Y,

I hope you and your family are well.

I am currently taking a course in PDE’s and would like a few things explained if possible.

* Consider a bar insulated on both sides with the ends held at some constant temperature (other than 0) my analysis gives, that as times goes to infinity, the temperature goes to 0 which is definitely not accurate and I don’t know where my mistake is.
* How do I solve the same problem when the ends are at different temperatures?
* How do I solve the same problem if the ends are insulated?

Please show the analysis for each situation….I am using separation of variables and Fourier Series as the method of solution.

Chuvck