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\documentclass[12pt]{article}
\usepackage{tikz}
\usepackage{amsmath, amssymb}
\usepackage{fullpage}
\usepackage[colorlinks=true,linkcolor=blue]{hyperref}

\title{\textbf{Microsoft Word vs. \LaTeX}}
\date{}
\pagenumbering{gobble}

\begin{document}

\maketitle
\vspace{-1cm}

Here is the equation for the area of a circle:
\begin{equation}
\label{eqn:circle}
A = \pi r^2
\end{equation}

It's a pretty good equation, if I do say so myself. \\

This is the formula for Riemann sums:
\begin{equation}
\label{eqn:riemann}
\lim_{n \to \infty} \sum_{i=1}^n f(x_i^*) \Delta x = \int_a^b f(x) dx.
\end{equation}

\noindent Here's something interesting about equation \eqref{eqn:riemann}.
If you look at \eqref{eqn:circle}, you'll notice that if  $r = 1$  then  $A = \pi$ ,
where  $\pi = 3.1415\dots$ 

Let's make a graph!
\begin{center}
\begin{tikzpicture}
\draw[->, thick] (0,0) -- (0,4.2) node[above] {$y$};
\draw[->, thick] (0,0) -- (3, 0) node[right] {$x$};
\draw[domain=0:2,blue, ->] plot (\x, \x^2) node[above,blue] {$f(x) = x^2$};
\end{tikzpicture}
\end{center}

Before we're done, let's quickly compute some derivatives.
Let  $f(x) = \sqrt[3]{x}$ . Compute  $f'(x)$ .

Well, we can rewrite the function as  $f(x) = x^{\frac{1}{3}}$ ,
and use the normal power rule for derivatives. Here goes:
\begin{align*}
f'(x) &= \frac{1}{3} x^{-\frac{2}{3}} \\
&= \frac{1}{3 \sqrt[3]{x^2}}
\end{align*}

Looks great! \\

This document took 10 minutes to write.

\end{document}

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