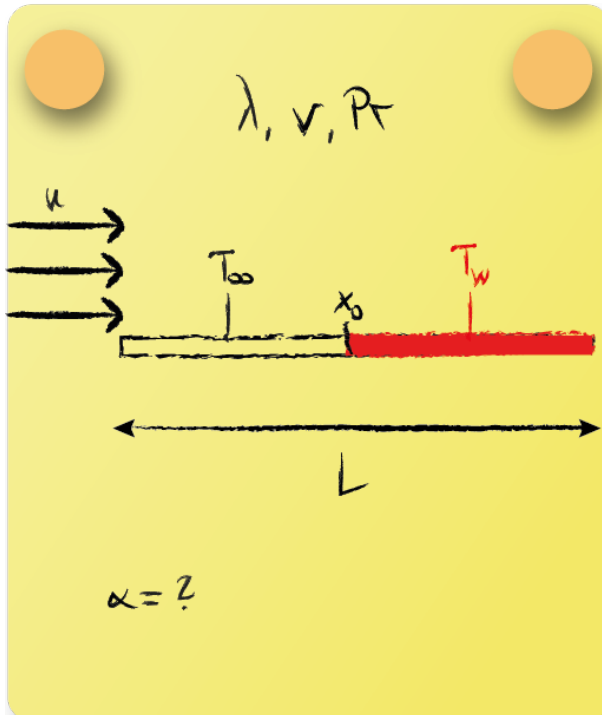




Heat Transfer Correlation: Task 3



The image describes a plate with length L which is heated from x_0 . A fluid streams with velocity u over this plate.

1



$$\overline{Nu}_L = 0,664 Re_L^{1/2} Pr^{1/3} [1 - (\frac{x_0}{L})^{3/4}]^{2/3} / [1 - \frac{x_0}{L}]$$

2



$$Re_L = 3.1:2402,7 \mid 3.2:15197,6 \mid 3.3:33783,8 \mid 3.4:1849,1$$

3



$$\overline{Nu}_L = 3.1:35,64 \mid 3.2:146,14 \mid 3.3:259,7 \mid 3.4:28,01$$

4



$$\overline{\alpha} = 3.1:0,179 \mid 3.2:92,21 \mid 3.3:16,00 \mid 3.4:0,271$$