

Zadatak 1: Električna vodljivost u dvije dimenzije (10 bodova)

Upišite brojeve između 0 i 9 u sljedeću tablicu:

0	1	2	3	4	5	6	7	8	9

Dio A. Mjerenja s probom četiri kontakta (4PP) (1.2 boda)

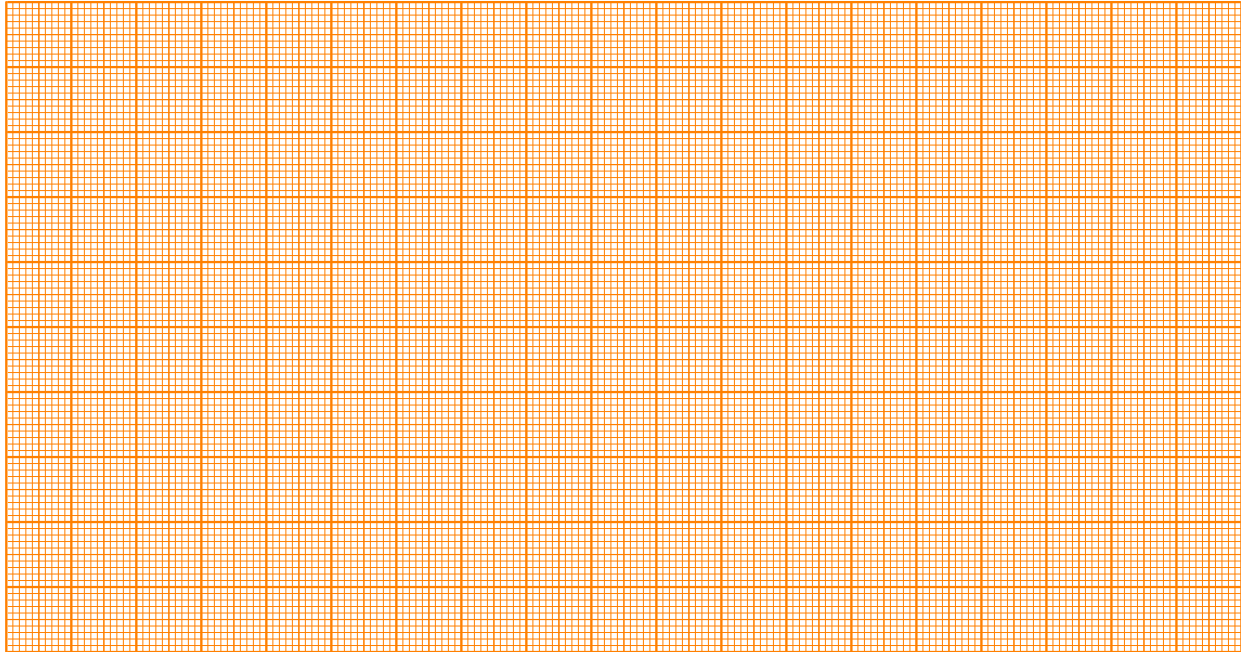
A.1 (0.6 pt)

$s =$

I	V	I	V

Nacrtajte podatke na **Graf A.1**.

Graf A.1: I vs. V



A.2 (0.2 pt)

$R =$

A.3 (0.4 pt)

$\Delta R =$

Dio B. Površinska otpornost (0.3 boda)

B.1 (0.3 pt)

$\rho_{\square} \equiv \rho_{\infty} =$

Dio C. Mjerenja s uzorkom različitih dimenzija

C.1 (3 pt)

$s =$

$\rho_{\infty} =$

Prazni stupci mogu se koristiti za međurezultate.

w/s						\hat{R}

C.2 (0.2 pt)

Koristite Tablicu **C.1.** za vaše rezultate.

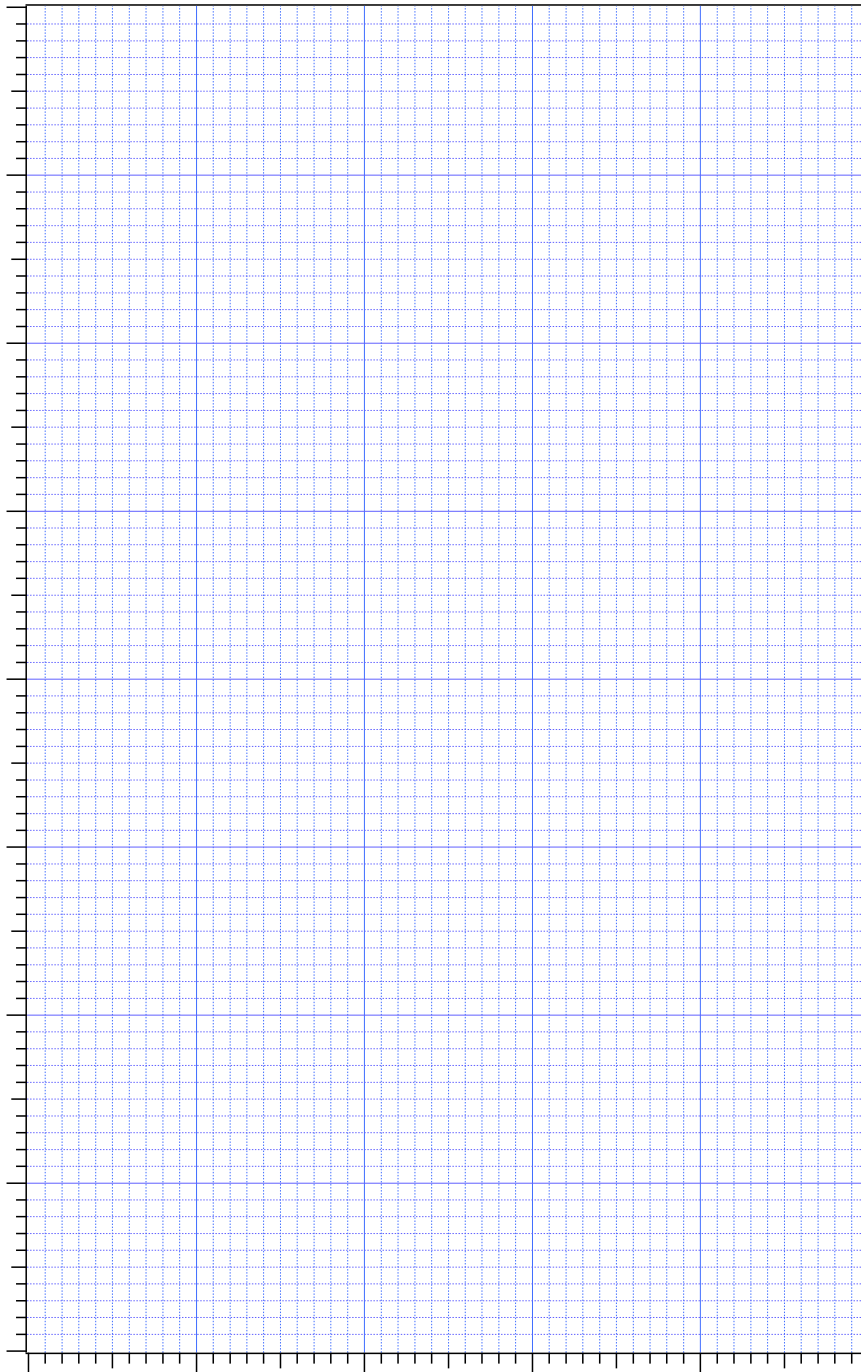
Dio D. Geometrijski korektivni faktor (1.9 bodova)

D.1 (1.0 pt)

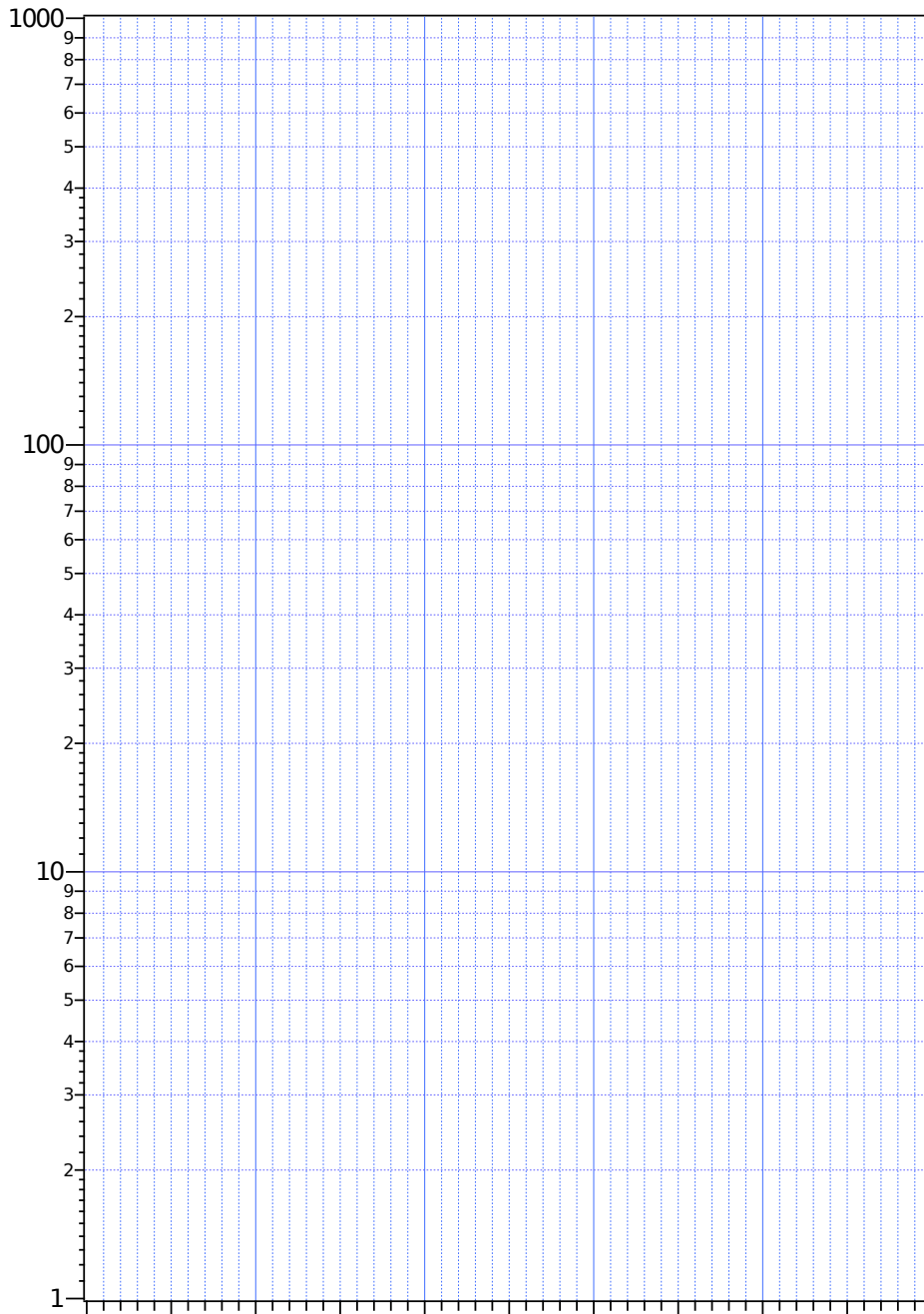
Nacrtajte vaše podatke na pripadnom grafičkom papiru: linearni (Graf **D.1a**), polu-logaritamski (**D.1b**) ili log-log (**D.1c**) na sljedećim stranicama.

D.2 (0.9 pt)

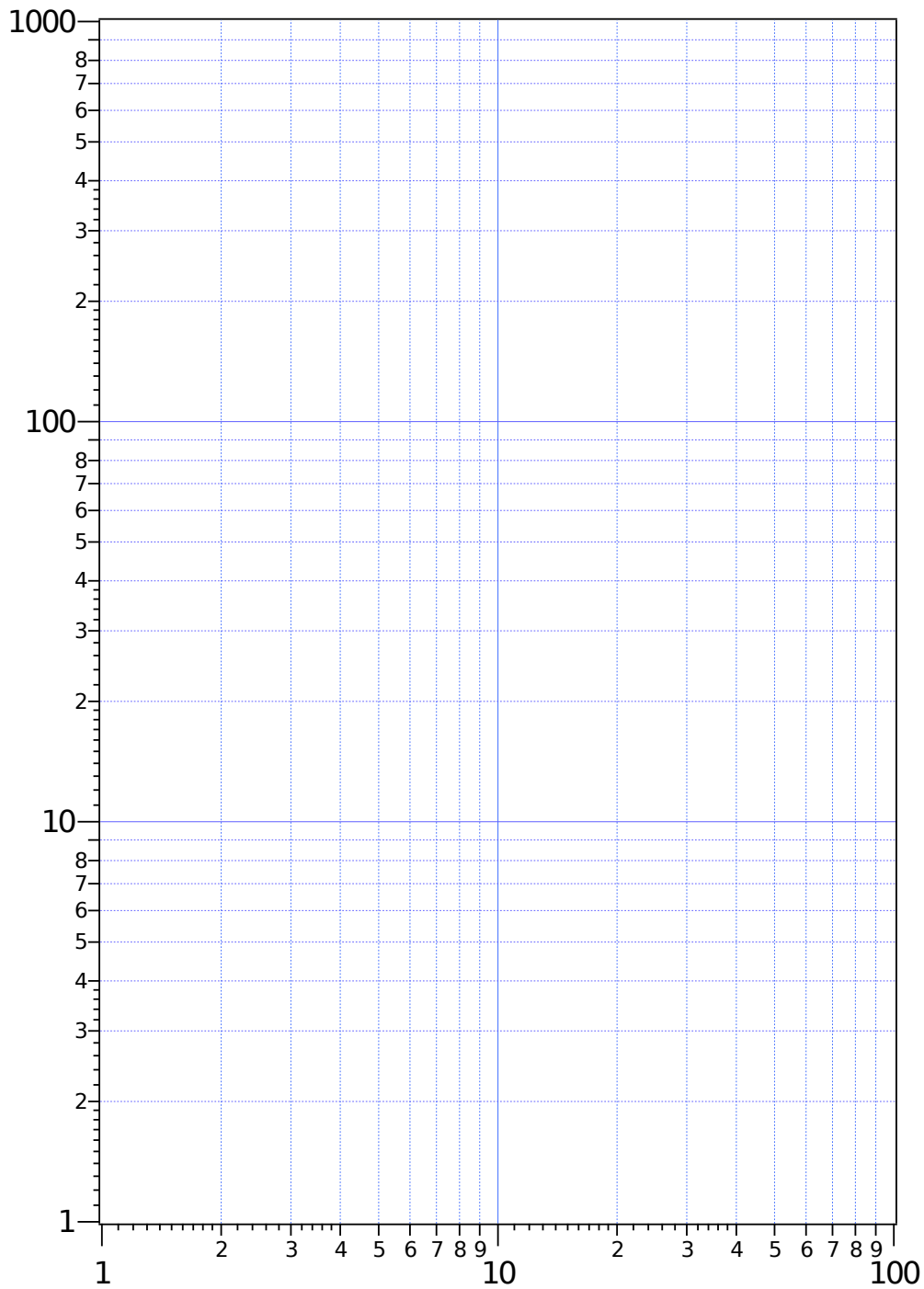
Graf D.1a: linearna skala:



Graph D.1b: polu-logaritamska skala:



GraF D1c: log-log skala:



Dio E. Silikonska pločica i van der Pauwova metoda (3.4 boda)

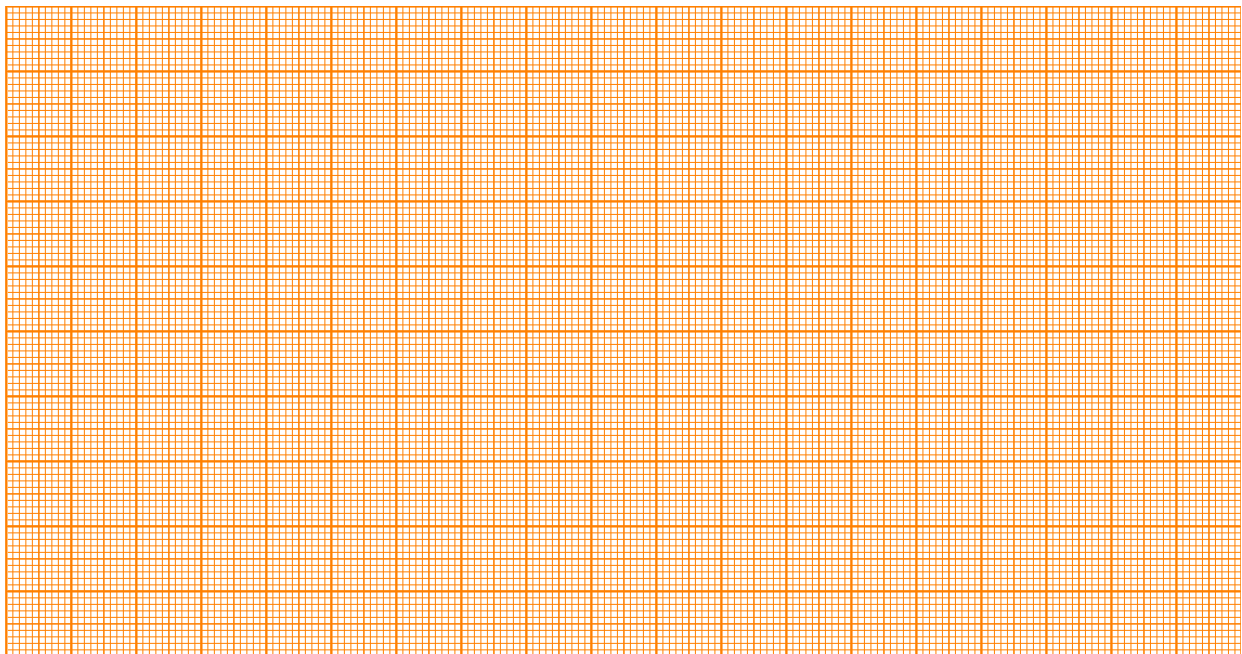
Ovdje zabilježite broj vaše pločice.

E.1 (0.4 pt)

I	V	I	V

E.2 (0.4 pt)

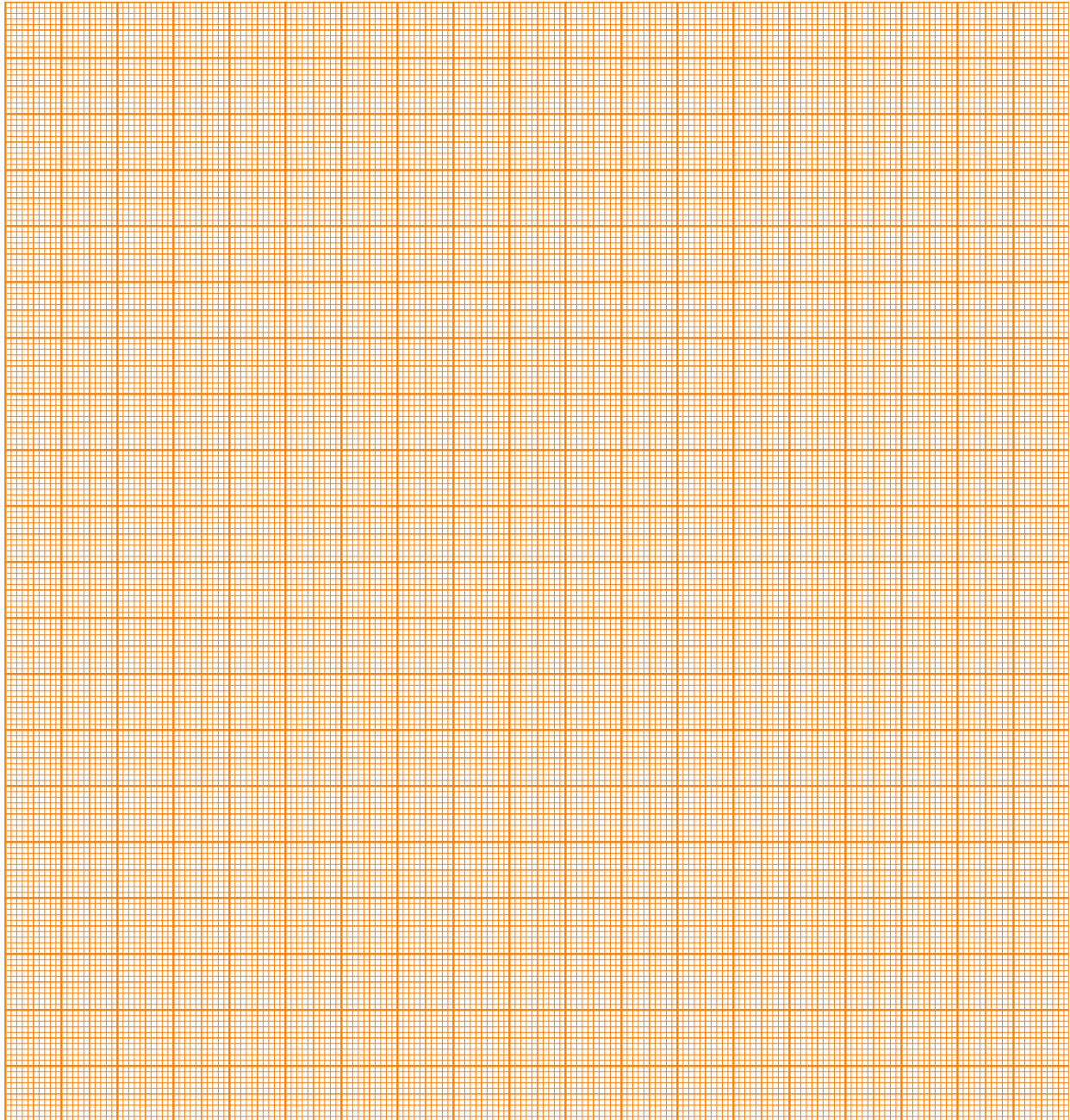
Graf E.2: I vs V



$R_{4PP} =$

E.7 (0.5 pt)

Graf E.7: I vs. V



$\langle R \rangle =$

E.8 (0.4 pt)
Račun:

$$\rho_{\square}(\text{vdP}) =$$

E.9 (0.1 pt)

$$\frac{\Delta\rho_{\square}}{\rho_{\square}(\text{vdP})} = \quad = \quad \%$$

E.10 (0.1 pt)

Otpornost Cr tankog filma $\rho =$