

Clicker Question

Which best describes your experience with LaTeX?

- a) What's a LaTeX?
- b) I hadn't heard about it before this semester
- c) I had heard about it but haven't used it before
- d) I have used it once
- e) I have used it more than once

History of LaTeX

- Disappointing galley proofs
- TeX was created by Donald Knuth of in 1977
- LaTeX was written by Leslie Lamport in 1985



I had spent 15 years writing those books, but if they were going to look awful I didn't want to write any more.

Knuth Reward Check



- Reward for coding, technical, historical or other errors in his books and programs

Knuth Reward Check



- Reward for coding, technical, historical or other errors in his books and programs
- One hexadecimal dollar

LaTeX Community

- *LaTeX: A Document Preparation System - User's Guide and Reference Manual*, by Leslie Lamport, Second Edition
- google “latex code for integral”
- modify other code [templates]

Topic Idea: Transformations

Name

Experience with Transformations:

- In MAT 2240: *Introduction to Linear Algebra* we explored matrix transformations in 2-D and 3-D.
- In MAT 3110: *Modern Algebra* we explored symmetry groups, like the dihedral group, the group S_4 and the symmetries of a cube and tetrahedron.
- In MAT 3610: *Introduction to Geometry* we explored symmetries of the five regular polyhedra.

Prior Progress:

Search and report back on one interesting item related to prior progress in the area of your course project (it could be someone who laid groundwork on the topic, or peripheral but connected research or history). Include the date and the name of the person and their contribution, and remove these instructions.

Recent Scholarly Journal Article:

Search MathSciNet or other Library Databases for recent scholarly journal articles related to your course project topic and write down one item that you find, including the date and the journal, as well as the title, and remove these instructions.

Author's e-mail address: replace_emailaddress@appstate.edu

Template 1 Commands for the Header and Title Page

```
\documentclass[12pt]{article}
\title{\vspace*{-4cm}Topic Idea: Transformations}
\author{Name}

\begin{document}
\date{}
\maketitle
```

Template 1 Rest of Code

```
{\bf Experience with Transformations:}
\begin{itemize}
\item In MAT 3110: \emph{Modern Algebra}, we...
\end{itemize}
\vspace*{.5cm}
{\sl Author's e-mail address:}   emailaddress
\end{document}
```

- 1 itemize - bulleted list
- 2 enumerate - numbered list
- 3 vspace, hspace
- 4 caution: “2 single left quotes” versus ”double quotes on left” and other symbols:

\sim $_$ $\$$ $\#$ $\%$ $\&$ $\{$ “
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History of Mathematical Reviews

- Letters (Marin Mersenne ~200 correspondants) vs. email/arxiv
- Published papers, *Zentralblatt für Mathematik* (1931) and *Mathematical Reviews* (1940) and electronic versions (1980s)
- In 2015 *MathSciNet* > 3 million items
- In 2015 *Zentralblatt MATH* > 3 million items from over 3500 journals and 1100 serials dating back to the 1800s.

