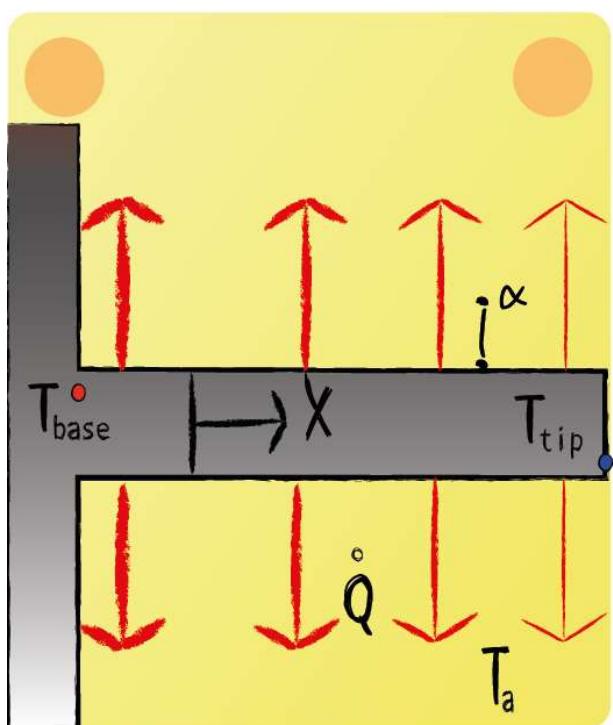


Lecture 9 - Question 6



Consider a fin exchanging heat. Which of the following temperature profiles is correct?

At the base the rate of heat transfer is the biggest. This is due to a large temperature difference. Here the temperature should be at its maximum as well as the slope of the temperature profile.

At the tip the rate of heat transfer is the smallest and will approach zero. This is due to a very small temperature difference and thus the temperature profile will approach the tip temperature. Due to the fact that the temperature profile approaches the tip temperature, the slope should go to zero at that point.

