Sample Latex Document

Title 1

Title 2

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Contents

1 Text and Tables

1.1 Text Formatting

The document is written in **whichever** *formatting* `is appropriate`. It can be broken into sections, subsections, subsubsections paragraphs, and make reference to included images, graphics, math, equations, code and bibliography.

1.1.1 Lorem Ipsum

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1.2 Tabular Formatting

We can represent data in a tabular format, as in Table **??**.

1.2.1 Table

Hours	**Minutes**	**Seconds**
0	0	0
1	60	3600
2	120	7200
24	1440	86400

Table 1: *An example of a simple table*

2 Mathematical Formatting

2.1 In-line Mathematics

Math formulas can appear in line in text such as $y = \frac{m}{x} + b$ or be referenced as a standalone equation, such as Eq. (**??**) and Eq. (**??**).

2.2 Some Equations

$$I_D = I_S \left[\exp\left(\frac{V_D}{V_T}\right) - 1 \right] \tag{1}$$

$$V_D = v_s - V_R \tag{2}$$

3 Graphics and Diagrams

Figure **??** is a wiring digram of a simple resistive circuit with a diode. Eq. (**??**) and Eq. (**??**) are theoretical mathematical formulas for the expected quantities one would measure in the circuit.
Figure **??** shows a graphical plot of the theoretical equations (**??**) and (**??**) as applicable to the circuit in figure **??**.

3.1 Circuit Diagram

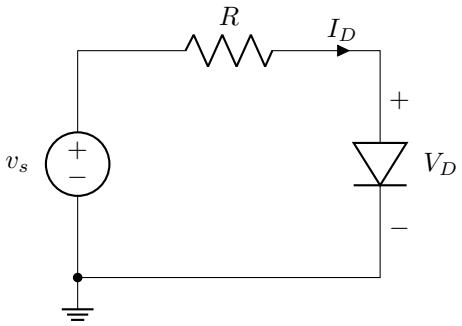

Figure 1: *A Circuitikz Diagram.*

3.2 Graphics

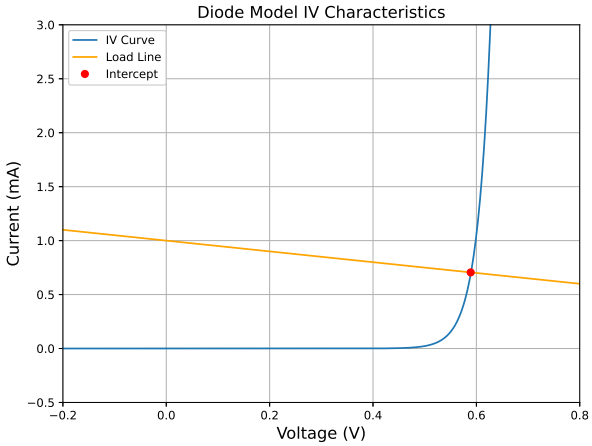

Figure 2: *Graphical representation of the Diode model.*

4 Code Listings

4.1

Verbatim code listings can be directly represented with appropriate syntax highlighting applied for whichever programming language is being represented. Figure **??** is a code listing of a generic Java class.

4.2 SampleClass.java

```
1  public class SampleClass extends Object implements Comparable<T>{
2
3      int var1;
4      String msg;
5
6      SampleClass(String msg){
7          super();
8          this.msg = msg;
9      }
10     @Override
11     public int compareTo(T o) {
12         return 0;
13     }
14     @Override
15     public String toString() {
16         return "SampleClass{" +
17                 "msg='" + msg + '\'' +
18                 '}';
19     }
20 }
21
```

Figure 3: *SampleClass.java*