EXPERIMENTAL PROBLEM

In a "black box" there are two identical semiconducting diodes and one resistor connected in some unknown way. By using instruments provided by the organizers find the resistance of the resistor.

Remark: One may assume that the diode conducts current in one direction only.

List of instruments: two universal volt-ammeters (without ohmmeters), battery, wires with endings, graph paper, resistor with regulated resistance.