

UM-SJTU JOINT INSTITUTE

PHYSICS LABORATORY DATA

SHEET (EXERCISE 1)

Name: Han Yibei

Student ID: 519370910123

Group: 11

Date: 2020.9.12

NOTICE. Please remember to show the data sheet to your instructor before leaving the laboratory. The data sheet will not be accepted if the data are recorded with a pencil or modified with a correction fluid/tape. If a mistake is made in recording a datum item, cancel the wrong value by drawing a fine line through it, record the correct value legibly, and ask your instructor to confirm the correction. Please remember to take a record of the precision of the instruments used. You are required to hand in the original data with your lab report, so please keep the data sheet properly.

mass [g] \pm 0.1 [g]			
m	54.5		
m_d	488.5	$m_c + m_d$	887.6
m_A	165.8	m_B	165.8

Table 1: Mass Measurement Data.

	length [mm] \pm 0.02 [mm]					
	1	2	3	4	5	6
$D_{c,i}$	209.98	209.96	210.02	209.98	210.00	209.94
$D_{c,o}$	239.92	239.04 240.04	239.86	239.90	239.98	239.96
D_d	239.84	239.86	239.90	239.82	239.86	239.88
D_A	29.92	29.98	28.00 30.00	29.98	29.96	28.02 30.02
D_B	28.02 30.02	29.98	28.04 30.04	29.98	28.00 30.00	28.02 30.02
R	50.40 50.10	50.38	50.36	50.38 50.18	50.44 50.14	50.42
d_i	69.98	69.90	69.98	69.94	69.96	69.94
d_o	79.77 80.10	80.06	80.10	80.16	80.12	80.14

Table 2: Length Measurement Data.

Instructor's signature: SXL

	time [s] ± 0.0001 [s]		time [s] ± 0.0001 [s]
1	0.6385	9	6.0112
2	1.2839	10	6.7191
3	1.9364	11	7.4356
4	2.5961	12	8.1610
5	3.2634	13	8.8956
6	3.9382	14	9.6394
7	4.6209	15	10.3929
8	5.3116	16	11.1564

Table 3: Time Measurement Data (Empty Platform without Weight).

	time [s] ± 0.0001 [s]
1	0.9671
2	1.6433
3	2.1959
4	2.6751
5	3.1046
6	3.4973
7	3.8614
8	4.2024

Table 4: Time Measurement Data (Empty Platform with Weight).

Instructor's signature: SXe

	time [s] ± 0.000 [s]		time [s] ± 0.000 [s]
1	0.5230	9	4.7974
2	1.0486	10	5.3431
3	1.5767	11	5.8914
4	2.1072	12	6.4423
5	2.6402	13	6.9969
6	3.1758	14	7.5523
7	3.7138	15	8.1113
8	4.2543	16	8.6732

Table 5: Time Measurement Data (Platform with Cirque but without Weight).

	time [s] ± 0.000 [s]
1	1.1159
2	1.9178
3	2.5780
4	3.1534
5	3.6698
6	4.1428
7	4.5816
8	4.9930

Table 6: Time Measurement Data (Platform with Cirque and with Weight).

Instructor's signature: SXR

	time [s] ± 0.0001 [s]		time [s] ± 0.0001 [s]
1	0.5614	9	5.1749
2	1.1260	10	5.7676
3	1.6940	11	6.3643
4	2.2653	12	6.9646
5	2.8402	13	7.5688
6	3.4184	14	8.1769
7	4.0003	15	8.7891
8	4.5857	16	9.4052

Table 7: Time Measurement Data (Platform with Disk but without Weight).

	time [s] ± 0.0001 [s]
1	1.1050
2	1.8720
3	2.4969
4	3.0385
5	3.5230
6	3.9659
7	4.3761
8	4.7603

Table 8: Time Measurement Data (Platform with Disk and with Weight).

Instructor's signature: Sxe

	time [s] ± 0.0001 [s]		time [s] ± 0.0001 [s]
1	0.5846	9	5.4256
2	1.1735	10	6.0523
3	1.7671	11	6.6844
4	2.3650	12	7.3214
5	2.9676	13	7.9639
6	3.5748	14	8.6117
7	4.1869	15	9.2651
8	4.8037	16	9.9240

Table 9: Time Measurement Data (Platform with Cylinders but without Weight).

	time [s] ± 0.0001 [s]
1	0.8543
2	1.4973
3	2.0360
4	2.5095
5	2.9312
6	3.3306
7	3.6966
8	4.0406

Table 10: Time Measurement Data (Platform with Cylinders and with Weight).

Instructor's signature: SXR