

# Sample document

Hiroki Hamaguchi

December 7, 2025

## Appendix A Check LLText

Wrong LaTeX math environment:

```
\begin{align}
\end{equation}
```

## Appendix B LLSetBar

Detecting inappropriate use of the vertical bar  $|$  is very difficult. We are currently trying to detect the following, although not implemented yet.

<code>\lvert -1 \rvert</code>	$ -1 $	ok
<code>\abs{-1}</code>	$ -1 $	ok
<code>\vert -1 \vert</code>	$ -1 $	ng
<code>  -1  </code>	$ -1 $	ng

<code>\lVert -x \rVert</code>	$\  -x \ $	ok
<code>\norm{-x}</code>	$\  -x \ $	ok
<code>\Vert -x \Vert</code>	$\  -x \ $	ng
<code>   -x   </code>	$\  -x \ $	ng

<code>\relmiddle  (macro)</code>	$\left\{ a \mid a > \frac{1}{2} \right\}$	ok
<code>\mid</code>	$\{ a \mid a > \frac{1}{2} \}$	ok?
<code> </code>	$\{ a   a > \frac{1}{2} \}$	ng

<code>\divides (MnSymbol)</code>	$+2 \mid +4$	ok
<code>\mid</code>	$+2 \mid +4$	ok?
<code>\mathrel </code>	$+2 \mid +4$	ok?
<code>\vert</code>	$+2 \mid +4$	ng
<code> </code>	$+2 \mid +4$	ng

<code>f(y x)</code>	$f(y x)$	ok?
<code>f(y \mid x)</code>	$f(y \mid x)$	ok?
<code>f(\,y\mid x\,)</code>	$f(y \mid x)$	ok?
<code>\left. \mathrm{d}v \right _{t=0} f(t)</code>	$\left. \frac{d}{dt} \right _{t=0} f(t)$	ok?