ELG2331
Lab 4: MATLAB Application in Magnetic Circuits

Solve the following problem twice, once by hand and once by a MATLAB program.

A ferromagnetic core is shown in the following Figure. Three sides of this core are of a uniform width, while the fourth side is somewhat thinner. The depth of the core (into the page) is 10 cm, and the other dimensions are shown in the Figure. There is a 200-turn coil wrapped around the left side of the core. Assuming relative permeability μ_r of 2500, how much   flux   will   be   produced   by   a   1-A   input current?