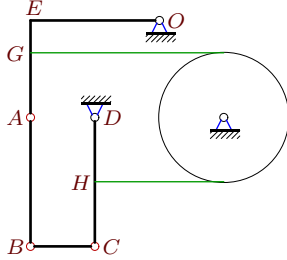


Плоский механизм с блоком

В указанном положении механизма задана угловая скорость одного из звеньев (с^{-1}). Длины звеньев даны в сантиметрах. Стержни и нити, направление которых не указано, считать горизонтальными или вертикальными. Нить огибает диск радиусом r без проскальзывания. Найти угловые скорости всех звеньев механизма.

Задача К-28.1.

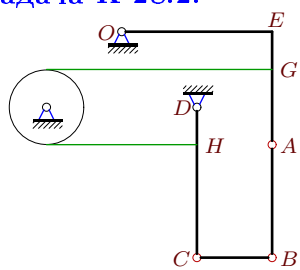
17



$OE = 4$, $CB = 2$, $AB = 4$, $CD = 4$, $r = 2$,
 $CH = AG = 2$, $GE = 1$, $\omega_{OA} = -4$.

Задача К-28.2.

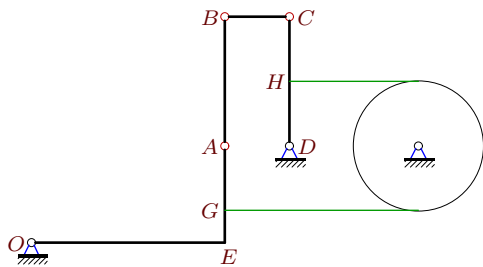
17



$OE = 4$, $CB = 2$, $AB = 3$, $CD = 4$, $r = 1$,
 $CH = 3$, $AG = 2$, $GE = 1$, $\omega_{OA} = -3$.

Задача К-28.3.

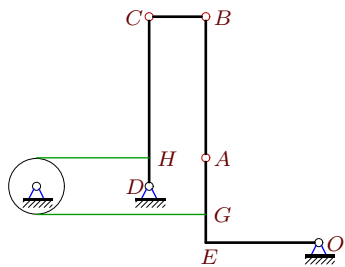
17



$OE = 6$, $CB = 2$, $AB = 4$, $CD = 4$, $r = 2$,
 $CH = AG = 2$, $GE = 1$, $\omega_{OA} = -4$.

Задача К-28.4.

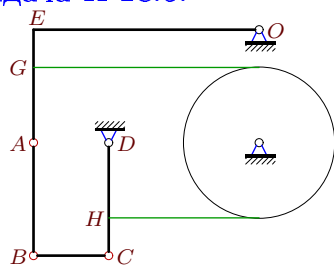
17



$OE = 4$, $CB = 2$, $AB = 5$, $CD = 6$, $r = 1$,
 $CH = 5$, $AG = 2$, $GE = 1$, $\omega_{OA} = -5$.

Задача К-28.5.

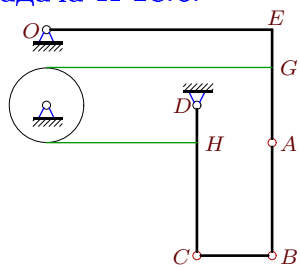
17



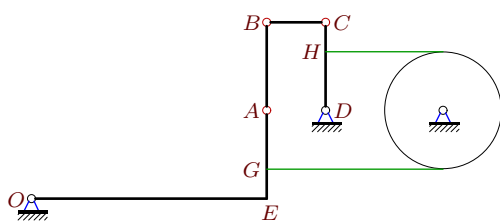
$OE = 6$, $CB = 2$, $AB = 3$, $CD = 3$, $r = 2$,
 $CH = 1$, $AG = 2$, $GE = 1$, $\omega_{AB} = 3$.

Задача К-28.6.

17



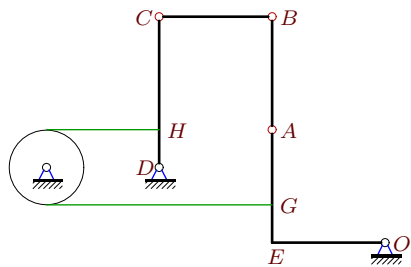
$OE = 6$, $CB = 2$, $AB = 3$, $CD = 4$, $r = 1$,
 $CH = 3$, $AG = 2$, $GE = 1$, $\omega_{AB} = 7$.



$OE = 8$, $CB = 2$, $AB = 3$, $CD = 3$, $r = 2$,
 $CH = 1$, $AG = 2$, $GE = 1$, $\omega_{AB} = 3$.

Задача К-28.8.

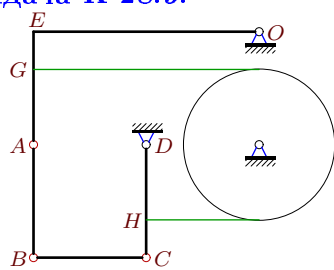
17


$$OE = 3, CB = AB = 3, CD = 4, r = 1,$$

$$CH = 3, AG = 2, GE = 1, \omega_{AB} = 7.$$

Задача К-28.9.

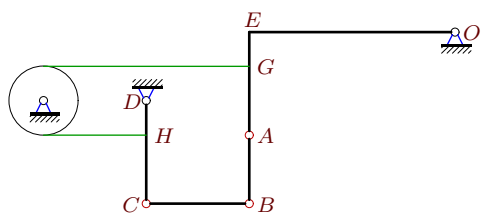
17



$OE = 6$, $CB = AB = 3$, $CD = 3$, $r = 2$,
 $CH = 1$, $AG = 2$, $GE = 1$, $\omega_{CB} = -4$.

Задача К-28.10.

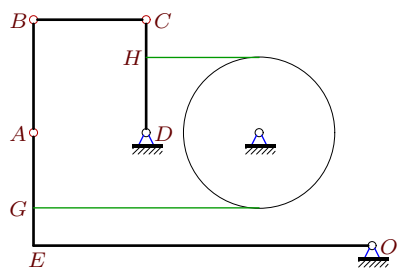
17



$OE = 6$, $CB = 3$, $AB = 2$, $CD = 3$, $r = 1$,
 $CH = AG = 2$, $GE = 1$, $\omega_{CB} = 2$.

Задача К-28.11.

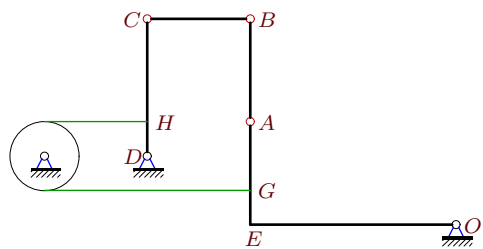
17



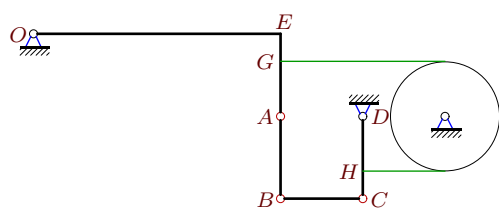
$OE = 9$, $CB = AB = 3$, $CD = 3$, $r = 2$,
 $CH = 1$, $AG = 2$, $GE = 1$, $\omega_{CB} = -6$.

Задача К-28.12.

17



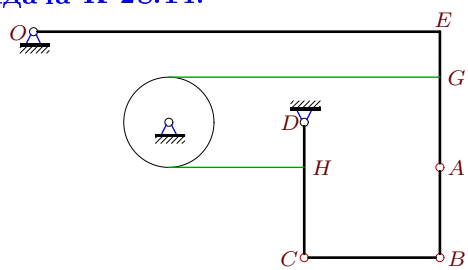
$OE = 6$, $CB = AB = 3$, $CD = 4$, $r = 1$,
 $CH = 3$, $AG = 2$, $GE = 1$, $\omega_{CB} = 6$.



$OE = 9$, $CB = AB = 3$, $CD = 3$, $r = 2$,
 $CH = 1$, $AG = 2$, $GE = 1$, $\omega_{CD} = 1$.

Задача К-28.14.

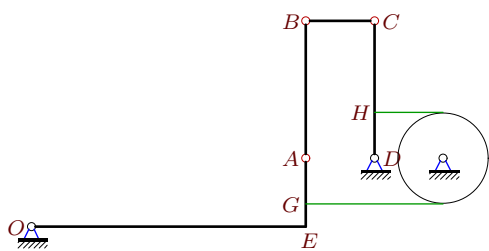
17



$OE = 9$, $CB = 3$, $AB = 2$, $CD = 3$, $r = 1$,
 $CH = AG = 2$, $GE = 1$, $\omega_{CD} = 1$.

Задача К-28.15.

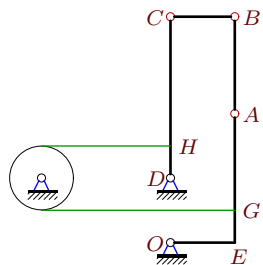
17



$OE = 12$, $CB = 3$, $AB = 6$, $CD = 6$, $r = 2$,
 $CH = 4$, $AG = 2$, $GE = 1$, $\omega_{CD} = 1$.

Задача К-28.16.

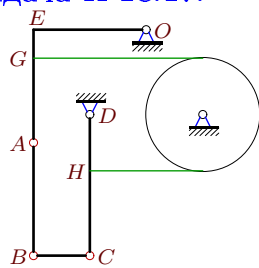
17



$OE = 2$, $CB = 2$, $AB = 3$, $CD = 5$, $r = 1$,
 $CH = 4$, $AG = 3$, $GE = 1$, $\omega_{CD} = 1$.

Задача К-28.17.

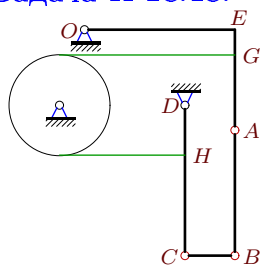
17



$OE = 4$, $CB = 2$, $AB = 4$, $CD = 5$, $r = 2$,
 $CH = AG = 3$, $GE = 1$, $\omega_{disk} = 4$.

Задача К-28.18.

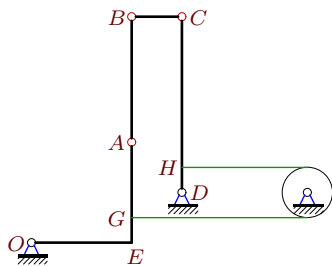
17



$OE = 6$, $CB = 2$, $AB = 5$, $CD = 6$, $r = 2$,
 $CH = 4$, $AG = 3$, $GE = 1$, $\omega_{disk} = 5$.

Задача К-28.19.

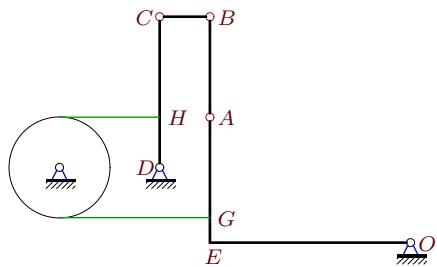
17



$OE = 4$, $CB = 2$, $AB = 5$, $CD = 7$, $r = 1$,
 $CH = 6$, $AG = 3$, $GE = 1$, $\omega_{disk} = 5$.

Задача К-28.20.

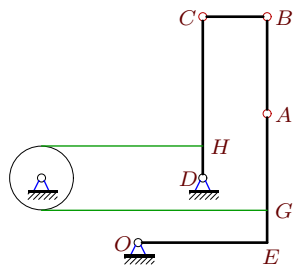
17



$OE = 8$, $CB = 2$, $AB = 4$, $CD = 6$, $r = 2$,
 $CH = AG = 4$, $GE = 1$, $\omega_{CD} = 1$.

Задача К-28.21.

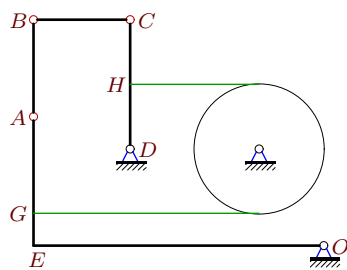
17



$OE = 4$, $CB = 2$, $AB = 3$, $CD = 5$, $r = 1$,
 $CH = 4$, $AG = 3$, $GE = 1$, $\omega_{CB} = -2$.

Задача К-28.22.

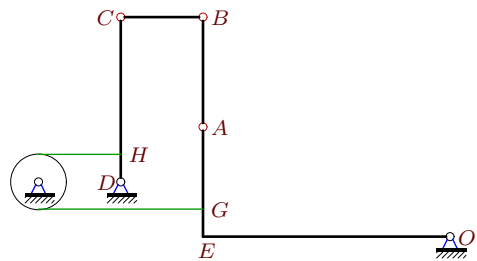
17



$OE = 9$, $CB = AB = 3$, $CD = 4$, $r = 2$,
 $CH = 2$, $AG = 3$, $GE = 1$, $\omega_{CB} = -6$.

Задача К-28.25.

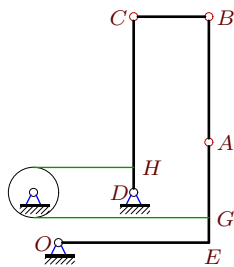
17



$OE = 9$, $CB = 3$, $AB = 4$, $CD = 6$, $r = 1$,
 $CH = 5$, $AG = 3$, $GE = 1$, $\omega_{CB} = 6$.

Задача К-28.27.

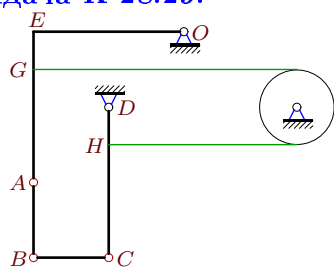
17



$OE = 6$, $CB = 3$, $AB = 5$, $CD = 7$, $r = 1$,
 $CH = 6$, $AG = 3$, $GE = 1$, $\omega_{OA} = -5$.

Задача К-28.29.

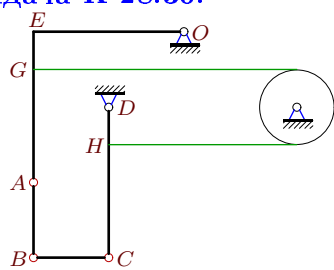
17



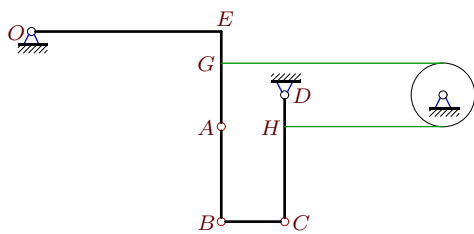
$OE = 4$, $CB = AB = 2$, $CD = 4$, $r = 1$,
 $CH = AG = 3$, $GE = 1$, $\omega_{CB} = -2$.

Задача К-28.30.

17



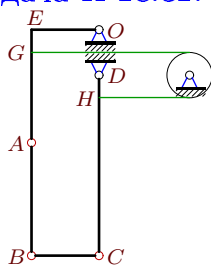
$OE = 4$, $CB = AB = 2$, $CD = 4$, $r = 1$,
 $CH = AG = 3$, $GE = 1$, $\omega_{OA} = -1$.



$OE = 6$, $CB = 2$, $AB = 3$, $CD = 4$, $r = 1$,
 $CH = 3$, $AG = 2$, $GE = 1$, $\omega_{CD} = 3$.

Задача К-28.32.

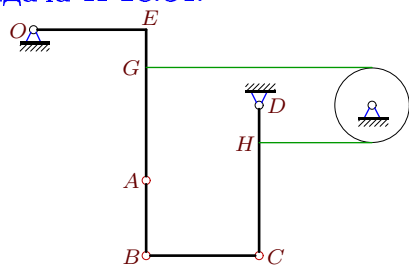
17



$OE = 3$, $CB = 3$, $AB = 5$, $CD = 8$, $r = 1$,
 $CH = 7$, $AG = 4$, $GE = 1$, $\omega_{OA} = -5$.

Задача К-28.34.

17



$OE = 3, CB = 3, AB = 2, CD = 4, r = 1,$
 $CH = AG = 3, GE = 1, \omega_{OA} = -1.$

Ответы.
Плоский механизм с блоком

16.05.2016

№	ω_{OA_z}	ω_{AB_z}	ω_{CB_z}	ω_{CD_z}	ω_{disk_z}
1	—	5	-8	2	2
2	—	7	-6	3	3
3	—	5	12	2	2
4	—	9	10	5	5
5	-2	—	-6	1	1
6	-3	—	-9	3	3
7	-2	—	8	1	1
8	-3	—	3	3	3
9	-2	3	—	1	1
10	-1	3	—	1	1
11	-2	3	—	1	1
12	-3	7	—	3	3
13	-2	3	6	—	1
14	-1	3	-3	—	1
15	-2	2	8	—	1
16	-1	3	-1	—	1
17	-8	13	-16	4	—
18	-10	14	-30	5	—
19	-5	11	10	5	—
20	-2	4	8	—	1
21	-1	3	—	1	1
22	-2	4	—	1	1
23	-1	3	-3	—	1
24	-1	3	2	—	1
25	-2	5	—	2	2
26	-5	—	-15	5	5
27	—	11	-10	5	5
28	-1	—	1	1	1
29	-1	4	—	1	1
30	—	4	-2	1	1
31	-3	7	9	—	3
32	—	13	-5	5	5
33	-3	11	—	3	3
34	—	4	1	1	1

К-28 файл о28k17А