

Formatting Math in L^AT_EX

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Abstract

This article gives examples of some common math typesetting problems. View the source code to see how each example is done.

Intro

1. $\lim_{h \rightarrow 0} \frac{f(x+h)-f(x)}{h} = f'(x)$

2. $\lim_{h \rightarrow 0} \frac{f(x+h) - f(x)}{h} = f'(x)$

3. $\ln x$

4. $\cos x$

5. $\int_a^b f(x)dx = F(b) - F(a)$

6. $\int_a^b f(x)dx = F(b) - F(a)$

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

8. $x \in \Re$

9. $x \in \mathbb{R}$

10. $\begin{pmatrix} 1 & 2 & 3 \\ 4 & 5 & 6 \\ 7 & 8 & 9 \end{pmatrix}$

11. $\left(\int_a^b f(x)dx \right) \left[\int_a^b f(x)dx \right]$

12. $|x| = \begin{cases} -x & x < 0 \\ x & x \geq 0 \end{cases}$

13. $|x| = \begin{cases} -x & x < 0 \\ x & x \geq 0 \end{cases}$

14. $\int_{-2}^3 f(t) dt$ (notice the upright “d”)

15. $\mathbb{Q} = \left\{ \frac{a}{b} \mid a, b \in \mathbb{Z} \text{ and } b \neq 0 \right\}$