

Exercise 1.3.1

Consider a one-dimensional rod, $0 \leq x \leq L$. Assume that the heat energy flowing out of the rod at $x = L$ is proportional to the temperature difference between the end temperature of the bar and the known external temperature. Derive (1.3.5); briefly, physically explain why $H > 0$;

[I think a better way to write the last independent clause is “explain briefly why $H > 0$ physically.”]