

A FEW MORE MATH EXAMPLES IN L^AT_EX

1. The truth table for $p \wedge q$ is

p	q	$p \wedge q$
0	0	0
0	1	0
1	0	0
1	1	1

2. Summations may be displayed in different sizes depending on whether they are in text mode. Here is a summation in text mode: $\sum_{i=1}^n i = \frac{n(n+1)}{2}$. And here is the same thing in display mode:

$$\sum_{i=1}^n i = \frac{n(n+1)}{2}.$$

3. Likewise for unions, intersections, and other things: $\bigcup_{x \in \mathbb{Z}} \{x^2\}$ or

$$\bigcup_{x \in \mathbb{Z}} \{x^2\}.$$

4. Did you notice how the curly braces were not quite large enough above? If you have exponents or other large terms in an expression, you will want to make your delimiters grow to match with `\left` and `\right` like

$$\{x \in \mathbb{R} : x^2 = x\}$$

and

$$(n-1) \left(1 - \left(\frac{n-1}{n}\right)^{2n}\right)$$

and even

$$f(n) = \begin{cases} n/2 & \text{if } n \text{ is even} \\ (n-1)/2 & \text{otherwise} \end{cases}$$

5. Some functions like `min`, `max`, `log`, and `lim` have their own commands to display them correctly. For example:

$$y = \min_{x \in \mathbb{R}} f(x)$$

and

$$y = \lim_{x \rightarrow \infty} f(x)$$