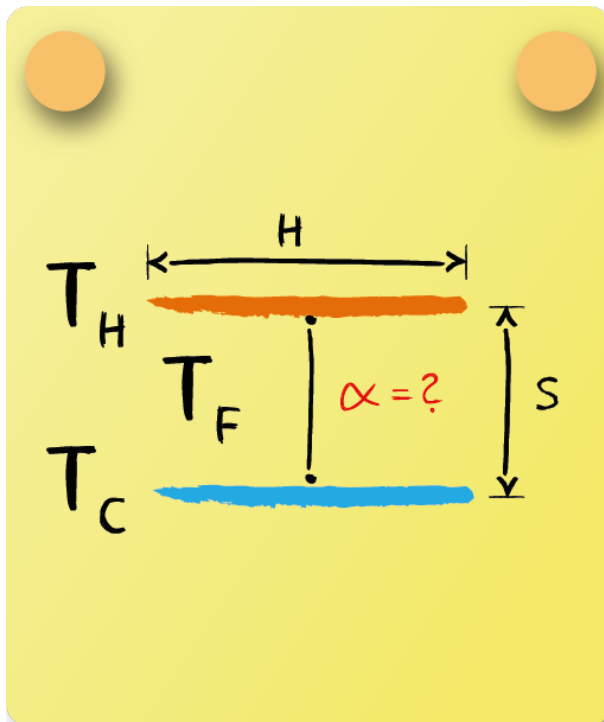




# Heat Transfer Correlation: Task 23



The image describes a gap of  $s$  between two horizontal plates of length  $H$  which is filled with an ideal gas. The upper plate has a temperature  $T_H$  and the lower plate has a temperature  $T_C$ , the ideal gas in between has an average temperature  $T_F$ .

1



For heating from above, the relationship for pure heat conduction always applies:  $\overline{Nu}_s = 1$

2



Results:  $Gr_s = 1682.92$   $\overline{Nu}_s = 1$   $\overline{\alpha} = 7.63$

3



**Important:** Use temperatures in Kelvin!