Hello world!

I'm a test Markdown document.

Here's some bold text and here's some italic text. This is inline code.

Markdown Tables

First Name	Last Name	Location	Allegiance
Mance	Rayder	North of the Wall	Wildlings
Margaery	Tyrell	The Reach	House Tyrell
Danerys	Targaryen	Meereen	House Targaryen
Tyrion	Lannister	King's Landing	House Lannister

Code blocks

```
This code is in a code block.
```

Here's a syntax-highlighted code block:

```
#!/usr/bin/env python3
import sys
if __name__ == '__main__':
    print('This is highlighted Python code!')
    sys.exit(0)
```

Page Layout with \LaTeX\ Commands

Here's a forced page break.

\pagebreak

LaTeX support

This document supports inline \LaTeX!

Here's the proof: $\frac{n!}{k!(n-k)!} = \frac{n}{k}$

Creating a footnote is easy.\footnote{An example footnote.}

Here's an equation:

$$x = a_0 + \frac{1}{a_1 + \frac{1}{a_2 + \frac{1}{a_4}}}$$

Here are some numbered equations:

$$f(x) = (x+a)(x+b)$$

\begin{equation}

$$5^2 - 5 = 20$$

\end{equation}

$$a = bq + r$$

Here's some multi-line math stuff:

$$u(x) = \begin{cases} \exp x & \text{if } x \ge 0\\ 1 & \text{if } x < 0 \end{cases}$$

\begin{align}

$$f(x) &= (x+a)(x+b) |$$

$$&= x^2 + (a+b)x + ab$$

\end{align}