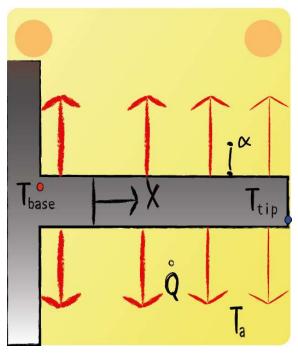


Lecture 9 - Question 6



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 because of this the slope will be relatively small. This is due to a small difference between the ambient and tip temperature. Thus the temperature profile will approach the tip temperature with a small slope.

