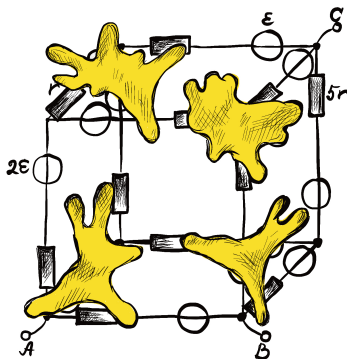**9.s04.e01**

Annushka has already spilled the sunflower oil.
Woland, "The Master and Margarita"

APCH-HI

The robot WALL-E found an electrical circuit of the Cubic Robot and assembled it (see fig.), using random batteries and resistors from his collection. Due to some reasons, the Robot did not work, and WALL-E began to connect electrical measuring devices to various outputs of the circuit, and enter the results in the table below.

When measuring, two ideal ammeters A_1 and A_2, an ideal voltmeter V and an ohmmeter Ω were used. Unfortunately, WALL-E sneezed with engine oil on the circuit and some data in the table was lost.

1. *(1 point)* Determine the EMF $\mathcal{E}_\Omega$ of the ohmmeter used by WALL-E.

2. *(1 point)* Determine the internal resistance R_Ω of the ohmmeter.

3. *(2 points)* Help WALL-E recover the lost data for the 8th row.

4. *(6 points)* Help WALL-E recover the lost data for the 9th row.

Number of measurement	Connected devices	Device readings
1	A_1 to AB	0,20 mA
2	A_2 to BC	0,40 mA
3	A_1 to AC	0,30 mA
4	V to AB	6,0 V
5	V to BC	12,0 V
6	V to AC	6,0 V
7	Ω to AB	5,0 KΩ
8	Ω to BC	
9	A_1 to AB / A_2 to BC	
10	Ω to AB	off the scale

First hint — 24.04.2023 20:00 (Moscow time)
Second hint — 26.04.2023 12:00 (Moscow time)

Final of the first round — 28.04.2023 20:00 (Moscow time)