The result is:

I said, "Let there be light" ...

A note about quotation marks:

I said, "Let there be light"...

The result is:

I said, "Let there be light" ...

‘‘Two single apostrophes from left side of keyboard,
two right single quotes’’

“Two single apostrophes from left side of keyboard, two right
single quotes”

Some Notes About Writing

Example 1: Inline or Display Math mode?

“If d is Bob’s distance above the ground in feet, then $d = 100 - 16t^2$, where t is the number of seconds after Bob’s Flugelputz-Levigator is activated. Solving for t in the equation $100 - 16t^2 = 0$, we find that $t = 2.5$. Bob hits the ground after 2.5 seconds.”

Some Notes About Writing

Example 1: Inline or Display Math mode?

“If d is Bob’s distance above the ground in feet, then $d = 100 - 16t^2$, where t is the number of seconds after Bob’s Flugelputz-Levigator is activated. Solving for t in the equation $100 - 16t^2 = 0$, we find that $t = 2.5$. Bob hits the ground after 2.5 seconds.”

“If d is Bob’s distance above the ground in feet, then

$$d = 100 - 16t^2,$$

where t is the number of seconds after Bob’s Flugelputz-Levigator is activated. Solving for t in the equation

$$100 - 16t^2 = 0,$$

we find that $t = 2.5$. Bob hits the ground after 2.5 seconds.”

Multiple Equations

$$\begin{aligned}3^{2x} - 2^x &= -1 \\(3^x)^2 - 23^x + 1 &= 0 \\(3^x - 1)^2 &= 0\end{aligned}$$

were typeset using the following code. Remember `amsmath`

In the header:

```
\usepackage{graphicx,fullpage, amsmath}
```

In the text:

```
\begin{align*}3^{\{2x\}}-2^x&=-1\\(3^x)^2-23^x+1&=0\\(3^x-1)^2&=0\end{align*}
```

General Comments

- ▶ Use a passive voice in writing math.
- ▶ Never start a sentence with variable name.
- ▶ Do not say “See figure below”. In LaTeX, write
See Figure `\ref{LabelName}`.

This week, we'll look at some plotting options. For the remaining time today, you may work on this week's lab.