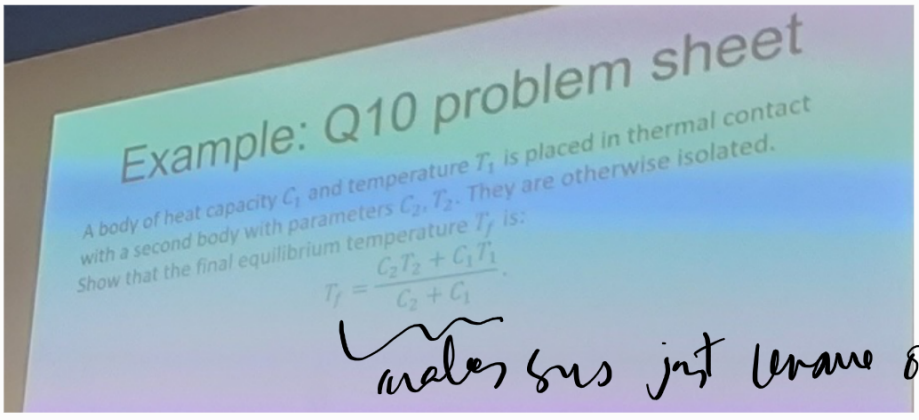

makes sure just because on less academic

$C = \frac{dQ}{dT}$

$\Delta Q_1 = -\Delta Q_2$ heat flow into body

heat flow out of a body

$C = \frac{dQ}{dT} \Leftrightarrow dQ = C\,dT$

$C_1 \int_{T_1}^{T_f} dT = -C_2 \int_{T_2}^{T_f} dT \Rightarrow C_1(T_f - T_1) = -C_2(T_f - T_2)$

$(C_1 + C_2) T_f = C_1 T_1 + C_2 T_2 \Rightarrow \boxed{T_f = \frac{C_2 T_2 + C_1 T_1}{C_2 + C_1}}$

exams: 3 bodies

add ΔQ together