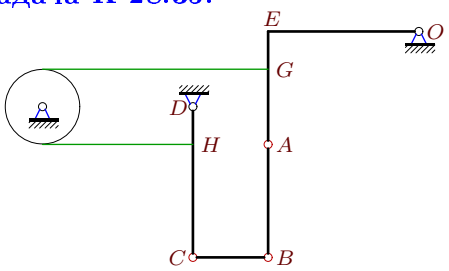
Плоский механизм с блоком

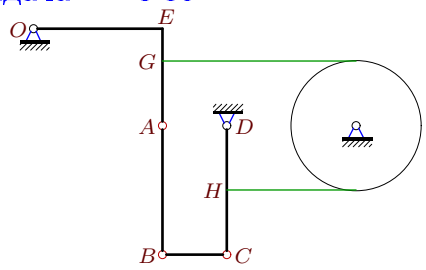
В указанном положении механизма задана угловая скорость одного из звеньев ($с^{-1}$). Длины звеньев даны в сантиметрах. Стержни и нити, направление которых не указано, считать горизонтальными или вертикальными. Нить огибает диск радиусом r без проскальзывания. Найти угловые скорости всех звеньев механизма.

Задача К-28.35. *18*



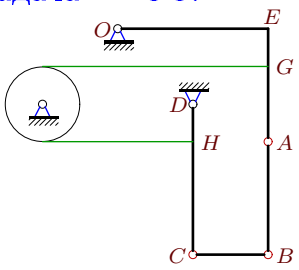
$OE = 4$, $CB = 2$, $AB = 3$, $CD = 4$, $r = 1$, $CH = 3$, $AG = 2$, $GE = 1$, $\omega_{AB} = 7$.

Задача К-28.36.



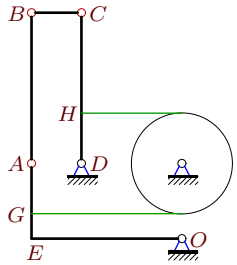
$OE = 4$, $CB = 2$, $AB = 4$, $CD = 4$, $r = 2$,
$CH = AG = 2$, $GE = 1$, $\omega_{AB} = 5$.

Задача К-28.37.



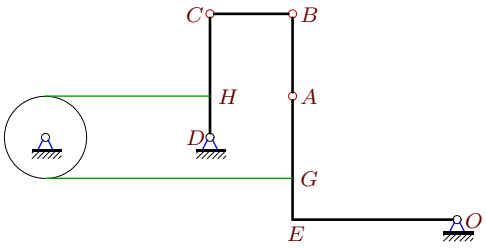
$OE = 4$, $CB = 2$, $AB = 3$, $CD = 4$, $r = 1$, $CH = 3$, $AG = 2$, $GE = 1$, $\omega_{AB} = 7$.

Задача К-28.38.



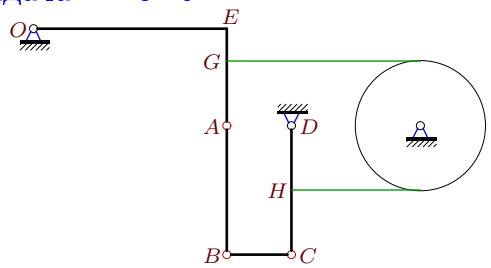
$OE = 6$, $CB = 2$, $AB = 6$, $CD = 6$, $r = 2$, $CH = 4$, $AG = 2$, $GE = 1$, $\omega_{AB} = 2$.

Задача К-28.39.



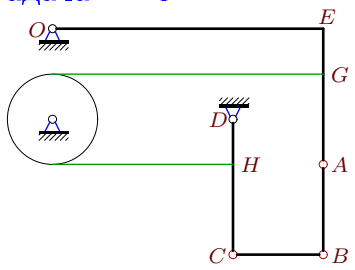
$OE = 4$, $CB = AB = 2$, $CD = 3$, $r = 1$,
$CH = AG = 2$, $GE = 1$, $\omega_{CB} = 2$.

Задача К-28.40.



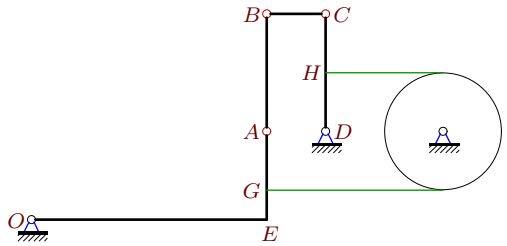
$OE = 6$, $CB = 2$, $AB = 4$, $CD = 4$, $r = 2$,
$CH = AG = 2$, $GE = 1$, $\omega_{CB} = 12$.

Задача К-28.41.



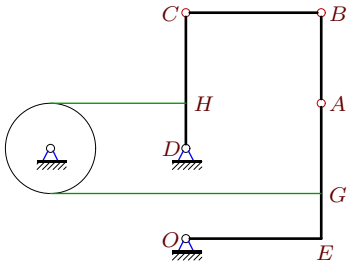
$OE = 6$, $CB = AB = 2$, $CD = 3$, $r = 1$,
$CH = AG = 2$, $GE = 1$, $\omega_{CB} = -3$.

Задача К-28.42.



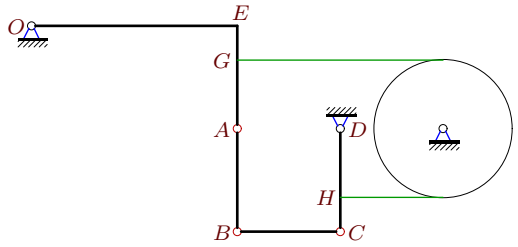
$OE = 8$, $CB = 2$, $AB = 4$, $CD = 4$, $r = 2$,
$CH = AG = 2$, $GE = 1$, $\omega_{CB} = 16$.

Задача К-28.43.



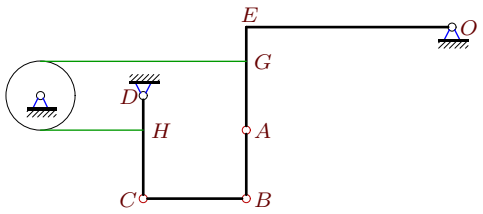
$OE = 3$, $CB = 3$, $AB = 2$, $CD = 3$, $r = 1$,
$CH = AG = 2$, $GE = 1$, $\omega_{CD} = 1$.

Задача К-28.44.



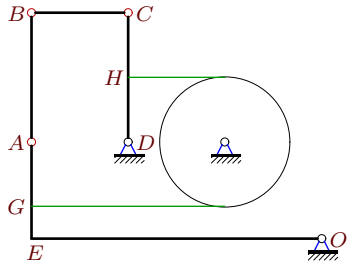
$OE = 6$, $CB = AB = 3$, $CD = 3$, $r = 2$,
$CH = 1$, $AG = 2$, $GE = 1$, $\omega_{CD} = 1$.

Задача К-28.45.



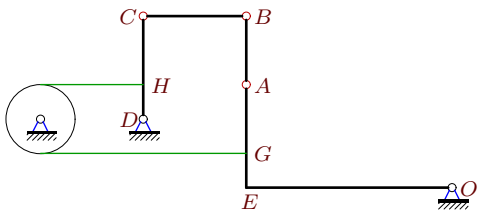
$OE = 6$, $CB = 3$, $AB = 2$, $CD = 3$, $r = 1$,
$CH = AG = 2$, $GE = 1$, $\omega_{CD} = 1$.

Задача К-28.46.



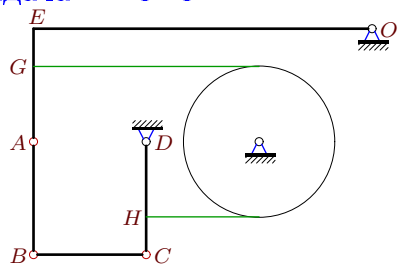
$OE = 9$, $CB = 3$, $AB = 4$, $CD = 4$, $r = 2$,
$CH = AG = 2$, $GE = 1$, $\omega_{CD} = 2$.

Задача К-28.47.



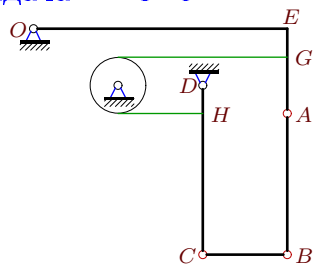
$OE = 6$, $CB = 3$, $AB = 2$, $CD = 3$, $r = 1$,
$CH = AG = 2$, $GE = 1$, $\omega_{disk} = 1$.

Задача К-28.48.



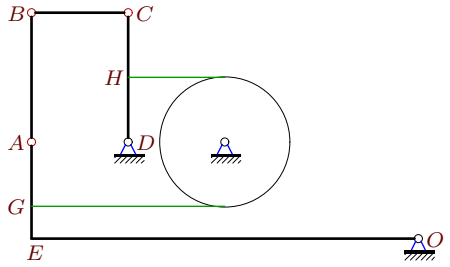
$OE = 9$, $CB = AB = 3$, $CD = 3$, $r = 2$,
$CH = 1$, $AG = 2$, $GE = 1$, $\omega_{disk} = 1$.

Задача К-28.49.



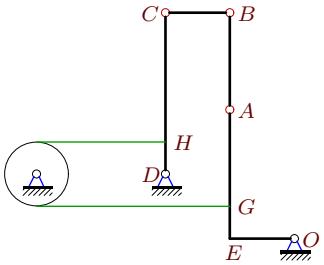
$OE = 9$, $CB = 3$, $AB = 5$, $CD = 6$, $r = 1$,
$CH = 5$, $AG = 2$, $GE = 1$, $\omega_{disk} = 5$.

Задача К-28.50.



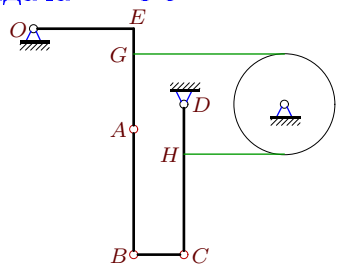
$OE = 12$, $CB = 3$, $AB = 4$, $CD = 4$, $r = 2$, $CH = AG = 2$, $GE = 1$, $\omega_{CD} = 2$.

Задача К-28.51.



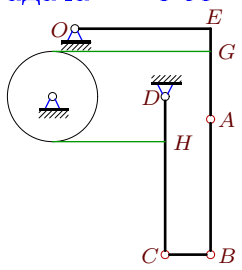
$OE = 2$, $CB = 2$, $AB = 3$, $CD = 5$, $r = 1$, $CH = 4$, $AG = 3$, $GE = 1$, $\omega_{CB} = 1$.

Задача К-28.52.



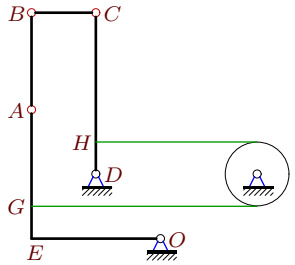
$OE = 4$, $CB = 2$, $AB = 5$, $CD = 6$, $r = 2$, $CH = 4$, $AG = 3$, $GE = 1$, $\omega_{CB} = 20$.

Задача К-28.53.



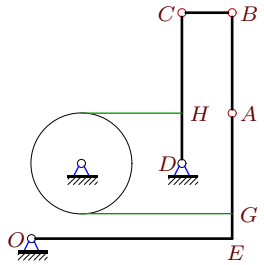
$OE = 6$, $CB = 2$, $AB = 6$, $CD = 7$, $r = 2$,
$CH = 5$, $AG = 3$, $GE = 1$, $\omega_{CD} = 2$.

Задача К-28.54.



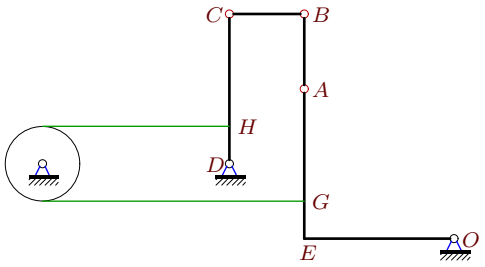
$OE = 4$, $CB = 2$, $AB = 3$, $CD = 5$, $r = 1$,
$CH = 4$, $AG = 3$, $GE = 1$, $\omega_{CD} = 1$.

Задача К-28.55.



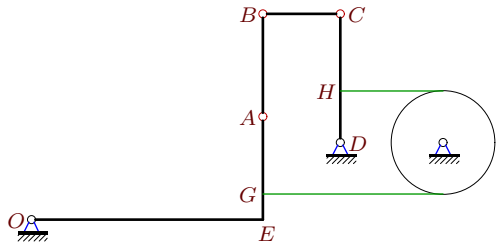
$OE = 8$, $CB = 2$, $AB = 4$, $CD = 6$, $r = 2$,
$CH = AG = 4$, $GE = 1$, $\omega_{CB} = -8$.

Задача К-28.56.



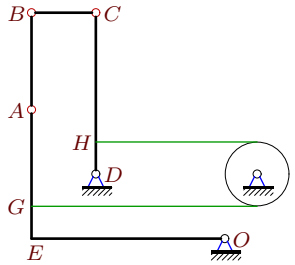
$OE = 4$, $CB = AB = 2$, $CD = 4$, $r = 1$,
$CH = AG = 3$, $GE = 1$, $\omega_{AB} = 4$.

Задача К-28.57.



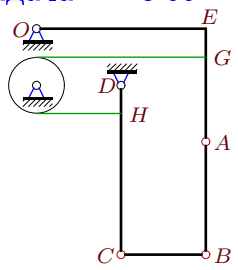
$OE = 9$, $CB = 3$, $AB = 4$, $CD = 5$, $r = 2$,
$CH = AG = 3$, $GE = 1$, $\omega_{OA} = -8$.

Задача К-28.58.



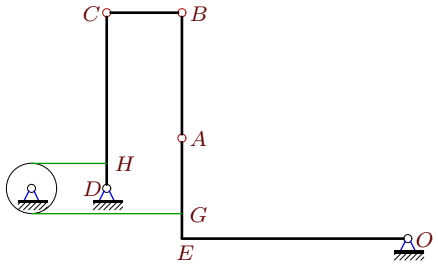
$OE = 6$, $CB = 2$, $AB = 3$, $CD = 5$, $r = 1$, $CH = 4$, $AG = 3$, $GE = 1$, $\omega_{AB} = 3$.

Задача К-28.59.



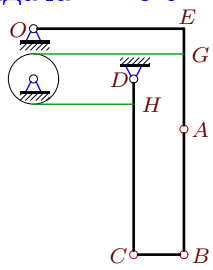
$OE = 6$, $CB = 3$, $AB = 4$, $CD = 6$, $r = 1$, $CH = 5$, $AG = 3$, $GE = 1$, $\omega_{CB} = -4$.

Задача К-28.60.



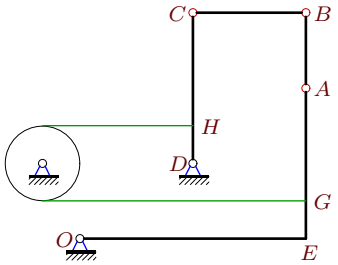
$OE = 9$, $CB = 3$, $AB = 5$, $CD = 7$, $r = 1$,
$CH = 6$, $AG = 3$, $GE = 1$, $\omega_{OA} = -5$.

Задача К-28.61.



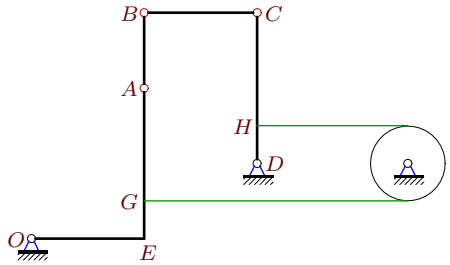
$OE = 6$, $CB = 2$, $AB = 5$, $CD = 7$, $r = 1$, $CH = 6$, $AG = 3$, $GE = 1$, $\omega_{CD} = 5$.

Задача К-28.62.



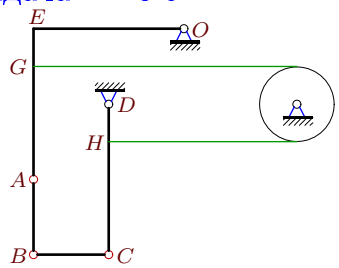
$OE = 6$, $CB = 3$, $AB = 2$, $CD = 4$, $r = 1$,
$CH = AG = 3$, $GE = 1$, $\omega_{OA} = -1$.

Задача К-28.63.



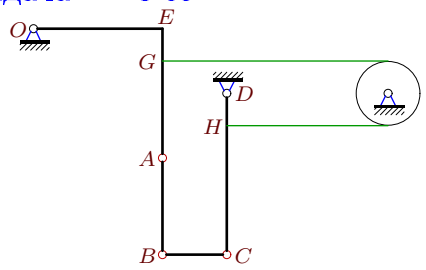
$OE = 3$, $CB = 3$, $AB = 2$, $CD = 4$, $r = 1$,
$CH = AG = 3$, $GE = 1$, $\omega_{CB} = 1$.

Задача К-28.64.



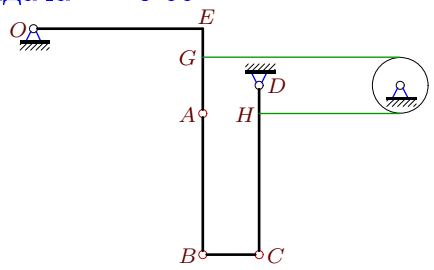
$OE = 4$, $CB = AB = 2$, $CD = 4$, $r = 1$,
$CH = AG = 3$, $GE = 1$, $\omega_{OA} = -1$.

Задача К-28.65.



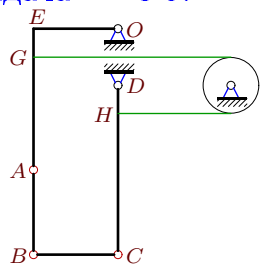
$OE = 4$, $CB = 2$, $AB = 3$, $CD = 5$, $r = 1$,
$CH = 4$, $AG = 3$, $GE = 1$, $\omega_{disk} = 1$.

Задача К-28.66.



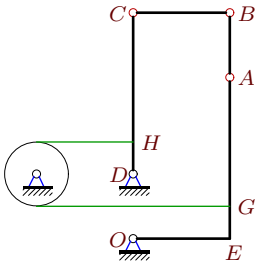
$OE = 6$, $CB = 2$, $AB = 5$, $CD = 6$, $r = 1$, $CH = 5$, $AG = 2$, $GE = 1$, $\omega_{disk} = 5$.

Задача К-28.67.



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

Задача К-28.68.



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

Ответы.

Плоский механизм с блоком

16.05.2016

№	ω_{OA_z}	ω_{AB_z}	ω_{CB_z}	ω_{CD_z}	ω_{disk_z}
35	-3	—	6	3	3
36	-4	—	8	2	2
37	-3	—	-6	3	3
38	-2	—	-6	1	1
39	-1	3	—	1	1
40	-4	5	—	2	2
41	-1	3	—	1	1
42	-4	5	—	2	2
43	-1	3	-1	—	1
44	-2	3	4	—	1
45	-1	3	2	—	1
46	-4	5	-12	—	2
47	-1	3	2	1	—
48	-2	3	-6	1	—
49	-5	9	-15	5	—
50	-4	5	-16	—	2
51	-1	3	—	1	1
52	-10	14	—	5	5
53	-4	5	-12	—	2
54	-1	3	-2	—	1
55	-2	4	—	1	1
56	-1	—	2	1	1
57	—	13	24	4	4
58	-1	—	-3	1	1
59	-2	5	—	2	2
60	—	11	15	5	5
61	-5	11	-15	—	5
62	—	4	-2	1	1
63	-1	4	—	1	1
64	—	4	-2	1	1
65	-1	3	2	1	—
66	-5	9	15	5	—
67	-3	11	—	3	3
68	-1	5	-1	1	—

K-28 файл o28k18A