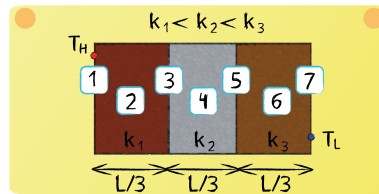# Lecture 02 - Conduction 09

Left side has the highest temperature, so from there it will start decreasing when moving left to right.

At constant area and heat conductivity the temperature gradient increases linearly from left to right.

$k_1 < k_2$, so therefore the temperature gradient in layer 2 will be smaller than in layer 1.

At constant area and heat conductivity the temperature gradient increases linearly from left to right.

$k_2 < k_3$, so therefore the temperature gradient in layer 3 will be smaller than in layer 2.

At constant area and heat conductivity the temperature gradient increases linearly from left to right.

Right side has the lowest temperature, so until there it decreases when moving left to right.