

OS9

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1 text

why \LaTeX ?

I It makes beautiful documents

I Especially mathematics

I It was created by scientists, for scientists

I A large and active community

I It is powerful — you can extend it

I Packages for papers, presentations, spreadsheets, . . .

2 image



best nature picture

3 table

<i>7C0</i>	<i>hexadecimal</i>
<i>3700</i>	<i>octal</i>
<i>11111000000</i>	<i>binary</i>
<i>1984</i>	<i>decimal</i>

4 formula

$$E = mc^2 \quad (*)$$

$$\begin{aligned}\sin A \cos B &= \frac{1}{2} [\sin(A - B) + \sin(A + B)] \\ \sin A \sin B &= \frac{1}{2} [\sin(A - B) - \sin(A + B)] \\ \cos A \cos B &= \frac{1}{2} [\cos(A - B) + \cos(A + B)]\end{aligned}$$

Use the Stirling formula to show that

$$\frac{a^n}{n!} \sim \frac{1}{\sqrt{2\pi n}} \left(\frac{ae}{n}\right)^n \quad (n \rightarrow \infty)$$

when a is any constant, and deduce that

$$\lim_{n \rightarrow \infty} \frac{a^n}{n!} = 0$$

5 code

```
#include <stdio.h>
#define N 10
/* Block
 * comment */

int main()
{
```

```
int i;

// Line comment.
puts("Hello_world!");

for (i = 0; i < N; i++)
{
    puts("LaTeX_is_also_great_for_programmers!");
}

return 0;
}
```