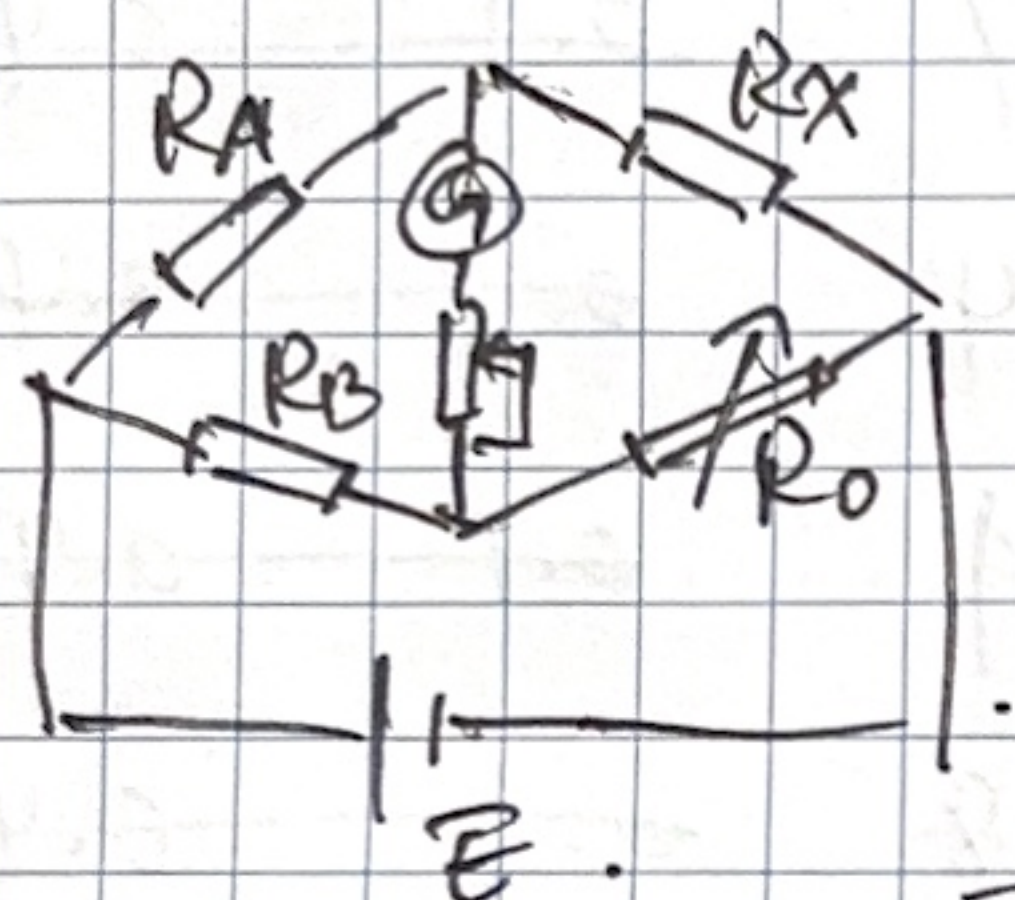


直流电桥测量电阻 & 非平衡电桥测量铂电阻温度系数.

数字万用电阻。

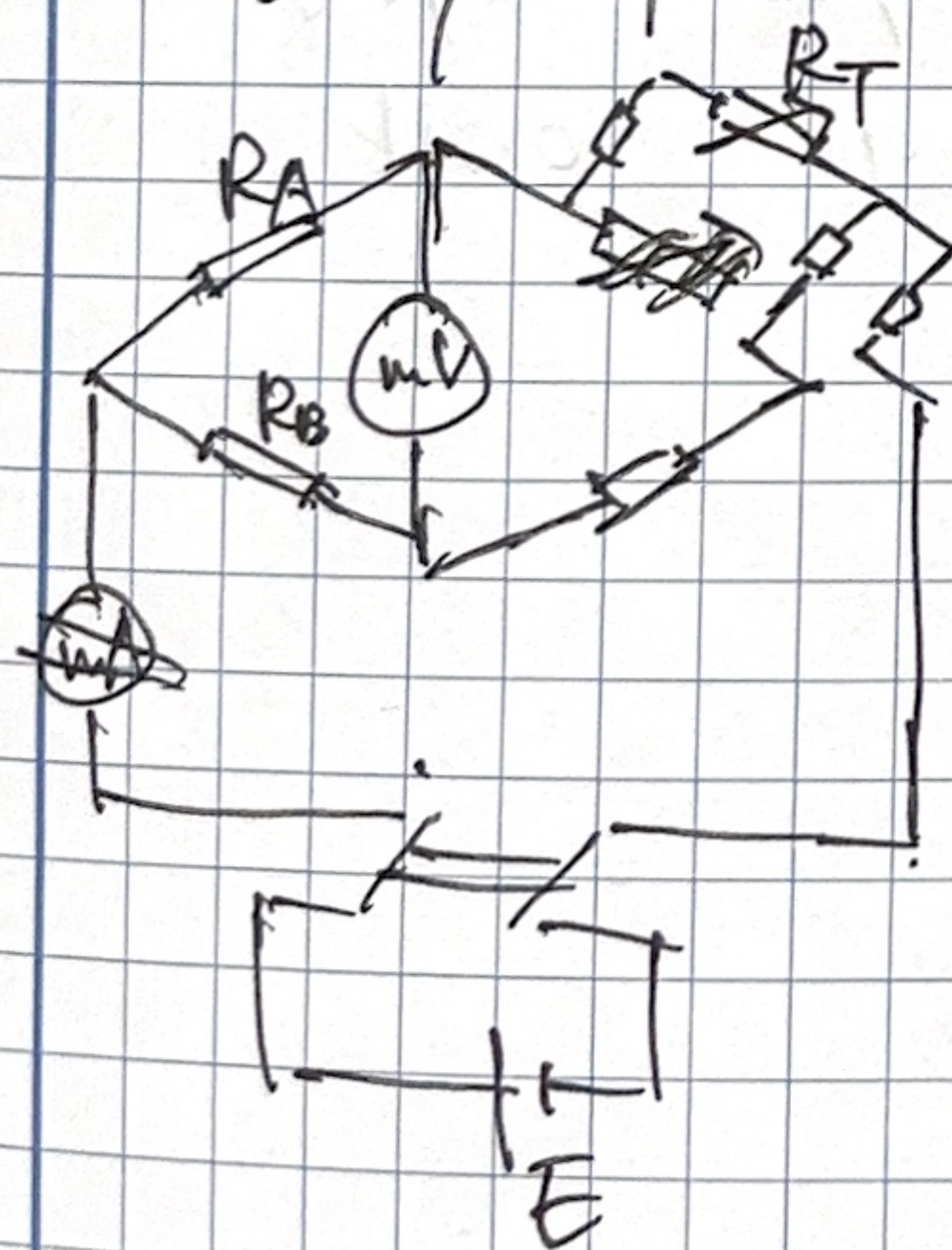
RA  $100.02 \Omega - 0.07 \Omega$   
 $0.9999 \text{ k}\Omega$   
 $9.956 \text{ k}\Omega$

R<sub>B</sub>. ~~100.04~~ 100.03 Ω - 0.07 Ω  
~~2.9999~~ 1.0000 kΩ.  
 10.059 kΩ

$$R_{X_1} = (32.87 - 0.07) \Omega$$
$$R_{in}(0) = 3.10 \Omega - 0.21 \Omega$$
$$E = 1.9919 \text{ V.}$$


RA/RB	RO/Ω	CR/Ω	Δn	S	Rx
100/100.	32.8	0.1	<del>8.7</del> 8.7	2853.6	32.8
100/1k.	<del>32.8</del> 32.83	1	2.3	755.09	32.83
10k/10k	<del>33.2</del> 33.2	<del>32.9</del> 32.9	<del>3.0</del> 3.0	<del>4.0</del> 3.7	<del>2.1</del> 2.1
100/100	33.0	2.0	2.9	40.95/23.03	33.05

## 非平衡电桥

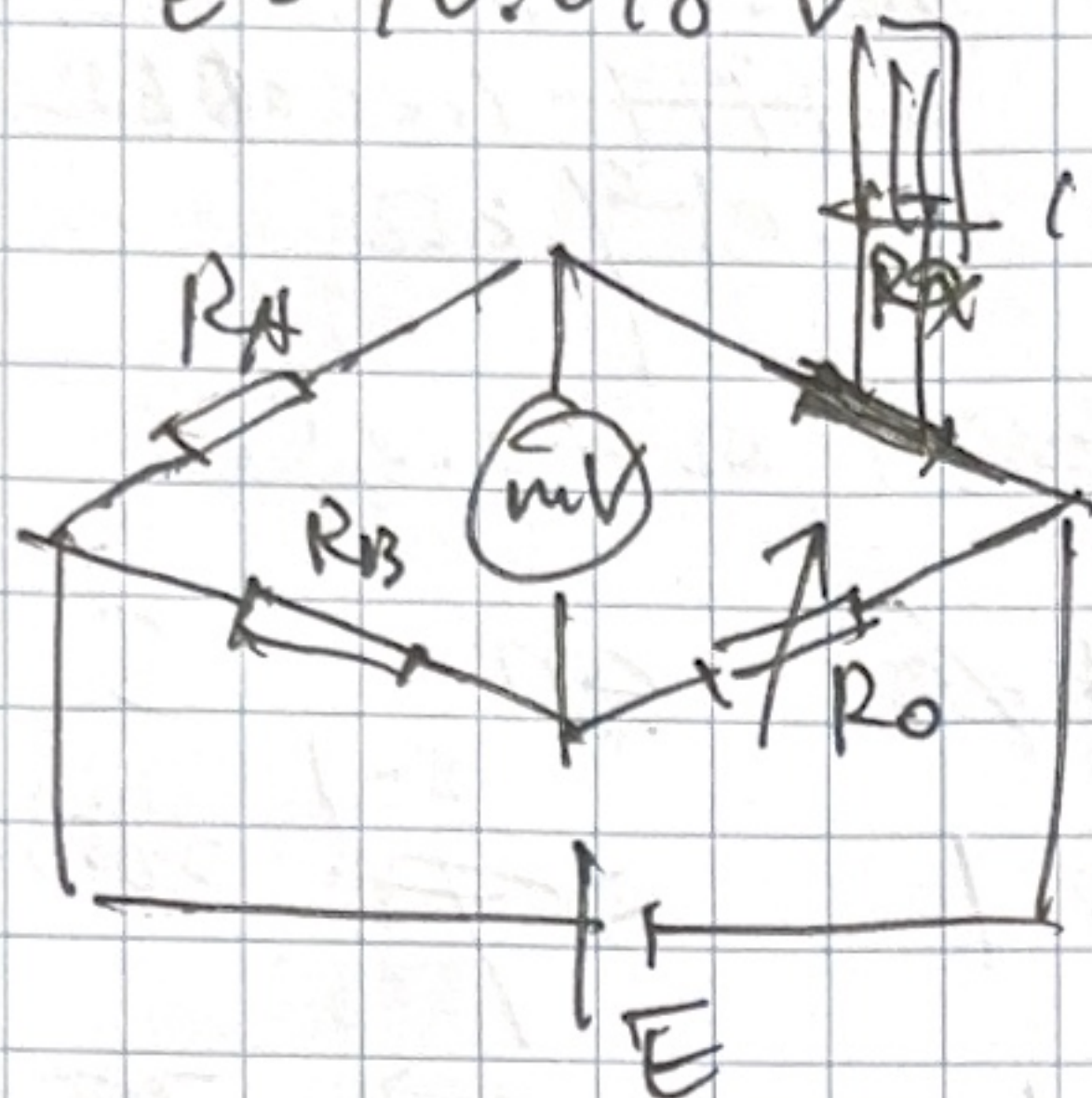
$$E = 19.024 \text{ V}$$

$$R_p = 99.8 \Omega$$
$$k = 0.70057$$
$$b = -0.709$$

$T/^{\circ}\text{C}$	$U/\text{mV}$	$R_0/\Omega$
<del>20.54</del> 20.54	0.04	99.7
21.40	13.87	
40.75	27.68	
50.18	34.42	
60.40	41.67	
70.40	48.69	
80.00	55.37	
	62.73	
90.45	<del>62.54</del>	
(沸腾) 99.95	69.29	



实验内容: 应变片实验 (电子秤).

$$E = 10.018 \text{ V}$$



$R_A/R_B$   
1000/100

$F/(\text{g})$   $R_0/\Omega$   $\Delta R_0/\Omega$   $\Delta U/\text{mV}$

0  $\times 10$  71.28 0.1 0.43

50 71.39 0.1 0.43

100 71.39 0.1 0.43

150 71.38 0.1 0.44

200 71.27 0.1 0.42

300 71.24 0.1 0.44

400 71.21 0.1 0.45

500 71.18 0.1 0.46

600 71.14 0.1 0.44

手机: 71.33

$S_{22}$  (88) 73.39 73.40 0.1

73.49 200

73.61 500

73.64 500

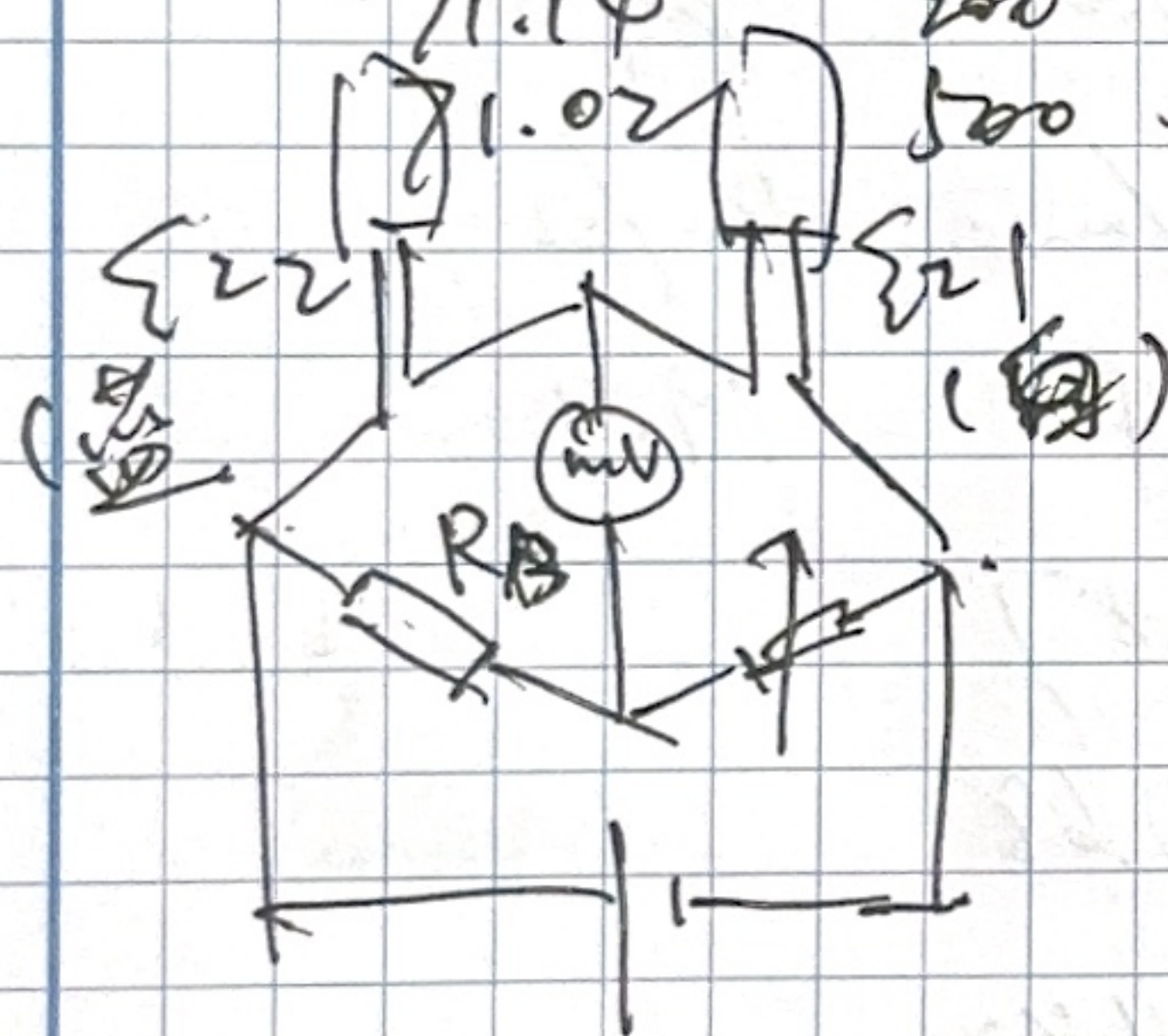
73.52 200

73.44 0

71.22 0

71.14 200

71.02 500



$F/(\text{g})$   $R_0/\Omega$   $\Delta R_0/\Omega$   $\Delta U/\text{mV}$

0 1006.6 0.1 0.24

500 1007.8

400 1007.5

300 1007.3

250 1007.2

200 1007.0

150 1006.9

100 1006.8



1/4 桥 (白)  $F(\mu f)$   $U(mV)$   $R_0/\Omega$   
 0 0.00 3733.9

50 0.13

100 0.22

150 0.33

手机 0.37

200 0.44

250 0.53

300 0.64

400 0.83

500 1.02

1/2 桥

0 0.05

1006.6

50 0.23

100 0.54

150 0.83

手机 0.98

200 1.13

250 1.44

300 1.73

400 2.32

500 2.89

0 ~~28.75~~ 28.75

50 29.35

100 29.93

150 30.53

200 31.11

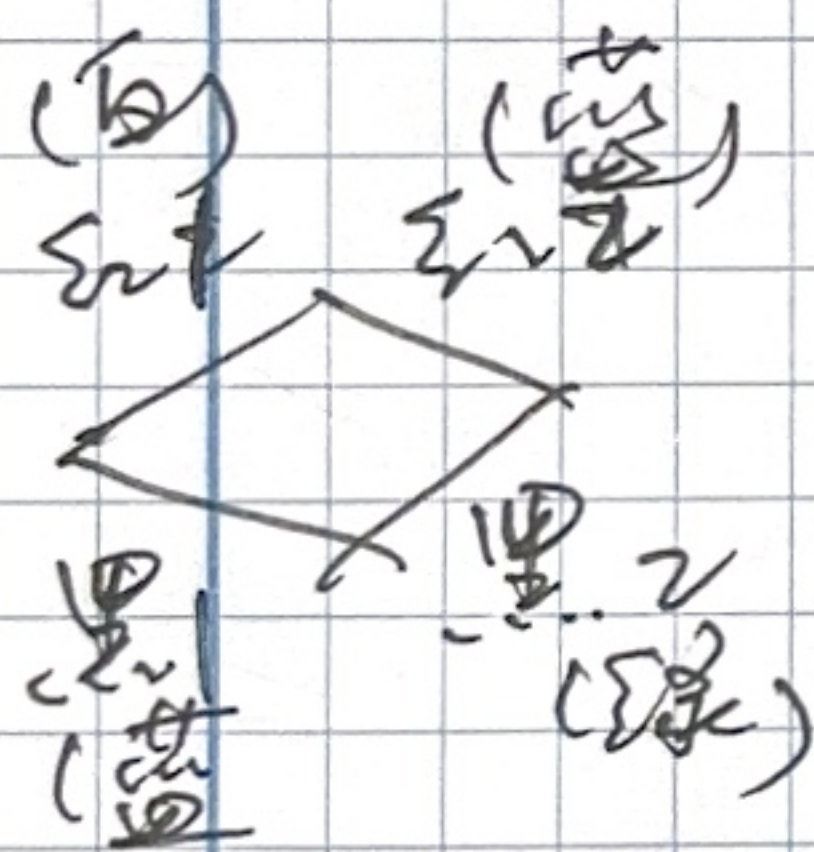
250 31.72

300 32.31

400 33.50

500 34.69

手机 30.92



全桥