

Question 1

Question 2

Question 3

Question 4

Question 5

Question 6

Question 7

Appendix: L^AT_EX Symbol List

You may find the following symbol list useful.

Greek Letters	Math Symbols	Math Constructs
α \alpha	\times \times	$\&$ \&
β \beta	\div \div	$\%$ \%
χ \chi	\sim \sim	$\{$ \{
δ \delta	\neq \neq	$\}$ \}
ϵ \epsilon	\equiv \equiv	$($ (
η \eta	\geq \ge	$)$)
γ \gamma	\leq \le	$($ \big(
ι \iota	∞ \infty	$)$ \big)
κ \kappa	\sum \sum	$($ \Big(
λ \lambda	\prod \prod	$)$ \Big)
μ \mu	\neg \neg	a^x a ^x
ν \nu	\wedge \wedge	a_x a _x
ω \omega	\vee \vee	$\frac{abc}{xyz}$ \frac{abc}{xyz}
ϕ \phi	\rightarrow \rightarrow	\sqrt{abc} \sqrt{abc}
π \pi	\leftrightarrow \leftrightarrow	$\sqrt[n]{abc}$ \sqrt[n]{abc}
ψ \psi	\forall \forall	\overline{abc} \overline{abc}
ρ \rho	\exists \exists	$\mathcal{P}(X)$ \mathcal{P}(X)
σ \sigma	\nexists \nexists	$\bigcup_{i=1}^n$ \bigcup_{i=1}^n
τ \tau	\in \in	
θ \theta	\notin \notin	
υ \upsilon	\subset \subset	
ξ \xi	$\not\subset$ \not\subset	
ζ \zeta	\subseteq \subseteq	
Δ \Delta	$\not\subseteq$ \not\subseteq	
Γ \Gamma	\emptyset \emptyset	
Λ \Lambda	\cup \cup	
Ω \Omega	\cap \cap	
Φ \Phi	\bigcup \bigcup	
Π \Pi	\bigcap \bigcap	
Ψ \Psi	\circ \circ	
Σ \Sigma	\cdot \cdot	
Θ \Theta	\cdots \cdots	
Υ \Upsilon	\ldots \ldots	
Ξ \Xi		

Mathcal letters \mathcal{A}: *ABCDEFGHIJKLMNOPQRSTUVWXYZ*

Mathbb letters \mathbb{A}: *ABCDEFGHIJKLMNOPQRSTUVWXYZ*

Mathfrak letters \mathfrak{A}: *A B C D E F G H I J K L M N O P Q R S T U V W X Y Z*

Bold letters \textbf{A}: **A B C D E F G H I J K L M N O P Q R S T U V W X Y Z**

Bold italic letters \pmb{A}: ***A B C D E F G H I J K L M N O P Q R S T U V W X Y Z***