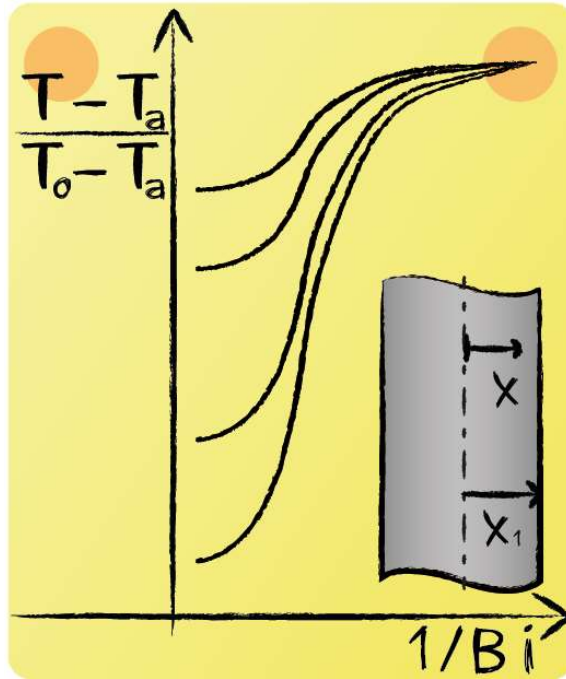


Lecture 17- Question 4



Remember the Heisler diagram for a plate as sketched in the figure. A flat plate surrounded by a fluid, with the known parameters λ , a , α , T_a and x_1 , has at time instant t_0 temperature T_0 . After some time the temperature at the center has cooled down to T_1 at time instant t_1 . Which of the following parameters can **only** be determined with use of the Heisler diagram?



The surface temperature $T(x = x_1, t)$ at time instant t_1 . The other parameters are given or can be calculated by their known formulas.