

Realistic Limits

MATH 110:
Calculus I

Limits at Infinity?

- Infinity is not realistic
- “A lot of the time, if a question includes the word “infinity,” the answer is “an infinite amount”—when there's an answer at all.”
 - <https://what-if.xkcd.com/109/>
- Log at infinity is infinite, but the log of the universe in planck length is less than 62

The background is a dark, textured surface covered with a dense, overlapping pattern of mathematical symbols and numbers. The symbols include various numbers (0-9), mathematical operators like plus (+), minus (-), multiplication (x), division (/), and percent (%), as well as geometric shapes like triangles and circles. The colors are primarily dark green, black, and white, with some lighter green accents. The overall effect is a complex, chaotic, and intellectual visual field.

Questions?

Labs

- You are encouraged to collaborate and discuss among your peers
- You will submit one lab for your group
- Type it up and submit it online by the end of the next lab
 - Cite all the resources used including other groups if you got ideas from them
- This time can also be used to ask me questions or to help each other with the current homework

Lab 4

- What is the point of limits at infinity if they are not realistic?
- Are there any applications where this makes sense?
- Give a few examples where the limit at infinity doesn't seem applicable and a few where it does.
- What does it mean for x to be infinite in reality?
- Can you think of a few examples of infinite limits not involving numbers?
- What are your personal thoughts on this concept?
 - e.g. It's silly because they aren't practical