

GPT, The Worst Mathematician Ever

The GPT foundation model is likely to fail due to the `max_completion_token` parameter, which restricts the length to the responses it can generate, and thus its ability to deal with more lengthy calculations in this case. Essentially, what is asked to GPT is an iterative exponential calculation, meaning $n.\text{pow}(n.\text{pow}(i))$, which exponentially ramps up the small brain of GPT. As a result, the model might not process properly or to completion the requested calculation. Additionally, the way the model api is requested can cause problems. The combination of asking the developer to be at the same time funny and arithmetically accurate, might reduce the available token or mix the temperature / top_p of the two tasks. However, having the two calls be distinct also has its drawbacks, mainly in performance.