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Assignment #1:

A short summary about the conductive heat transfer and solving the same exercise with L= 0.4 m, A= 20 m2, DeltaT= 25, and k=0.78 W/m K using both simple method and using the resistance concept

What is conductive heat transfer?

Conductive heat transfer is the transfer of heat energy through a material when there is a difference in temperature.

It takes place in all phases of solid, liquid, and gas.

It is represented by

Heat transfer through a wall is proportional to its area. It is also proportional to the difference in temperature and the conductivity. However, it is inversely proportional to thickness of the wall.

Conductivity of a material is its willingness to transfer heat.

L= 0.4 m, A= 20 m2, DeltaT= 25, and k=0.78 W/m K

Method 1:

Method 2: