NEM294 ASSIGNMENT 2 (due Apr. 20, Thursday; 17:00 o'clock)

A 6-Liter pressure cooker ("düdüklü tencere" in Turkish) has the lid screwed on tight. A small opening with A=0.048 cm^2 is covered with a petcock ("düdük") that can be lifted to let steam escape. The outside atmospheric pressure is 100 kPa.

At the start of the cooking period, the P-cooker contains 3 kg water. At the end of the cooking period, the quality of the water is x=0.006.

For cooking temperatures 120, 125, 130, … ,155, 160 ^{0}C (nine values), write a program to **compute** the following:

(a) Mass of the petcock,
(b) Mass of the lid (with a diameter D=25 cm) if it were a regular cooker ("normal tencere"),
(c) Heat transfer during the cooking period,
(d) Length of the cooking period if the heat is transferred from a 2-kW source.

NOTES
Prepare a report about your findings in the **proper format**, including plots and tables exhibiting results. DO NOT NEGLECT to write meaningful conclusion(s).

Submissions cannot be uploaded to HADİ later than 17:05 on Apr. 20; so, adjust your time with respect to that.