

Questions to ask and clarify with your favorite LLM (recommended: Claude, I am using Opus 5 High)

1. Can you explain the concept of infinity in mathematics? Is infinity a number, and how should I interpret it? (Most of you probably have a really fuzzy idea regarding what infinity really means; it should help you resolve misconceptions you may have)
2. What are the different orders of infinity? (This is an intriguing set of results by Cantor and it will improve your understanding of issues encountered when dealing with uncountably infinite sample spaces)
3. Can you explain the notion of a t-test from statistics? (You most likely never saw t-tests so this is a nice way to check if you can learn something new with AI)
4. Explain the practical and mathematical meaning of the Central Limit Theorem. (Most of you have seen CLT, but do you truly know what it stands for and why the scaling is chosen the way it is)?

When trying to clarify a concept you should ask something like: can you explain this to me in layman's terms, can you provide the intuition, can you give me at least two useful examples? Once you understand the intuition behind the idea/proof, ask for formal mathematical definitions, proofs etc. Make sure to understand the notation and concepts, as often LLMs use fancy terminology directly adapted from specialized papers.