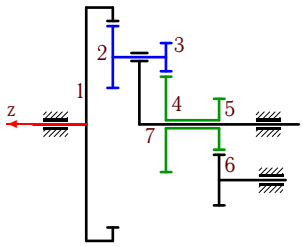
Планетарный редуктор

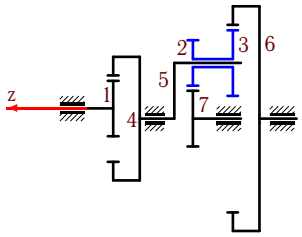
Найти угловую скорость ведомого вала 7 планетарного редуктора. Даны угловые скорости ведущего вала 1 и колеса 6 ($с^{-1}$) и радиусы всех колес в сантиметрах.

Задача К21.1. 2



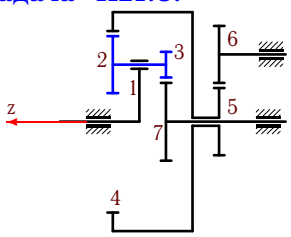
$r_1 = 18$, $r_2 = 6$, $r_3 = 3$, $r_4 = 9$, $r_5 = 5$, $r_6 = 5$, $r_7 = 12$, $\omega_{1z} = 48$, $\omega_{6z} = 10$,

Задача К21.2. 2



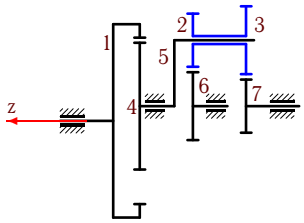
$r_1 = 6$, $r_2 = 5$, $r_3 = 7$, $r_4 = 8$, $r_5 = 11$, $r_6 = 18$, $r_7 = 6$, $\omega_{1z} = 240$, $\omega_{6z} = 271$,

Задача К21.3. 2



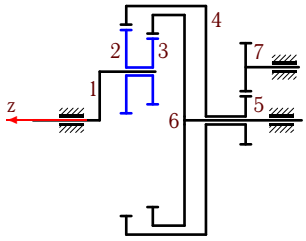
$r_1 = 11$, $r_2 = 6$, $r_3 = 3$, $r_4 = 17$, $r_5 = 7$, $r_6 = 6$, $r_7 = 8$, $\omega_{1z} = 48$, $\omega_{6z} = -336$,

Задача К21.4. 2



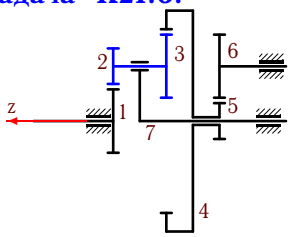
$r_1 = 11$, $r_2 = 4$, $r_3 = 5$, $r_4 = 9$, $r_5 = 9$, $r_6 = 5$, $r_7 = 4$, $\omega_{1z} = -288$, $\omega_{6z} = 16$,

Задача К21.5. 2



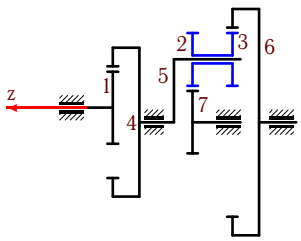
$r_1 = 11$, $r_2 = 10$, $r_3 = 8$, $r_4 = 21$, $r_5 = 6$, $r_6 = 19$, $r_7 = 6$, $\omega_{1z} = 504$, $\omega_{6z} = 336$,

Задача К21.6. 2



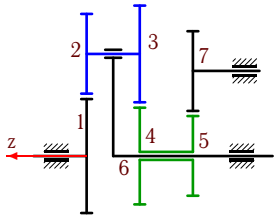
$r_1 = 5$, $r_2 = 3$, $r_3 = 5$, $r_4 = 13$, $r_5 = 3$, $r_6 = 5$, $r_7 = 8$, $\omega_{1z} = 64$, $\omega_{6z} = -384$,

Задача К21.7. 2



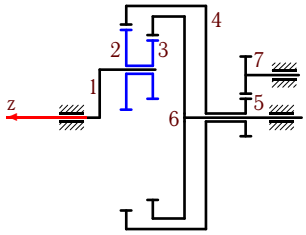
$r_1 = 8$, $r_2 = 6$, $r_3 = 6$, $r_4 = 11$, $r_5 = 13$, $r_6 = 19$, $r_7 = 7$, $\omega_{1z} = 1254$, $\omega_{6z} = 1374$,

Задача К21.8. 2



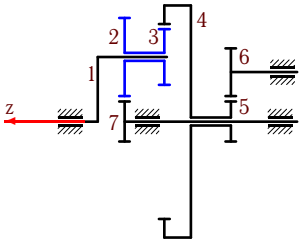
$r_1 = 7$, $r_2 = 5$, $r_3 = 6$, $r_4 = 6$, $r_5 = 5$, $r_6 = 12$, $r_7 = 5$, $\omega_{1z} = 2$, $\omega_{6z} = 57$,

Задача К21.9. 2



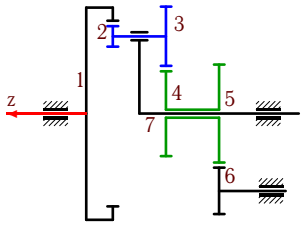
$r_1 = 9$, $r_2 = 8$, $r_3 = 6$, $r_4 = 17$, $r_5 = 4$, $r_6 = 15$, $r_7 = 4$, $\omega_{1z} = 34$, $\omega_{6z} = 68$,

Задача К21.10. 2



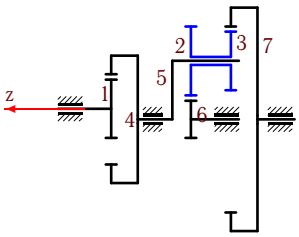
$r_1 = 17$, $r_2 = 11$, $r_3 = 8$, $r_4 = 25$, $r_5 = 6$, $r_6 = 7$, $r_7 = 6$, $\omega_{1z} = -275$, $\omega_{6z} = 318$,

Задача К21.11. 2



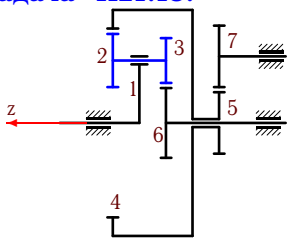
$r_1 = 14$, $r_2 = 2$, $r_3 = 5$, $r_4 = 7$, $r_5 = 8$, $r_6 = 4$, $r_7 = 12$, $\omega_{1z} = 24$, $\omega_{6z} = 12$,

Задача К21.12. 2



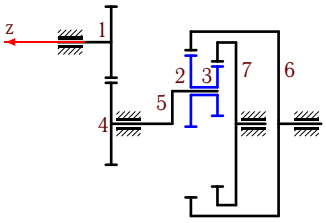
$r_1 = 6$, $r_2 = 7$, $r_3 = 6$, $r_4 = 8$, $r_5 = 11$, $r_6 = 4$, $r_7 = 17$, $\omega_{1z} = 952$, $\omega_{6z} = 119$,

Задача К21.13. 2



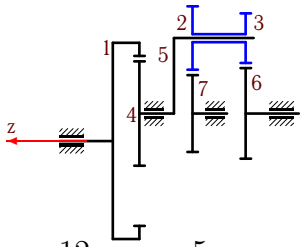
$r_1 = 15$, $r_2 = 7$, $r_3 = 6$, $r_4 = 22$, $r_5 = 8$, $r_6 = 9$, $r_7 = 8$, $\omega_{1z} = 3$, $\omega_{6z} = -41$,

Задача К21.14. 2



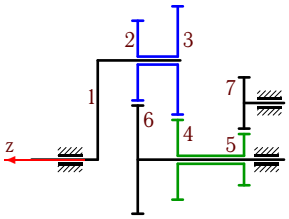
$r_1 = 7$, $r_2 = 7$, $r_3 = 5$, $r_4 = 8$, $r_5 = 6$, $r_6 = 13$, $r_7 = 11$, $\omega_{1z} = 520$, $\omega_{6z} = 161$,

Задача К21.15. 2



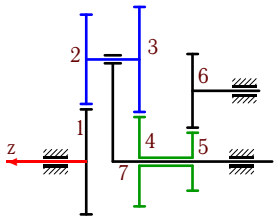
$r_1 = 12$, $r_2 = 5$, $r_3 = 4$, $r_4 = 8$, $r_5 = 11$, $r_6 = 7$, $r_7 = 6$, $\omega_{1z} = -280$, $\omega_{6z} = -108$,

Задача К21.16. 2



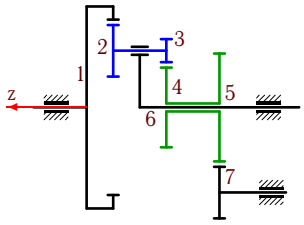
$r_1 = 14$, $r_2 = 6$, $r_3 = 8$, $r_4 = 6$, $r_5 = 4$, $r_6 = 8$, $r_7 = 4$, $\omega_{1z} = 16$, $\omega_{6z} = -11$,

Задача К21.17. 2



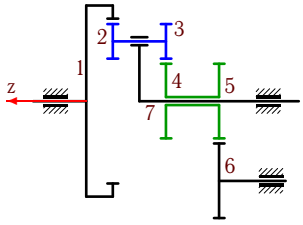
$r_1 = 7$, $r_2 = 6$, $r_3 = 7$, $r_4 = 6$, $r_5 = 4$, $r_6 = 5$, $r_7 = 13$, $\omega_{1z} = 65$, $\omega_{6z} = 104$,

Задача К21.18. 2



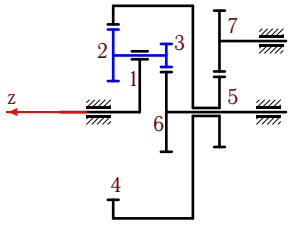
$r_1 = 12$, $r_2 = 4$, $r_3 = 2$, $r_4 = 6$, $r_5 = 8$, $r_6 = 8$, $r_7 = 4$, $\omega_{1z} = 8$, $\omega_{6z} = 3$,

Задача К21.19. 2



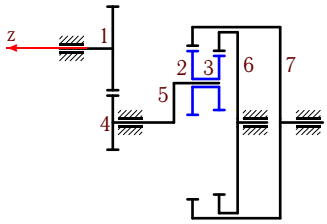
$r_1 = 12$, $r_2 = 3$, $r_3 = 3$, $r_4 = 6$, $r_5 = 6$, $r_6 = 6$, $r_7 = 9$, $\omega_{1z} = 5$, $\omega_{6z} = 1$,

Задача К21.20. 2



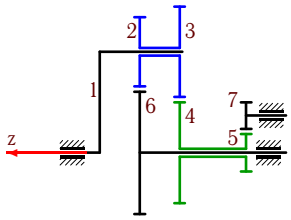
$r_1 = 12$, $r_2 = 6$, $r_3 = 3$, $r_4 = 18$, $r_5 = 8$, $r_6 = 9$, $r_7 = 7$, $\omega_{1z} = 1$, $\omega_{6z} = 9$,

Задача К21.21. 2



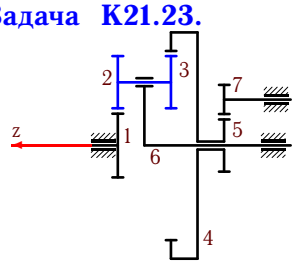
$r_1 = 9$, $r_2 = 7$, $r_3 = 6$, $r_4 = 6$, $r_5 = 8$, $r_6 = 14$, $r_7 = 15$, $\omega_{1z} = 540$, $\omega_{6z} = -45$,

Задача К21.22. 2



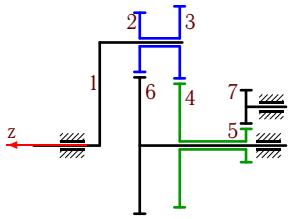
$r_1 = 19$, $r_2 = 7$, $r_3 = 9$, $r_4 = 10$, $r_5 = 4$, $r_6 = 12$, $r_7 = 3$, $\omega_{1z} = 54$, $\omega_{6z} = 229$,

Задача К21.23. 2



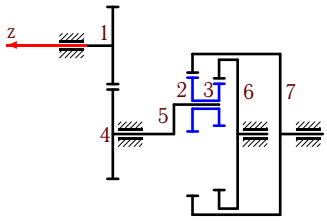
$r_1 = 6$, $r_2 = 5$, $r_3 = 5$, $r_4 = 16$, $r_5 = 5$, $r_6 = 11$, $r_7 = 3$, $\omega_{1z} = 55$, $\omega_{6z} = -225$,

Задача К21.24. 2



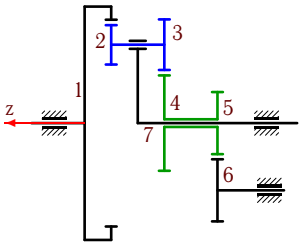
$r_1 = 16$, $r_2 = 5$, $r_3 = 6$, $r_4 = 10$, $r_5 = 3$, $r_6 = 11$, $r_7 = 3$, $\omega_{1z} = 33$, $\omega_{6z} = -142$,

Задача К21.25. 2



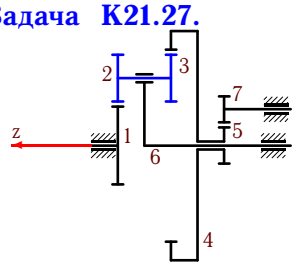
$r_1 = 7$, $r_2 = 5$, $r_3 = 4$, $r_4 = 8$, $r_5 = 5$, $r_6 = 9$, $r_7 = 10$, $\omega_{1z} = 32$, $\omega_{6z} = -4$,

Задача К21.26. 2



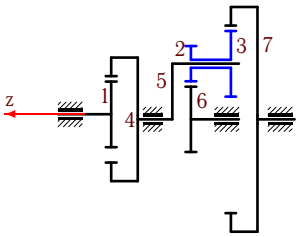
$r_1 = 18$, $r_2 = 4$, $r_3 = 5$, $r_4 = 9$, $r_5 = 6$, $r_6 = 6$, $r_7 = 14$, $\omega_{1z} = 77$, $\omega_{6z} = 42$,

Задача К21.27. 2



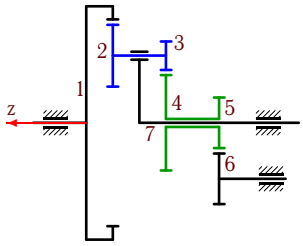
$r_1 = 8$, $r_2 = 5$, $r_3 = 5$, $r_4 = 18$, $r_5 = 4$, $r_6 = 13$, $r_7 = 3$, $\omega_{1z} = 65$, $\omega_{6z} = -115$,

Задача К21.28. 2



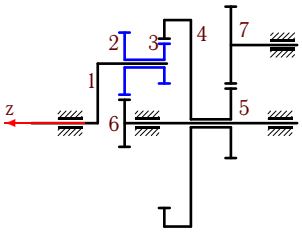
$r_1 = 7$, $r_2 = 4$, $r_3 = 7$, $r_4 = 8$, $r_5 = 11$, $r_6 = 7$, $r_7 = 18$, $\omega_{1z} = 72$, $\omega_{6z} = -9$,

Задача К21.29. 2



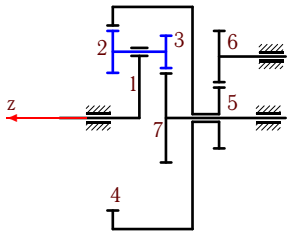
$r_1 = 18$, $r_2 = 6$, $r_3 = 3$, $r_4 = 9$, $r_5 = 5$, $r_6 = 5$, $r_7 = 12$, $\omega_{1z} = 96$, $\omega_{6z} = 10$,

Задача К21.30. 2



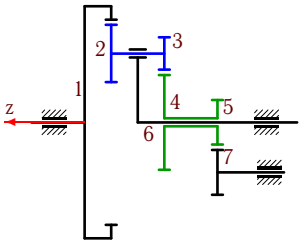
$r_1 = 16$, $r_2 = 9$, $r_3 = 6$, $r_4 = 22$, $r_5 = 10$, $r_6 = 7$, $r_7 = 11$, $\omega_{1z} = 2178$, $\omega_{6z} = 1089$,

Задача К21.31. 2



$r_1 = 14$, $r_2 = 5$, $r_3 = 4$, $r_4 = 19$, $r_5 = 7$, $r_6 = 6$, $r_7 = 10$, $\omega_{1z} = 50$, $\omega_{6z} = -175$,

Задача К21.32. 2



$r_1 = 16$, $r_2 = 5$, $r_3 = 3$, $r_4 = 8$, $r_5 = 4$, $r_6 = 11$, $r_7 = 4$, $\omega_{1z} = 231$, $\omega_{6z} = 86$,

К21 **Ответы.**
Планетарный редуктор 09.08.2012

№	ω_7	ω_2
1	19	106
2	-15	414
3	-207	728
4	223	-812
5	-314	105
6	415	1000
7	-342	2375
8	20	134
9	-74	119
10	275	-575
11	19	54
12	834	1054
13	-24	69
14	65	689
15	35	-966
16	32	52
17	605	1235
18	4	18
19	3	11
20	8	-23
21	23	975
22	-432	-246
23	550	-561
24	198	418
25	-1	26
26	43	196
27	260	-403
28	112	189
29	43	202
30	-2190	3025
31	-102	430
32	88	550

K21 файл o21k2A