**ASSIGNMENT**

Find the rate of heat transfer through the wall if L= 0.4 m, A= 20 m2, T= 25, and k=0.78 W/m K using both simple method and using the resistance concept?

**SIMPLE METHOD:**

**RESISTANCE CONCEPT:**

= 976.56 W

**Summary**

HEAT TRANSFER- CONDUCTION AND CONVECTION

In a steady heat transfer through a wall, the transfer is always steady and constant. The heat transfer is in horizontal or x- direction.

The rate of heat conduction through a plane wall:

- is proportional to the average thermal conductivity, the wall area, and the temperature difference

-but is inversely proportional to the wall thickness.

- The better the conductor, the more rapidly **heat** will be **transferred.**

Conduction resistance of the wall:

Thermal resistance of the wall is against heat conduction.

Thermal resistance of a medium depends on the geometry and the thermal properties of the medium.