

Quotations in L^AT_EX

BAD

"This is a quote."

"This is a quote."

'This is a quote.'

'This is a quote.'

GOOD

“This is a quote.”

“This is a quote.”

‘This is a quote.’

‘This is a quote.’

Text inside of the math environment

BAD

$$\frac{rateofchangeofy}{rateofchangeofx}$$

```
$$  
\frac{rate of change of y}  
  {rate of change of x}  
$$
```

$$\frac{rate\ of\ change\ of\ y}{rate\ of\ change\ of\ x}$$

```
$$  
\frac{rate~of~change~of~y}  
  {rate~of~change~of~x}  
$$
```

GOOD

$$\frac{\text{rate of change of } y}{\text{rate of change of } x}$$

```
$$  
\frac{\text{rate of change of } y}  
  {\text{rate of change of } x}  
$$
```

Italics

BAD

This proof is *extremely* easy.

This proof is \$extremely\$ easy.

GOOD

This proof is *extremely* easy.

This proof is \textit{extremely} easy.

Math Operators

BAD

$\sin x, \cos x, \ln(x)$

`$\sin x$, $\cos x$, $\ln x$`

$\sin(x), \cos(x), \ln(x)$

`$\sin(x)$, $\cos(x)$, $\ln(x)$`

$\lim_{x \rightarrow 0} f(x)$

`$$
lim_{x \rightarrow 0} f(x)
$$`

GOOD

$\sin x, \cos x, \ln(x - 2)$

`$$\sin x$, $\cos x$, $\ln(x-2)$`

$\lim_{x \rightarrow 0} f(x)$

`$$
\lim_{x \rightarrow 0} f(x)
$$`

Pro Tip: If you need a new operator you can define it in your preamble. For example if I put this in the preamble:

```
\def\deg{\operatorname{deg}}
```

Then I can use it:

$\deg(p(x)q(x)) = \deg(p(x)) + \deg(q(x))$

`$$\deg(p(x)q(x))=\deg(p(x))+\deg(q(x))$`

Multiplication Signs

BAD

$x * y$

`$x*y$`

$x \times y$

`$x\times y$`

$x.y$

`$x.y$`

OKAY

$x \cdot y$

`$x\cdot y$`

GOOD

xy

`xy`

$0 \cdot f'(c)$

`$0\cdot f'(c)$`