Task 1

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SHORT SUMMERY

A short summary about the conductive heat transfer :

a short summary about the class was we understand about energy transfer through the objects like gas and liquid or solid like wall and it have direct relation with area and thinness and the material of wall and at same the time it is related to different temperature of 2 side of wall . and all of these can give us information about how much wall or item can transfer the heat through themselves .

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

① $Q° = KA (DELTA\ T / L) = 0.78 \times 20 \times (25/0.4) = 975$

② $R_{WALL} = L/KA = 0.4/(0.78 \times 20) = 0.0256\ C°/W$

$Q° = DELTA\ T / R_{WALL} = 25/0.0256 = 976.5625 \approx 977$ Rounding to higher