# LATEX is fun 

Your Names

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## 1 Getting started

Here is an equation:

$$
\begin{equation*}
e=m c^{2} \tag{1}
\end{equation*}
$$

Equation 1 is a very famous equation, but if you want to include an equation in mid-sentence, like $e^{2 * \pi * i}=1$, you use a different grouping symbol.

Here is a (fallacious) proof that $2=1$ :

$$
\begin{align*}
a & \equiv b  \tag{2}\\
a^{2} & =a b  \tag{3}\\
\left(a^{2}-b^{2}\right) & =a b-b^{2}  \tag{4}\\
(a-b)(a+b) & =b(a-b)  \tag{5}\\
a+b & =b  \tag{6}\\
b+b & =b  \tag{7}\\
2 b & =b  \tag{8}\\
2 & =1 \tag{9}
\end{align*}
$$

You can avoid the numbering with eqnarray*.

$$
\begin{aligned}
a & \equiv b \\
a^{2} & =a b \\
\left(a^{2}-b^{2}\right) & =a b-b^{2} \\
(a-b)(a+b) & =b(a-b) \\
a+b & =b \\
b+b & =b \\
2 b & =b \\
2 & =1
\end{aligned}
$$

| left | centered | right |
| :--- | :---: | ---: |
| 1 | 1 | 1 |
| 12 | 12 | 12 |
| 123 | 123 | 123 |

Table 1: This is the longer caption that should explain, in detail, exactly what the contents of the table are, so that some one flipping through the journal can read the table without having to read the entire article. Here I'm illustrating 3 of the many formatting options for table columns.

## 2 Finishing up

As we saw in Section 1, math is fun. Now let's do a table. Table 1 has a simple table.

## References

