LaTeX Example

My Name

A Date

1 Section Title

The first paragraph in a section is never indented. All subsequent paragraphs are automatically indented unless a `\noindent` command is used.

When you write in-line equations or use Greek letters, you must surround the equations with two \$. For example, sometimes we estimate $\pi \approx 3$ when we don not have a calculator. When we state an equation, however, we use the equation environment:
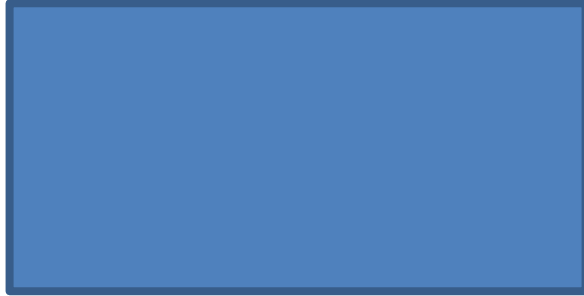
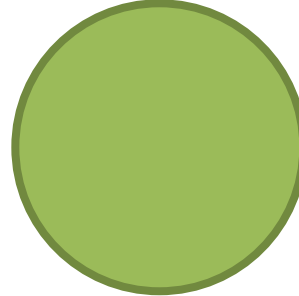$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a} \tag{1}$$

1.1 Sub-Section Title

At the bottom of this page, there is a smiley face. It is Figure 1. We force it to be at the bottom by using the option `b!`, which tells LaTeX that I want this figure to be at the **bottom** of the page**!**

Figure 1: A sample figure.

(a) First figure caption.   (b) Second figure caption.

Figure 2: Two related figures using subfig package.

Sub-figures are created using the `subfig` package and can be referred to in a number of ways. We will do this using a bulleted list.
A bulleted list:

- Something here refers to the subfigure using the figure number, which is Figure 2

- Another item refers to the subfigure using each of the subfigure numbers. The rectangle is Figure 2a and the circle is Figure 2b.

A numbered list:

1. First thing here refers to Equation (1).

2. Second item refers to Figure 1.

1.1.1   Sub-Sub-Section Title

There is a book [1] that people use for courses on compressible flow. Flows are also discussed in references [2, 3]

The table below (Table 1) shows tank pressure on given days.

Table 1: Tank Pressure

Day	Pressure (psia)
Aug 18	82
Aug 19	123

References

[1] John D. Anderson. *Modern Compressible Flow with Historical Perspective*. McGraw Hill, 3rd edition, 2002.

[2] Thomas J. Juliano, Steven P. Schneider, Selin Aradag, and Doyle Knight. Quiet-flow Ludwieg tube for hypersonic transition research. *AIAA Journal*, 47(7):1757–1763, Jul 2008.

[3] Kenneth F. Stetson and Roger L. Kimmel. Example of second-mode instability dominance at a Mach number of 5.2. *AIAA Journal*, 30(12):2975–2976, 1992.