

Házi feladat III. Keménység mérés Járóműmérnöki BSc

Neptun kód	1. feladat			2. feladat		3. feladat
	1. kérdés	2. kérdés	3. kérdés	Átlag átmérő	F [N]	
MOA5OS	11	21	23	0,719	980,68	326HV10
U5JTW3	8	19	24	0,433	294,20	102HBW/2,5/62,5/15
IQ4WNT	11	20	25	0,556	49,03	805HV1
BY2R52	10	22	26	0,422	98,07	61HRC
O6ZUCF	1	21	27	0,544	294,20	796HV0,1
JBN23D	2	17	28	0,535	490,34	41HRA
H2BOQ6	7	14	29	0,467	196,14	209HBW/5/250/15
HWC9QN	5	20	30	0,628	980,68	326HV10
CACXSD	1	13	31	0,549	49,03	98HBS/2,5/187,5/10
ZYN27M	9	19	32	0,396	980,68	15HBS/5/25/120
BSMFDF	12	15	23	0,387	980,68	980HV100
CPCZSN	6	22	24	0,595	196,14	112HBW/2,5/62,5/10
CXDQWA	12	18	25	0,407	196,14	398HV30
CSQAX5	8	17	26	0,642	49,03	398HV30
AOHEYH	8	19	27	0,34	490,34	67HRA
HCNKJS	5	15	28	0,385	490,34	300HV30
JGSIDU	12	14	29	0,452	49,03	90,6HBW/5/250/10
APPA4A	12	17	30	0,715	49,03	81HRA
FFK4AH	5	21	31	0,358	294,20	398HV30
RKH9FW	1	17	32	0,328	294,20	140HV30
JN5L7H	10	22	23	0,449	980,68	90,6HBW/5/250/10
BFSGE2	5	21	24	0,547	49,03	209HBW/5/250/15
IWM7SL	4	18	25	0,57	196,14	300HV30
IOT9WV	2	19	26	0,555	49,03	15HBS/5/25/120
M0BSQO	9	14	27	0,565	196,14	140HV30
W72ZC7	7	13	28	0,704	98,07	72HRB
V5A0FB	6	15	29	0,472	294,20	41HRA
E6GRBA	9	14	30	0,627	49,03	520HV50
AKV9WD	9	22	31	0,55	294,20	140HV30
PDOBLK	9	21	32	0,669	98,07	61HRC
E9SWHZ	11	17	23	0,537	49,03	61HRC
BSQ1FS	10	18	24	0,359	196,14	41HRA
C1RK92	9	19	25	0,668	490,34	41HRA
Z30EWI	6	20	26	0,597	98,07	98HBS/2,5/187,5/10
TAES9J	6	13	27	0,415	49,03	15HBS/5/25/120
YZVP4U	9	22	28	0,49	490,34	90HV10
M0M05A	1	18	29	0,62	980,68	279HV20
I1FP2K	8	21	30	0,376	49,03	67HRA
X21VTT	2	13	31	0,498	490,34	61HRC
DDUZ44	6	13	32	0,581	294,20	279HV20
FXM15C	9	21	23	0,394	294,20	240HBS/2,5/187,5/10
BASEZH	5	13	24	0,349	490,34	50HBS/2,5/400/10
YTGWDG	12	14	25	0,64	490,34	796HV0,1
HND7BC	6	19	26	0,426	490,34	61HRC
FF52ZU	9	18	27	0,698	294,20	805HV1
BFWYNS	8	14	28	0,448	980,68	796HV0,1
GIOG1Y	10	15	29	0,632	294,20	398HV30
QAFFBX	2	19	30	0,51	98,07	102HBW/2,5/62,5/15
HTD3VP	1	13	31	0,639	294,20	226HV5
X3Z968	1	20	32	0,339	98,07	61HRC
JZHOMN	5	14	23	0,592	49,03	240HBS/2,5/187,5/10
TZZRLK	3	17	24	0,438	294,20	102HBW/2,5/62,5/15
XGNN4O	11	22	25	0,37	196,14	85HBW/5/250/10
HGKJLX	11	21	26	0,559	98,07	85HBW/5/250/10
ECOYYY	11	20	27	0,65	98,07	240HBS/2,5/187,5/10
LIC6BN	1	18	28	0,602	490,34	326HV10
C9PH6F	1	15	29	0,585	980,68	279HV20
L28F9L	9	16	30	0,662	490,34	85HBW/5/250/10
C9OJ5G	5	18	31	0,515	98,07	61HRC

HCRY21	4	14	32	0,344	98,07	279HV20
V8LDS2	7	14	23	0,583	294,20	520HV50
TQA500	4	19	24	0,399	49,03	805HV1
HH3PA0	8	19	25	0,531	294,20	250HBS/5/750/15
XCYNQR	4	21	26	0,425	196,14	72HRB
JVLP84	2	18	27	0,462	98,07	112HBW/2,5/62,5/10
ERRV9W	3	21	28	0,514	980,68	980HV100
CYV878	4	15	29	0,395	490,34	98HBS/2,5/187,5/10
A37WLE	10	13	30	0,416	294,20	102HBW/2,5/62,5/15
F5UI3L	12	16	31	0,678	98,07	112HBW/2,5/62,5/10
B4VQBN	6	18	32	0,35	98,07	300HV30
R2U61U	5	19	23	0,482	980,68	398HV30
BYW1YS	9	18	24	0,424	980,68	81HRA
NRBJZ2	7	14	25	0,695	98,07	41HRA
I47VNC	4	17	26	0,68	294,20	85HBW/5/250/10
C67QXI	1	13	27	0,562	49,03	140HV30
VAZ41I	5	18	28	0,474	980,68	99HRC
BNZHRX	11	17	29	0,421	196,14	72HRB
BC3VSL	3	21	30	0,568	294,20	520HV50
NTQWZK	10	21	31	0,375	490,34	140HV30
BL972R	11	14	32	0,691	490,34	796HV0,1
KJ3FRR	6	22	23	0,618	294,20	112HBW/2,5/62,5/10
Q2KYD5	3	17	24	0,58	490,34	50HBS/2,5/400/10
BPN6VR	9	20	25	0,543	294,20	209HBW/5/250/15
PEUSVU	11	17	26	0,596	98,07	112HBW/2,5/62,5/10
J7ACGU	11	17	27	0,526	294,20	980HV100
MQ6TMF	4	20	28	0,398	196,14	41HRA
JE8NP1	3	17	29	0,677	196,14	209HBW/5/250/15
BAWBYU	3	18	30	0,411	196,14	107HBW/2,5/62,5/15
MYRVOO	2	13	31	0,655	98,07	250HBS/5/750/15
HTQV7W	3	17	32	0,541	196,14	226HV5
V1IT58	6	20	23	0,443	980,68	98HBS/2,5/187,5/10
IGLGR7	7	21	24	0,688	196,14	140HV30
FF26NO	10	16	25	0,378	196,14	796HV0,1
DTGZ91	12	20	26	0,414	196,14	240HBS/2,5/187,5/10
K0Y1RI	4	17	27	0,403	980,68	99HRC
PVW7J6	12	21	28	0,466	294,20	112HBW/2,5/62,5/10
ZJAPTF	11	15	29	0,477	196,14	326HV10
E59G72	6	17	30	0,697	49,03	41HRA
EU23DT	8	18	31	0,367	490,34	99HRC
GUAUZK	9	15	32	0,423	490,34	72HRB
F89CVC	5	15	23	0,389	196,14	81HRA
VBJVD3	2	17	24	0,594	196,14	72HRB
FUSSNM	3	19	25	0,571	196,14	72HRB
JCDG8V	4	22	26	0,699	980,68	240HBS/2,5/187,5/10
BVV5MB	7	19	27	0,53	294,20	99HRC
JRGLTH	1	21	28	0,469	980,68	209HBW/5/250/15
IJ24PC	4	16	29	0,405	196,14	279HV20
AYITYS	4	18	30	0,343	196,14	209HBW/5/250/15
WIG6ZD	10	18	31	0,561	490,34	15HBS/5/25/120
YTYRQY	6	18	32	0,666	490,34	112HBW/2,5/62,5/10
IDESBF	3	19	23	0,609	980,68	140HV30
UYMD0H	10	21	24	0,409	980,68	398HV30
HOH8NK	10	16	25	0,586	294,20	398HV30
NBTHOA	2	16	26	0,714	980,68	520HV50
MLHLJG	12	17	27	0,683	490,34	209HBW/5/250/15
U9BVQL	8	13	28	0,686	98,07	85HBW/5/250/10
IQWXU3	4	14	29	0,459	196,14	62HRC
HLP7RO	1	22	30	0,463	490,34	102HBW/2,5/62,5/15
LMUN5T	1	14	31	0,684	98,07	805HV1
O3VBLC	10	16	32	0,476	980,68	279HV20
E0CJ19	6	16	23	0,365	980,68	326HV10
T0Q07T	2	22	24	0,402	98,07	796HV0,1
C6P69X	5	15	25	0,598	196,14	226HV5
UWLS30	11	22	26	0,434	980,68	805HV1
A3LFDT	1	15	27	0,578	294,20	150HBS/2,5/600/15
RGZVBI	4	22	28	0,529	980,68	226HV5

VNGH6T	2	13	29	0,718	980,68	81HRA
JUL49J	12	13	30	0,486	294,20	90,6HBW/5/250/10
B5VBKE	8	22	31	0,7	98,07	279HV20
TLVRH4	6	13	32	0,624	294,20	98HBS/2,5/187,5/10
GWC49S	2	15	23	0,475	294,20	279HV20
AJ6GCO	3	19	24	0,653	294,20	41HRA
CFMBQR	2	14	25	0,589	980,68	140HV30
F5XZ8B	9	13	26	0,342	980,68	90,6HBW/5/250/10
GV5JJB	9	17	27	0,685	98,07	326HV10
SANVI4	4	22	28	0,495	98,07	240HBS/2,5/187,5/10
FA0090	2	21	29	0,428	49,03	107HBW/2,5/62,5/15
HV23BE	7	20	30	0,487	196,14	326HV10
G5306P	12	13	31	0,643	49,03	90,6HBW/5/250/10
CCUUQW	8	22	32	0,708	49,03	90,6HBW/5/250/10
BQISIS	7	16	23	0,674	49,03	226HV5
GFOC5V	3	21	24	0,716	980,68	200HV10
D8BFO1	3	20	25	0,641	49,03	150HBS/2,5/600/15
XBWO2O	3	19	26	0,687	49,03	107HBW/2,5/62,5/15
AGTGCQ	2	19	27	0,408	98,07	140HV30
IUPK57	8	22	28	0,611	294,20	326HV10
F4MTJY	4	14	29	0,659	49,03	107HBW/2,5/62,5/15
BC3QZY	2	16	30	0,593	196,14	107HBW/2,5/62,5/15
F0ZN7E	6	22	31	0,337	196,14	209HBW/5/250/15
L7YYCZ	2	16	32	0,67	98,07	62HRC
IWNQ6S	3	16	23	0,572	294,20	98HBS/2,5/187,5/10
I45YPQ	9	18	24	0,47	980,68	72HRB
P5U4IB	1	20	25	0,427	980,68	15HBS/5/25/120
WFLPBP	1	20	26	0,496	196,14	300HV30
S6G58D	12	22	27	0,584	980,68	226HV5
WKQ2WJ	1	22	28	0,505	294,20	140HV30
Q78MU0	5	20	29	0,717	980,68	85HBW/5/250/10
OCKZ31	5	16	30	0,712	980,68	99HRC
X8CF3J	6	17	31	0,622	196,14	520HV50
U37QOL	3	18	32	0,451	490,34	300HV30
WIGGV5	8	13	23	0,471	49,03	300HV30
CFCKHT	12	15	24	0,552	49,03	279HV20
F1NWK6	1	13	25	0,551	49,03	81HRA
N9YH41	7	16	26	0,676	294,20	240HBS/2,5/187,5/10
NL5CYY	11	20	27	0,633	294,20	102HBW/2,5/62,5/15
T3018D	4	15	28	0,711	196,14	99HRC
TU0JMM	12	18	29	0,509	196,14	102HBW/2,5/62,5/15
KOLC1J	4	18	30	0,501	196,14	980HV100
SXEFR1	3	15	31	0,657	490,34	85HBW/5/250/10
B0VMIA	9	13	32	0,663	49,03	300HV30
IOO1G2	7	19	23	0,43	98,07	90,6HBW/5/250/10
V4BDOM	7	17	24	0,587	49,03	61HRC
HUIAHH	8	21	25	0,369	294,20	90,6HBW/5/250/10
GS282K	8	18	26	0,542	98,07	99HRC
XU2HAF	11	13	27	0,455	490,34	980HV100
OKAB4D	4	16	28	0,651	98,07	200HV10
EJMCJG	9	14	29	0,347	490,34	805HV1
CJG2FW	6	15	30	0,381	49,03	85HBW/5/250/10
GAY33V	5	20	31	0,513	49,03	796HV0,1
IQYS8Z	11	22	32	0,69	490,34	520HV50
C64LYD	7	16	23	0,705	294,20	81HRA
OA4O8B	4	17	24	0,525	980,68	300HV30
HO0MAJ	9	18	25	0,392	98,07	980HV100
IDENA0	5	15	26	0,646	294,20	102HBW/2,5/62,5/15
AV47SX	7	15	27	0,71	98,07	300HV30
HN18ZA	9	21	28	0,502	980,68	240HBS/2,5/187,5/10
FGNJ5K	7	14	29	0,355	98,07	85HBW/5/250/10
EHUEW8	3	19	30	0,444	490,34	240HBS/2,5/187,5/10
FE968W	10	21	31	0,577	49,03	90,6HBW/5/250/10
WNOJ49	1	15	32	0,489	196,14	326HV10
CHAVLV	10	20	23	0,417	490,34	520HV50
QCT3P8	1	16	24	0,625	98,07	209HBW/5/250/15
ILZXXP	3	14	25	0,703	490,34	520HV50

EI5IPL	5	16	26	0,693	490,34	33,3HRC
QLIY1M	12	14	27	0,579	196,14	112HBW/2,5/62,5/10
FR0ZJO	3	21	28	0,383	980,68	398HV30
ZLN6TJ	8	20	29	0,468	49,03	98HBS/2,5/187,5/10
U66A57	7	15	30	0,361	294,20	33,3HRC
BMSRTC	5	21	31	0,432	490,34	300HV30
W26BCG	12	13	32	0,527	49,03	140HV30
O49G5K	7	16	23	0,623	294,20	85HBW/5/250/10
GM48DM	9	13	24	0,569	196,14	15HBS/5/25/120
M8UHQG	4	15	25	0,341	196,14	99HRC
D5XVAA	3	20	26	0,617	98,07	140HV30
WRW0OL	4	19	27	0,723	980,68	520HV50
DEDV3Y	9	15	28	0,348	490,34	520HV50
JO1R1F	1	19	29	0,464	490,34	980HV100
GUHS4B	11	15	30	0,536	98,07	107HBW/2,5/62,5/15
P4Y3N1	6	16	31	0,354	196,14	980HV100
J2O5Q8	4	14	32	0,675	98,07	980HV100
B5Y6AM	2	13	23	0,372	294,20	240HBS/2,5/187,5/10
FN5TJD	11	18	24	0,638	490,34	81HRA
FOID0X	7	17	25	0,713	980,68	81HRA
QS9GC6	1	15	26	0,52	98,07	98HBS/2,5/187,5/10
IITU2K	7	16	27	0,479	294,20	72HRB
U7GX09	8	18	28	0,656	490,34	209HBW/5/250/15
FD8O6Y	1	16	29	0,661	490,34	796HV0,1
V00BH3	7	17	30	0,654	49,03	226HV5
TULOF4	6	19	31	0,331	196,14	398HV30
RIM42C	9	15	32	0,538	490,34	98HBS/2,5/187,5/10
IEZQNL	7	22	23	0,692	49,03	112HBW/2,5/62,5/10
LX9HM7	5	16	24	0,701	196,14	240HBS/2,5/187,5/10
H1UFFF	1	18	25	0,613	49,03	209HBW/5/250/15
ERYI9F	12	17	26	0,6	49,03	107HBW/2,5/62,5/15
W53HLM	11	16	27	0,532	196,14	72HRB
OF8G7T	4	14	32	0,344	98,07	279HV20
WJSCR	7	14	23	0,583	294,20	520HV50
DMDTLT	4	19	24	0,399	49,03	805HV1
HU9D4U	8	19	25	0,531	294,20	250HBS/5/750/15
KUW8A8	4	21	26	0,425	196,14	72HRB
I08VYE	2	18	27	0,462	98,07	112HBW/2,5/62,5/10
NMTQBE	3	21	28	0,514	980,68	980HV100
H7V43U	4	15	29	0,395	490,34	98HBS/2,5/187,5/10
P4TRAD	10	13	30	0,416	294,20	102HBW/2,5/62,5/15
H7QKG6	12	16	31	0,678	98,07	112HBW/2,5/62,5/10
FDK2WK	6	18	32	0,35	98,07	300HV30
K35MOY	5	19	23	0,482	980,68	398HV30
RW0L5T	9	18	24	0,424	980,68	81HRA
GIXG6S	7	14	25	0,695	98,07	41HRA
O0TQCL	4	17	26	0,68	294,20	85HBW/5/250/10
TIQMX4	1	13	27	0,562	49,03	140HV30
GIMQF4	5	18	28	0,474	980,68	99HRC
JPEIF0	11	17	29	0,421	196,14	72HRB
FVEFC0	3	21	30	0,568	294,20	520HV50
BDOYKL	10	21	31	0,375	490,34	140HV30
BDHM4D	11	14	32	0,691	490,34	796HV0,1
DE13LZ	10	22	23	0,449	980,68	90,6HBW/5/250/10
FYYKSZ	5	21	24	0,547	49,03	209HBW/5/250/15
D1EHF7	4	18	25	0,57	196,14	300HV30
SEDJIW	2	19	26	0,555	49,03	15HBS/5/25/120
DLCPK7	9	14	27	0,565	196,14	140HV30
ENA88H	7	13	28	0,704	98,07	72HRB
RXGP4Z	6	15	29	0,472	294,20	41HRA
SJSRGG	9	14	30	0,627	49,03	520HV50
XNRJ4I	9	22	31	0,55	294,20	140HV30