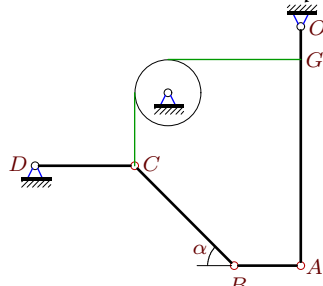


## Плоский механизм с блоком

В указанном положении механизма задана угловая скорость одного из звеньев. 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 K28.1.

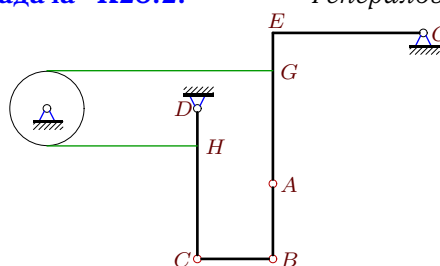
Бродников Иван



$$OA = 7, CB = 3\sqrt{2}, CD = 3, AB = 2, \\ OG = 1, r = 1, \omega_{OA} = -3 \text{ c}^{-1}, \alpha = 45^\circ.$$

### Задача K28.2.

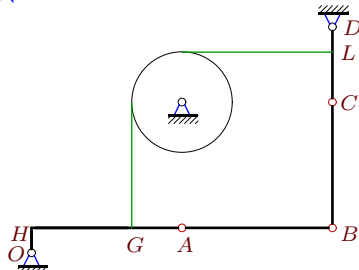
Генералов Сергей



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

### Задача K28.3.

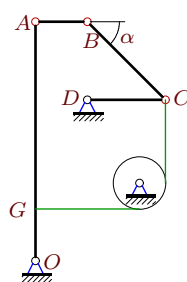
Голованов Алексей



$$OH = 1, CB = 5, HA = AB = 6, CD = 3, \\ r = 2, CL = 2, AG = 2, \omega_{CB} = -13 \text{ c}^{-1}.$$

### Задача K28.4.

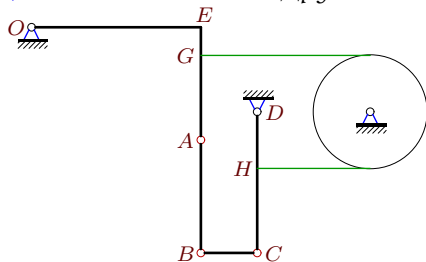
Дощечкин Артём



$$OA = 9, CB = 3\sqrt{2}, CD = 3, AB = 2, \\ OG = 2, r = 1, \omega_{CD} = 1 \text{ c}^{-1}, \alpha = 45^\circ.$$

### Задача K28.5.

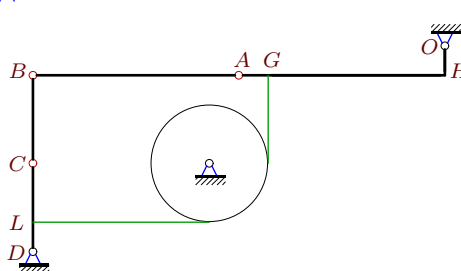
Дружинин Алексей



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

### Задача K28.6.

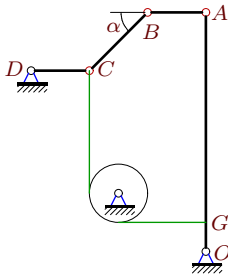
Агеев Алексей



$$OH = 1, CB = 3, HA = AB = 7, CD = 3, \\ r = 2, CL = 2, AG = 1, \omega_{OA} = 3 \text{ c}^{-1}.$$

**Задача K28.7.**

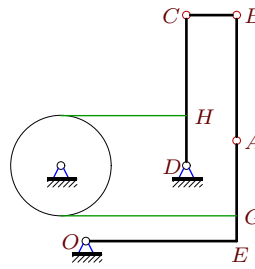
Колпаков Егор



$OA = 8, CB = 2\sqrt{2}, CD = 2, AB = 2,$   
 $OG = 1, r = 1, \omega_{AB} = 5 \text{ c}^{-1}, \alpha = 45^\circ.$

**Задача K28.8.**

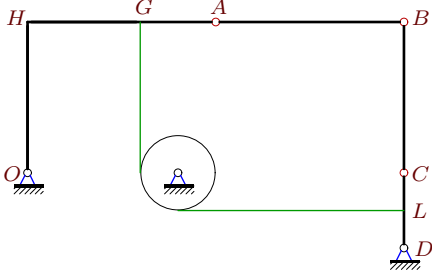
Кузьменко Илья



$OE = 6, CB = 2, AB = 5, CD = 6, r = 2,$   
 $CH = 4, AG = 3, GE = 1, \omega_{CB} = -30 \text{ c}^{-1}.$

**Задача K28.9.**

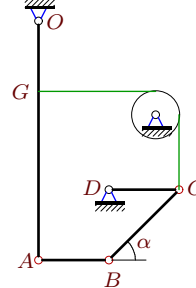
Лакштанкин Александр



$OH = 4, CB = 4, HA = AB = 5, CD = 2,$   
 $r = 1, CL = 1, AG = 2, \omega_{CD} = 6 \text{ c}^{-1}.$

**Задача K28.10.**

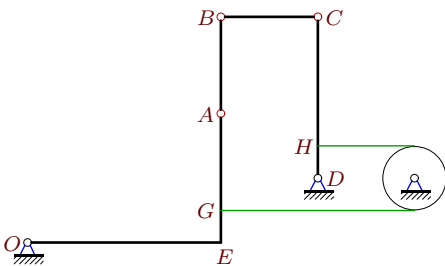
Мухамедов Тимур



$OA = 10, CB = 3\sqrt{2}, CD = 3, AB = 3,$   
 $OG = 3, r = 1, \omega_{disk} = 9 \text{ c}^{-1}, \alpha = 45^\circ.$

**Задача K28.11.**

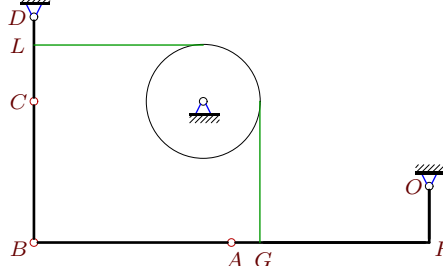
Обухов Олег



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

**Задача K28.12.**

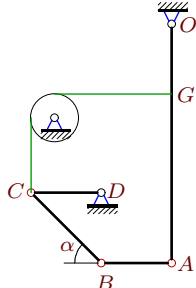
Останин Дмитрий



$OH = 2, CB = 5, HA = AB = 7, CD = 3,$   
 $r = 2, CL = 2, AG = 1, \omega_{AB} = -5 \text{ c}^{-1}.$

**Задача K28.13.**

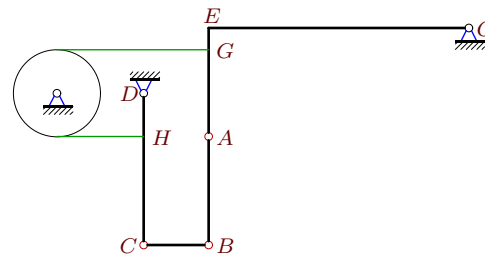
Чулков Андрей



$OA = 10, CB = 3\sqrt{2}, CD = 3, AB = 3,$   
 $OG = 3, r = 1, \omega_{CB} = -10 \text{ c}^{-1}, \alpha = 45^\circ.$

**Задача K28.14.**

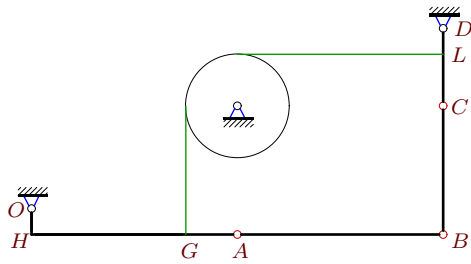
Полторакин Роман



$OE = 12, CB = 3, AB = 5, CD = 7, r = 2,$   
 $CH = 5, AG = 4, GE = 1, \omega_{CD} = 5 \text{ c}^{-1}.$

**Задача K28.15.**

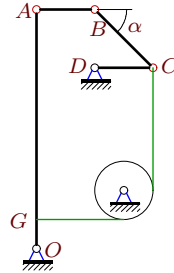
Романов Игорь



$OH = 1, CB = 5, HA = AB = 8, CD = 3,$   
 $r = 2, CL = 2, AG = 2, \omega_{disk} = -15 \text{ c}^{-1}.$

**Задача K28.16.**

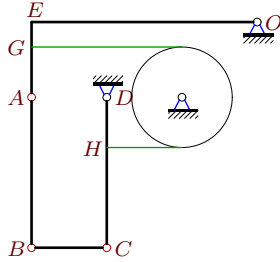
Скачков Роман



$OA = 8, CB = 2\sqrt{2}, CD = 2, AB = 2,$   
 $OG = 1, r = 1, \omega_{OA} = -1 \text{ c}^{-1}, \alpha = 45^\circ.$

**Задача K28.17.**

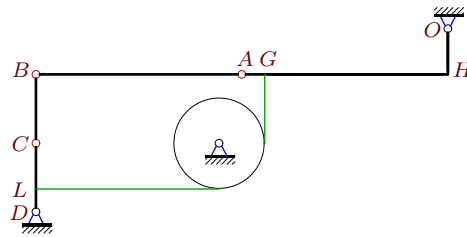
Сурков Алексей



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

**Задача K28.18.**

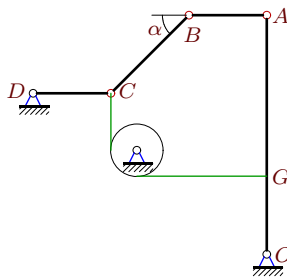
Сухих Александра



$OH = 2, CB = 3, HA = AB = 9, CD = 3,$   
 $r = 2, CL = 2, AG = 1, \omega_{CB} = -26 \text{ c}^{-1}.$

**Задача K28.19.**

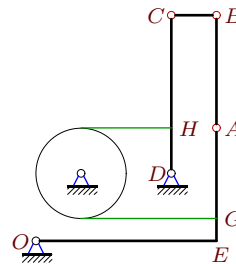
Хоруженко Кирилл



$OA = 9, CB = 3\sqrt{2}, CD = 3, AB = 3,$   
 $OG = 3, r = 1, \omega_{CD} = -1 \text{ c}^{-1}, \alpha = 45^\circ.$

**Задача K28.20.**

Чернышев Александр



$OE = 8, CB = 2, AB = 5, CD = 7, r = 2,$   
 $CH = 5, AG = 4, GE = 1, \omega_{disk} = 5 \text{ c}^{-1}.$