WEEKLY SUBMISSION - TASK 01

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1) Find the rate of heat loss through the wall?
   If K = 0.78 W/mc
   L = 0.4m
   ΔT = 25 °C
   A = 20 sqm

Sol:

	Q = kA ΔT/L
	Q= 0.78 (20) $\frac{25}{0.4}$
	= 975 W

Resistance concept
R$_{wall}$ = L / kA

	= $\frac{0.4}{(0.78)(20)}$
	= 0.0256 °C/W

Q = ΔT / R$_{wall}$

	= $\frac{25}{0.256}$
	= 976.56 W

Summary of Class - 1
Discussed about the heat transfer through the wall

(Rate of heat transfer into the wall) - (rate of heat transfer out of the wall) = rate of change of energy of the wall

Q $_{in}$ - Q $_{out}$ = $d\frac{Ewall}{dt}$

For steady operation or rate of heat transfer is constant then $d\frac{Ewall}{dt} = 0$

Q $_{wall}$ = $kA \frac{(T1-T2)}{L}$