Academic Typesetting
LaTeX *& Overleaf*

January 7, 2026

Timothy S. Leishman

Clinical Assistant Professor

Robotics Engineering Technology

College of Technology

Idaho State University

Contents

Chapter 1

General Overview

1.1   Why Learn LaTeX and Overleaf?

Instructors and professors at the College of Technology increasingly produce materials that require clarity, precision, and professional presentation. Whether preparing technical worksheets, engineering calculations, lab manuals, research proposals, accreditation documentation, or visually consistent course materials, LaTeX and Overleaf offer capabilities that traditional word processors cannot match. These academic typesetting tools allow educators to create clean, error-free documents with automated formatting, effortlessly managed equations, consistent tables and figures, and reusable templates that save time semester after semester.

Overleaf adds a modern, cloud-based interface—with real-time collaboration, version tracking, and anywhere-access—that simplifies the LaTeX workflow, even for beginners. For faculty teaching STEM-related programs, these tools help produce professional, publication-quality materials that better support student learning and align with industry and academic standards.

This session is ideal for instructors who want to streamline their document creation process, improve technical communication, and gain a long-term skill that enhances both teaching and scholarly output.

1.2   Academic Typesetting

Academic typesetting is the process of arranging text, figures, equations, and other content into a clear, professional, and readable layout for scholarly documents such as papers, theses, reports, and presentations. It focuses on structure, consistency, precision, and proper formatting so that the final document meets academic or publication standards.

1.3 LaTeX

LaTeX is a high-quality typesetting system widely used in academia for creating documents that require precise formatting—especially those containing mathematics, scientific notation, structured layouts, and references. It separates content from formatting, allowing authors to focus on writing, while LaTeX handles consistent styling, numbering, citations, and professional presentation.

1.4 Overleaf

Overleaf is an online, cloud-based LaTeX editor that allows users to create, edit, and collaborate on LaTeX documents directly in a web browser. It provides real-time preview, built-in templates, version control, and easy sharing, making it especially useful for students, researchers, and teams working on papers, reports, and presentations without needing to install LaTeX software locally.

1.4.1 MyProjectTemplate

https://www.overleaf.com/read/vqgnsytzzpbk#541b08

Chapter 2

Cool Math Stuff

2.1 LaTeX Math Capabilities

LaTeX for Mathematics LaTeX is widely used in academia because it produces high-quality mathematical typesetting. It can handle everything from simple equations to complex formulas, ensuring clarity and professional presentation. Its strength lies in precise formatting, alignment, and the ability to reference equations automatically.

2.1.1 Cool Symbol examples with Syntax:

θ `$\theta$`	Δ `$\alpha$`	β `$\beta$`	$\leq$ `$\leq$`
ϕ `$\phi$`	π `$\pi$`	$\sqrt{2}$ `$\sqrt{2}$`	$\geq$ `$\geq$`
$\int$ `$\int$`	α `$\beta$`	$\approx$ `$\approx$`	$\frac{-t}{\tau}$ `$\frac{-t}{\tau}$`

2.2 Inline Formulas:

Inline formulas can appear within a sentence. The formula for Ohm's Law is $E = IR$, and the capacitor charging equation is $V_c = v_{fin} - (v_{fin} - v_{in})e^{\frac{-t}{\tau}}$.

Syntax:

```
Inline formulas can appear within a sentence. The formula for
Ohm's Law is $E=IR$, and the capacitor charging equation is
$V_c=v_{fin}-(v_{fin}-v_{in})e^{\frac{-t}{\tau}}$.
```

2.3 Inline Formula Examples:

- $V_c = v_{fin} - (v_{fin} - v_{in})e^{\frac{-t}{\tau}}$

- $V_{inst} = Vp_{max}Sin(360Ft \pm \theta)$

- $cycles_{stab} = \frac{5\tau}{period}$

- $v_{max} = \frac{v_{gen+}}{1+e^{\frac{-t}{\tau}}}$

- $FC_L = \sqrt{(F_{C1})^2 + (F_{C2})^2 + (F_{C3})^2 + ...}$

- $C_{TotalIN} = C_{Gen} + C_{Stray} + C_{Probe} + C_{MillerIN} + CBG$

- $C_{MillerIN} = CBC(1 + \Delta V_{CE})$

- $CBC \approx C_{obo}$

- $CBG = CBE(1 - \Delta V_{CC})$

- $v_{min} = v_{gen+} - v_{max}$

- $time_{integration} = \frac{\tau}{10}$

- $time_{differentiation} = 10\tau$

- $CBE = \frac{1}{2\pi \times r'e \times f_T}$

- $C_{TotalOUT} = C_{MillerOUT} + C_{Stray} + C_{Probe}$

- $C_{MillerOUT} = CBC(\frac{1+\Delta V_{CE}}{\Delta V_{CE}})$

- $FCH_{Total} = \frac{0.35}{\sqrt{(\frac{0.35}{FCH_{IN}})^2 + (\frac{0.35}{FCH_{MID}})^2 + (\frac{0.35}{FCH_{OUT}})^2}}$

2.4   Display Formulas:

2.4.1   Basic

A LaTeX display formula is a mathematical expression that is centered on its own line and visually separated from the surrounding text, making it easier to read and emphasize.

$$V_c = v_{fin} - (v_{fin} - v_{in})e^{\frac{-t}{\tau}}$$

Syntax:

```
$$V_c=v_{fin}-(v_{fin}-v_{in})e^{\frac{-t}{\tau}}$$
```

2.4.2   Adding Reference and Label

Creating a figure and using the label function, we can now reference the formula. See equation 2.1 the *Capacitor Charge Formula:* on page 4.

Capacitor Charge Formula:

$$V_c = v_{fin} - (v_{fin} - v_{in})e^{\frac{-t}{\tau}} \tag{2.1}$$

Syntax:

```
Creating a figure and using the label function, we can now reference
the formula. See equation \ref{eq:CapChargeFormula}
```

the \textit{\nameref{eq:CapChargeFormula}} on page \pageref{eq:CapChargeFormula}.

\subsubsection{Capacitor Charge Formula:}

\begin{equation}
    V_c=v_{fin}-(v_{fin}-v_{in})e^{\frac{-t}{\tau}}
    \label{eq:CapChargeFormula}
\end{equation}

Chapter 3

Lists

In LaTeX, \begin{...},\end{...} define environments, which are structured blocks of content that tell LaTeX how to format and process what's inside them. An environment applies specific rules—such as alignment, spacing, numbering, or special parsing—to its contents, and those rules remain in effect only between the matching \begin and \end.

3.1 Itemize:

3.1.1 Basic Itemize:

- $V_c = v_{fin} - (v_{fin} - v_{in})e^{\frac{-t}{\tau}}$

- $V_{inst} = Vp_{max}Sin(360Ft \pm \theta)$

- $cycles_{stab} = \frac{5\tau}{period}$

- $v_{max} = \frac{v_{gen+}}{1+e^{\frac{-t}{\tau}}}$

- $v_{min} = v_{gen+} - v_{max}$

3.1.2 Basic Nested Itemize:

- $V_c = v_{fin} - (v_{fin} - v_{in})e^{\frac{-t}{\tau}}$

- $V_{inst} = Vp_{max}Sin(360Ft \pm \theta)$

- $cycles_{stab} = \frac{5\tau}{period}$
    - $v_{max} = \frac{v_{gen+}}{1+e^{\frac{-t}{\tau}}}$
    - $v_{min} = v_{gen+} - v_{max}$

3.1.3   How to change the itemized bullet.

- $V_c = v_{fin} - (v_{fin} - v_{in})e^{\frac{-t}{\tau}}$

- $V_{inst} = Vp_{max}Sin(360Ft \pm \theta)$

- $cycles_{stab} = \frac{5\tau}{period}$

    - $v_{max} = \frac{v_{gen+}}{1+e^{\frac{-t}{\tau}}}$
    - $v_{min} = v_{gen+} - v_{max}$

3.1.4   Syntax (changes local second-level bullets to circles)

```
\begin{itemize}
    \item $V_c=v_{fin}-(v_{fin}-v_{in})e^{\frac{-t}{\tau}}$
    \item $V_{inst}=Vp_{max}Sin (360Ft\pm \theta)$
    \item $cycles_{stab}=\frac{5\tau}{period}$
    \begin{itemize}[label=$\circ$]
        \item $v_{max}=\frac{v_{gen+}}{1+e^{\frac{-t}{\tau}}}$
        \item $v_{min}=v_{gen+}-v_{max}$
    \end{itemize}
\end{itemize}
```

3.1.5   Syntax (changes global second-level itemize bullets to circles)

```
\setlist[itemize,2]{label=$\circ$}
```

3.2   Enumerate:

3.2.1   Basic Enumerate:

1. $V_c = v_{fin} - (v_{fin} - v_{in})e^{\frac{-t}{\tau}}$

2. $V_{inst} = Vp_{max}Sin(360Ft \pm \theta)$

3. $cycles_{stab} = \frac{5\tau}{period}$

4. $v_{max} = \frac{v_{gen+}}{1+e^{\frac{-t}{\tau}}}$

5. $v_{min} = v_{gen+} - v_{max}$

Syntax:

```
\begin{enumerate}
    \item $V_c=v_{fin}-(v_{fin}-v_{in})e^{\frac{-t}{\tau}}$
    \item $V_{inst}=Vp_{max}Sin (360Ft\pm \theta)$
    \item $cycles_{stab}=\frac{5\tau}{period}$
    \item $v_{max}=\frac{v_{gen+}}{1+e^{\frac{-t}{\tau}}}$
    \item $v_{min}=v_{gen+}-v_{max}$
\end{enumerate}
```

3.2.2   Basic Nested Enumerate:

1. $V_c = v_{fin} - (v_{fin} - v_{in})e^{\frac{-t}{\tau}}$

2. $V_{inst} = Vp_{max}Sin(360Ft \pm \theta)$

3. $cycles_{stab} = \frac{5\tau}{period}$

    (a) $v_{max} = \frac{v_{gen+}}{1+e^{\frac{-t}{\tau}}}$

    (b) $v_{min} = v_{gen+} - v_{max}$

Syntax:

```
\begin{enumerate}
    \item $V_c=v_{fin}-(v_{fin}-v_{in})e^{\frac{-t}{\tau}}$
    \item $V_{inst}=Vp_{max}Sin (360Ft\pm \theta)$
    \item $cycles_{stab}=\frac{5\tau}{period}$
    \begin{enumerate}
        \item $v_{max}=\frac{v_{gen+}}{1+e^{\frac{-t}{\tau}}}$
        \item $v_{min}=v_{gen+}-v_{max}$
    \end{enumerate}
\end{enumerate}
```

3.2.3   Basic Nested Combo Enumerate and Itemize:

1. $V_c = v_{fin} - (v_{fin} - v_{in})e^{\frac{-t}{\tau}}$

2. $V_{inst} = Vp_{max}Sin(360Ft \pm \theta)$

3. $cycles_{stab} = \frac{5\tau}{period}$

    • $v_{max} = \frac{v_{gen+}}{1+e^{\frac{-t}{\tau}}}$

    • $v_{min} = v_{gen+} - v_{max}$

Syntax:

```
\begin{enumerate}
    \item $V_c=v_{fin}-(v_{fin}-v_{in})e^{\frac{-t}{\tau}}$
    \item $V_{inst}=Vp_{max}Sin (360Ft\pm \theta)$
    \item $cycles_{stab}=\frac{5\tau}{period}$
    \begin{itemize}
        \item $v_{max}=\frac{v_{gen+}}{1+e^{\frac{-t}{\tau}}}$
        \item $v_{min}=v_{gen+}-v_{max}$
    \end{itemize}
\end{enumerate}
```

3.3   Multi-column

Multicols:

- $V_c = v_{fin} - (v_{fin} - v_{in})e^{\frac{-t}{\tau}}$

- $V_{inst} = Vp_{max}Sin(360Ft \pm \theta)$

- $cycles_{stab} = \frac{5\tau}{period}$

- $v_{max} = \frac{v_{gen+}}{1+e^{\frac{-t}{\tau}}}$

Syntax:

```
\begin{multicols}{2}
    \begin{itemize}
        \item $V_c=v_{fin}-(v_{fin}-v_{in})e^{\frac{-t}{\tau}}$
        \item $V_{inst}=Vp_{max}Sin (360Ft\pm \theta)$
        \item $cycles_{stab}=\frac{5\tau}{period}$
        \item $v_{max}=\frac{v_{gen+}}{1+e^{\frac{-t}{\tau}}}$
    \end{itemize}
\end{multicols}
```

Chapter 4

Table

4.1 Table

Table 4.1: Amplifier Parameters

Description	Parameter	Value
Supply Voltage	V_{CC}	25 V
Load Resistance	R_L	8 Ω
Transistor Gain	β	45

4.2 Syntax

```
\begin{table}[h]
\centering
\caption{Amplifier Parameters}
\label{tab:amp_params}
    \begin{tabularx}{0.8\textwidth}{l Y r}
    \toprule
    Description & Parameter & Value \\
    \midrule
    Supply Voltage & $V_{CC}$ & 25 V \\
    Load Resistance & $R_L$ & 8 $\Omega$ \\
    Transistor Gain & $\beta$ & 45 \\
    \bottomrule
    \end{tabularx}
\end{table}
```

Chapter 5

Figures and Images

5.1 Basic Image Insertion:

Figure 5.1: Idaho State University Benny Logo

Figure 5.2: Idaho State University Spirit Logo

5.1.1   Syntax:

```
\section{Basic Image Insertion:}

\begin{figure}[h!]
    \centering
    \includegraphics[width=0.5\textwidth]{Images/IMG_BengalLogo.png}
    \caption{Idaho State University Benny Logo}
    \label{IMG:BennyLogo}
\end{figure}

\begin{figure}[h!]
    \centering
    \includegraphics[width=.35\textwidth]{Images/IMG_Spirit-BlackOrange.png}
    \caption{Idaho State University Spirit Logo}
    \label{IMG:SpiritLogo}
\end{figure}
```

5.2   Side by Side Image Insertion:

(a) Benny Logo   (b) Spirit Logo

Figure 5.3: Idaho State University Logos

5.2.1   Syntax:

```
\section{Side by Side Image Insertion:}

    \begin{figure}[h!]
        \centering
        \begin{subfigure}{0.50\textwidth}
            \includegraphics[width=\textwidth]{Images/IMG_BengalLogo.png}
            \caption{Benny Logo}
        \end{subfigure}
        \hspace{0.05\textwidth}
        \begin{subfigure}{0.35\textwidth}
            \includegraphics[width=\textwidth]{Images/IMG_Spirit-BlackOrange.png}
            \caption{Spirit Logo}
        \end{subfigure}
        \caption{Idaho State University Logos}
        \label{fig:sidebysideLogo}
    \end{figure}
```
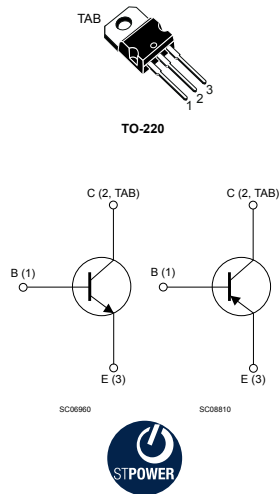
Chapter 6

PDF Insert

6.1 TIP41 Datasheet:[1]

TIP41C, TIP42C

Datasheet

Low voltage complementary power transistors

TO-220

C (2, TAB)   C (2, TAB)

B (1)   B (1)

E (3)   E (3)

SC06960   SC08810

STPOWER

Features

- Complementary PNP-NPN devices
- New enhanced series
- High switching speed
- h_{FE} grouping
- h_{FE} improved linearity

Application

- General purpose circuits
- Audio amplifier
- Power linear and switching

Description

The TIP41C is a base island technology NPN power transistor in TO-220 plastic package that makes this device suitable for audio, power linear, and switching applications. The complementary PNP type is TIP42C.

Product status link
TIP41C
TIP42C

ST   **TIP41C, TIP42C**
                                                                        Electrical ratings

1   Electrical ratings

Table 1. **Absolute maximum ratings**

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-base voltage (I_E = 0 A)	100	V
V_{CEO}	Collector-emitter voltage (I_B = 0 A)	100	V
V_{EBO}	Collector-base voltage (I_C = 0 A)	5	V
I_C	Collector current	6	A
I_{CM}	Collector peak current	10	A
I_B	Base current	3	A
P_{TOT}	Total power dissipation at T_C = 25 °C	65	W
T_{stg}	Storage temperature range	-65 to 150	°C
T_J	Maximum operating junction temperature	150	°C

Table 2. **Thermal data**

Symbol	Parameter	Value	Unit
R_{thJC}	Thermal resistance, junction-to-case	1.92	°C/W
R_{thJA}	Thermal resistance, junction-to-ambient	62.5	°C/W

Note: *For PNP types voltage and current values are negative.*

ST

2   Electrical characteristics

T_C = 25°C unless otherwise specified.

Table 3. Electrical characteristics

Symbol	Parameter	Test conditions	Min.	Typ.	Max.	Unit
I_{CEO}	Collector cut-off current	I_B = 0 A, V_{CE} = 60 V		-	0.7	mA
I_{EBO}	Emitter cut-off current	I_C = 0 A, V_{EB} = 5 V		-	1	mA
I_{CES}	Collector cut-off current	V_{BE} = 0 V, V_{CE} = 100 V		-	0.4	mA
$V_{CEO(sus)}$[1]	Collector-emitter sustaining voltage	I_B = 0 A, I_C = 30 mA	100	-		V
$V_{CE(sat)}$[1]	Collector-emitter saturation voltage	I_C = 6 A, I_B = 0.6 A		-	1.5	V
$V_{BE(on)}$[1]	Base-emitter on voltage	I_C = 6 A, V_{CE} = 4 V		-	2	V
h_{FE}[1]	DC current gain	I_C = 0.3 A, V_{CE} = 4 V	30	-		
		I_C = 3 A, V_{CE} = 4 V	15	-	75	
		Group R	15	-	28	
		Group O	24	-	44	
		Group Y	42	-	75	

1.   Pulse test: pulse duration ≤ 300 µs, duty cycle ≤ 2%.

Note: *For PNP types voltage and current values are negative.*

Note: *Product is pre-selected in DC current gain (group R, group O and group Y). STMicroelectronics reserves the right to ship either groups according to production availability. Please contact your nearest STMicroelectronics sales office for delivery details.*

6.2   Syntax:

```
\section{TIP41 Datasheet:\cite{ST_TIP41_Datasheet}}
\label{sec:TIP41datasheet}

\begin{center}
    \includegraphics[page=1, width=0.9\textwidth, trim = 0 10cm 0 0,clip]
    {PDFs/TIP41datasheet.pdf}
\end{center}

%trim = <left> <bottom> <right> <top>, -10cm off the bottom.

\includepdf[pages=2-3, scale=0.9, pagecommand={\thispagestyle{fancy}}]
{PDFs/TIP41datasheet.pdf}

%\includepdf[pages=2-, scale=0.9, pagecommand={\thispagestyle{fancy}}]
{PDFs/TIP41datasheet.pdf} %For pages 2 to the end of the PDF.
```

Chapter 7

Macro

7.1 What is a Macro?

A macro is a user-defined command that groups one or more LaTeX instructions into a single, reusable name. Macros reduce repetition, improve consistency, and make documents easier to maintain by allowing you to define formatting or content once and use it throughout the document with a simple command.

7.2 Red Text

This text is red.

```
\textcolor{red}{This text is red.}
```

7.2.1 Macro:

Whenever code is reused or has the potential to be reused, it is often beneficial to define a macro.

This red text with a macro!

```
\newcommand{\redtext}[1]{\textcolor{red}{#1}}

\redtext{This red text with a macro!}
```

7.2.2 Local vs. Global Macros

The \newcommand code can be placed in the preamble, in a .sty file, or in a dedicated file such as my_macros.tex, which I have created to house my macros. Keeping a separate macros file allows the commands to be **globally accessible** throughout the project, improving reusability and organization. Using the global macro method requires adding

\input{my_macros} to the preamble Or, the \input{my_macros} can be added to the .sty file. For this example, I added the \input{my_macros} to the book_style.sty file.

7.2.3   More Custom Macro Examples

The code: "\TF" returns:

○ True

○ False

The code: "\LongBlank" returns:

_____

```
The code:
"\SquareList{
    \item Power
    \item Efficiency
    \item Distortion
}"
returns:
```

☐ Power

☐ Efficiency

☐ Distortion

```
The code:
"\begin{multicols}{3}
    \SquareList{
        \item Power
        \item Efficiency
        \item Distortion
    }
\end{multicols}"
returns:
```

☐ Power   ☐ Efficiency   ☐ Distortion

Chapter 8

Citations

The `\bibliography{biblio}` command tells LaTeX which BibTeX database file to use for references, while `\bibliographystyle{ieeetr}` specifies how those references are formatted and numbered. Together, they enable consistent, automatically generated citations that follow IEEE standards, ensuring professional and uniform reference formatting throughout the document.

8.1 Bibliography

The `\bibliography{}` command requires an input file for reference. The biblio.bib file is used for this example; `\bibliography{References/biblio}`.

8.1.1 Reference Guide:

- **@article** — Journal or magazine articles

  ```
  @article{key,
    author  = {},
    title   = {},
    journal = {},
    year    = {}
  }
  ```

- **@book** — Complete books or textbooks

  ```
  @book{key,
    author    = {},
    title     = {},
    publisher = {},
    year      = {}
  }
  ```

- **@inbook** — A chapter or section within a book

```
@inbook{key,
  author    = {},
  title     = {},
  chapter   = {},
  publisher = {},
  year      = {}
}
```

- **@inproceedings** — Conference papers

```
@inproceedings{key,
  author    = {},
  title     = {},
  booktitle = {},
  year      = {}
}
```

- **@proceedings** — Entire conference proceedings

```
@proceedings{key,
  title = {},
  year  = {}
}
```

- **@techreport** — Technical or institutional reports

```
@techreport{key,
  author      = {},
  title       = {},
  institution = {},
  year        = {}
}
```

- **@manual** — Manuals, standards, documentation

```
@manual{key,
  title        = {},
  organization = {},
  year         = {}
}
```

- **@misc** — Datasheets, websites, or uncategorized sources

```
@misc{key,
   title = {},
   note  = {}
}
```

- **@phdthesis / @mastersthesis** — Theses and dissertations

```
@phdthesis{key,
   author = {},
   title  = {},
   school = {},
   year   = {}
}
```

8.2   bibliography style

The command \bibliographystyle{} will control the format style.

8.2.1   bibliography style types:

For this example, I am using \bibliographystyle{ieeetr}.

```
% General-purpose styles
\bibliographystyle{plain}       % Alphabetical, numbered
\bibliographystyle{unsrt}       % Citation order, numbered
\bibliographystyle{abbrv}       % Abbreviated first names

% Engineering / IEEE styles
\bibliographystyle{ieeetr}      % IEEE Transactions style
\bibliographystyle{IEEEtran}    % Strict IEEE (with IEEEtran class)

% Author{year styles
\bibliographystyle{alpha}       % Labels like [Knu84]
\bibliographystyle{apalike}     % APA-like author{year

% Science and mathematics
\bibliographystyle{amsplain}    % AMS math style
\bibliographystyle{siam}        % SIAM publications

% Publishing / conference styles
\bibliographystyle{acm}         % ACM conferences/journals
\bibliographystyle{chicago}     % Chicago Manual of Style
\bibliographystyle{nature}      % Nature journal style
\bibliographystyle{science}     % Science magazine style
```

8.3 Citation Examples:

8.3.1 The Example Environment & Syntax

Example 8.1. "A transistor will not switch on or off instantaneously. Turn-on and turn-off times depend upon the device and the circuit conditions." [2], p. 106

Example 8.2. The TIP41 datasheet [1] (p. 1) provides the absolute maximum ratings for the device.

```
\begin{example}
    "A transistor will not switch on or off instantaneously. Turn-on and
    turn-off times depend upon the device and the circuit conditions."
    \cite{bell2006solid}, p.~106
\end{example}

\begin{example}
    The TIP41 datasheet \cite{ST_TIP41_Datasheet} (p.~1) provides the
    absolute maximum ratings for the device.
\end{example}
```

Chapter 9

Hyper-reference & Hyperlinks

9.1 LaTeX Hyper-reference & Hyperlink Capabilities

LaTeX, with the hyperref package, allows authors to create interactive hyperlinks within a document. These can include clickable table of contents entries, cross-references to equations, figures, and sections, as well as external links to websites or email addresses. Hyperlinks improve navigation, enhance readability, and make digital documents more user-friendly by turning references and citations into interactive elements.

9.2 Internal Hyper-Reference

The `\label` command is used to tag chapters, sections, figures, tables, and most other numbered elements in a LaTeX document, enabling consistent and accurate cross-referencing throughout the text.

9.2.1 Label:

In the Cool Math Stuff chapter, the chapter was labeled as follows:

- `\chapter{Cool Math Stuff}\label{sec:CoolMathStuff}`

The Idaho State University Benny Logo was labled as follows:

- `\label{fig:BennyLogo}`

9.2.2 Hyper-reference:

- `\hyperref[sec:CoolMathStuff]{\textbf{Go to the CoolMathStuff Section}}`
- Compiled: **Go to the CoolMathStuff Section**

9.2.3   Name-reference:

- \nameref{sec:CoolMathStuff}

- Compiled: Cool Math Stuff

9.2.4   Page-reference:

- \nameref{sec:CoolMathStuff} is on page \pageref{sec:CoolMathStuff}.

- Compiled: Cool Math Stuff is on page 3.

- The Idaho State University Benny Logo can be found on page 11.

9.3   External Hyperlinks Syntax:

- Why LaTeX?

- Idaho State University College of Technology

- Udemy Course: LaTeX for Professional Publications

- Udemy Course: Master Academic Typesetting with LaTeX

Syntax:

```
\begin{itemize}
    \item \href{https://www.overleaf.com/about/why-latex}{Why LaTeX?}
    \item \href{https://www.isu.edu/tech/}
    {Idaho State University College of Technology}
    \item \href{https://www.udemy.com/course/learn-latex/}
    {Udemy Course: LaTeX for Professional Publications}
    \item \href{https://www.udemy.com/course/mastering-latex}
    {Udemy Course: Master Academic Typesetting with LaTeX}
\end{itemize}
```

9.4   URLs:

https://www.overleaf.com/read/vqgnsytzzpbk#541b08

Syntax:

\url{https://www.overleaf.com/read/vqgnsytzzpbk#541b08}

References

[1] STMicroelectronics, "TIP41, TIP42 — Low Voltage Complementary Power Transistors." Datasheet, Oct. 2025. Rev. 3. Available: https://www.st.com/resource/en/datasheet/cd00142950.pdf.

[2] D. A. Bell, *Solid State Pulse Circuits.* Oxford University Press, 4th ed., 2006.