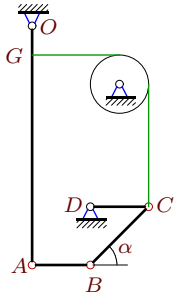
Плоский механизм с блоком

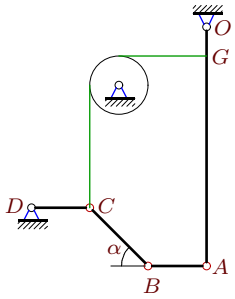
В указанном положении механизма задана угловая скорость одного из звеньев ($с^{-1}$). Длины звеньев даны в сантиметрах. Стержни и нити, направление которых не указано, считать горизонтальными или вертикальными. Нить огибает диск радиусом r без проскальзывания. Найти угловые скорости всех звеньев механизма.

Задача К-28.1. *Алимов Шамиль Маратович*



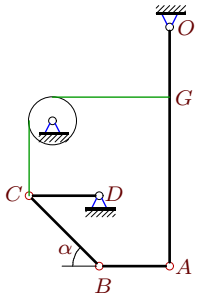
$OA = 8$, $CB = 2\sqrt{2}$, $CD = AB = 2$, $OG = 1$, $r = 1$, $\omega_{AB} = 9$, $\alpha = 45°$.

Задача К-28.2. *Берсенева Анастасия Юрьевна*



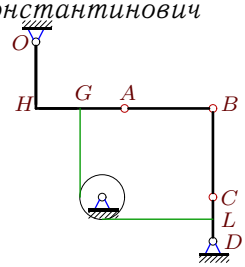
$OA = 8$, $CB = 2\sqrt{2}$, $CD = AB = 2$, $OG = 1$, $r = 1$, $\omega_{AB} = 9$, $\alpha = 45°$.

Задача К-28.3. *Богатых Ольга Юрьевна*



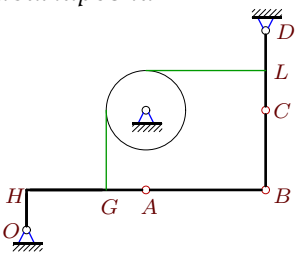
$OA = 10$, $CB = 3\sqrt{2}$, $CD = AB = 3$, $OG = 3$, $r = 1$, $\omega_{CD} = 3$, $\alpha = 45°$.

Задача К-28.4. *Войтов Марк Константинович*



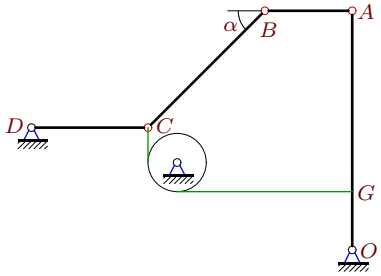
$OH = 3$, $CB = HA = AB = 4$, $CD = 2$, $r = 1$, $CL = 1$, $AG = 2$, $\omega_{OA} = 4$.

Задача К-28.5. *Грабчинская Екатерина Владимировна*



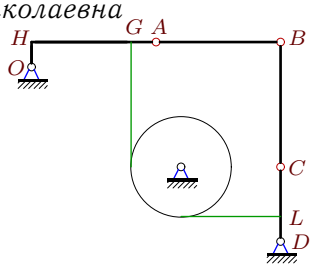
$OH = 1$, $CB = 2$, $HA = AB = 3$, $CD = 2$, $r = 1$, $CL = 1$, $AG = 1$, $\omega_{CD} = 4$.

Задача К-28.6. *Дугин Антон Дмитриевич*



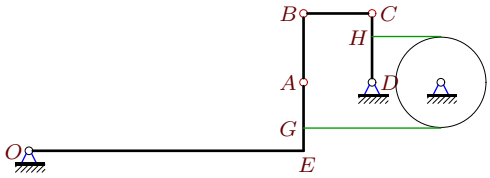
$OA = 8$, $CB = 4\sqrt{2}$, $CD = 4$, $AB = 3$, $OG = 2$, $r = 1$, $\omega_{OA} = -6$, $\alpha = 45°$.

Задача К-28.7. *Елизарова Ксения Николаевна*



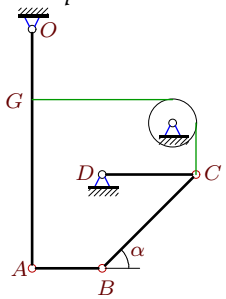
$OH = 1$, $CB = HA = AB = 5$, $CD = 3$, $r = 2$, $CL = 2$, $AG = 1$, $\omega_{OA} = 5$.

Задача К-28.8. *Ефименко Яна Эдуардовна*



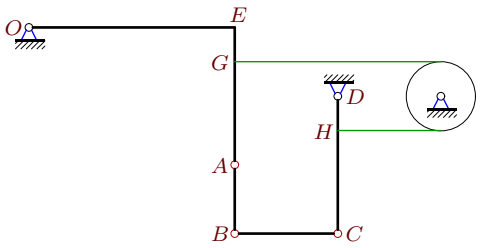
$OE = 12$, $CB = AB = 3$, $CD = 3$, $r = 2$, $CH = 1$, $AG = 2$, $GE = 1$, $\omega_{OA} = -2$.

Задача К-28.9. *Котов Андрей Александрович*



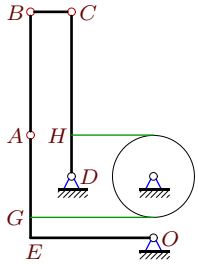
$OA = 10$, $CB = 4\sqrt{2}$, $CD = 4$, $AB = 3$, $OG = 3$, $r = 1$, $\omega_{disk} = 36$, $\alpha = 45°$.

Задача К-28.10. *Кравчук Ольга Андреевна*



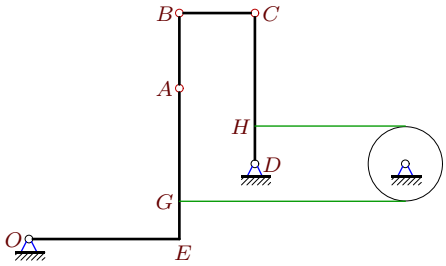
$OE = 6$, $CB = 3$, $AB = 2$, $CD = 4$, $r = 1$, $CH = AG = 3$, $GE = 1$, $\omega_{CD} = 1$.

Задача К-28.11. *Левин Глеб Кириллович*



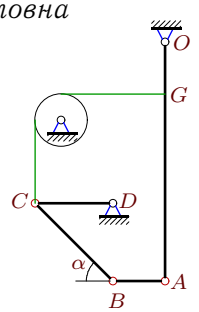
$OE = 6$, $CB = 2$, $AB = 6$, $CD = 8$, $r = 2$, $CH = 6$, $AG = 4$, $GE = 1$, $\omega_{CD} = 1$.

Задача К-28.12. *Лысина Екатерина Александровна*



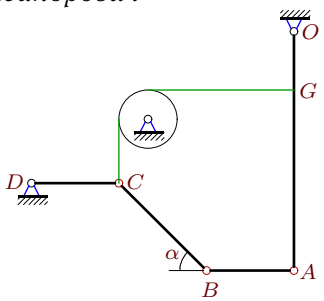
$OE = 4$, $CB = AB = 2$, $CD = 4$, $r = 1$, $CH = AG = 3$, $GE = 1$, $\omega_{disk} = 1$.

Задача К-28.13. *Маралкина Евгения Павловна*



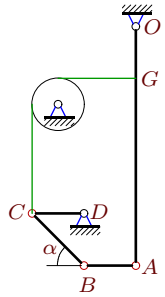
$OA = 9$, $CB = 3\sqrt{2}$, $CD = 3$, $AB = 2$, $OG = 2$, $r = 1$, $\omega_{AB} = 33$, $\alpha = 45°$.

Задача К-28.14. *Новов Александр Александрович*



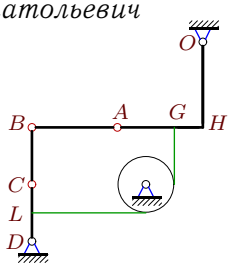
$OA = 8$, $CB = 3\sqrt{2}$, $CD = AB = 3$, $OG = 2$, $r = 1$, $\omega_{AB} = 10$, $\alpha = 45°$.

Задача К-28.15. *Павич Иван Анте*



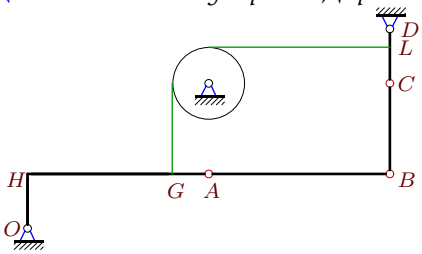
$OA = 9$, $CB = 2\sqrt{2}$, $CD = AB = 2$, $OG = 2$, $r = 1$, $\omega_{CB} = -9$, $\alpha = 45°$.

Задача К-28.16. *Сонин Андрей Анатольевич*



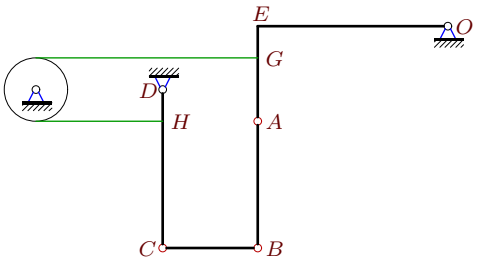
$OH = 3$, $CB = 2$, $HA = AB = 3$, $CD = 2$, $r = 1$, $CL = 1$, $AG = 2$, $\omega_{OA} = 2$.

Задача К-28.17. *Тугарина Дарья Олеговна*



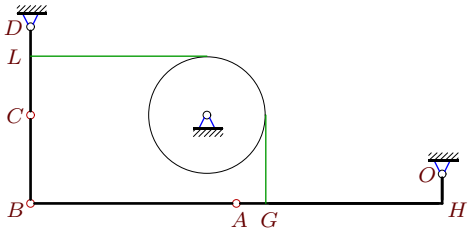
$OH = 3$, $CB = 5$, $HA = AB = 10$, $CD = 3$, $r = 2$, $CL = 2$, $AG = 2$, $\omega_{AB} = -5$.

Задача К-28.18. *Хромов Дмитрий Александрович*



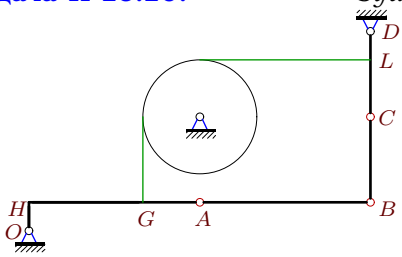
$OE = 6$, $CB = 3$, $AB = 4$, $CD = 5$, $r = 1$, $CH = 4$, $AG = 2$, $GE = 1$, $\omega_{AB} = 2$.

Задача К-28.19. *Чудаков Александр Евгеньевич*



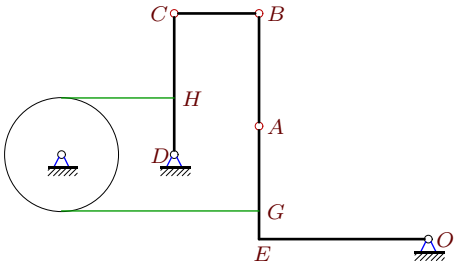
$OH = 1$, $CB = 3$, $HA = AB = 7$, $CD = 3$, $r = 2$, $CL = 2$, $AG = 1$, $\omega_{AB} = -3$.

Задача К-28.20. *Зуйков Игорь*



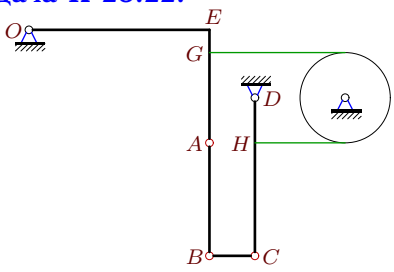
$OH = 1$, $CB = 3$, $HA = AB = 6$, $CD = 3$, $r = 2$, $CL = 2$, $AG = 2$, $\omega_{OA} = 3$.

Задача К-28.21. *Ермаков Владимир*



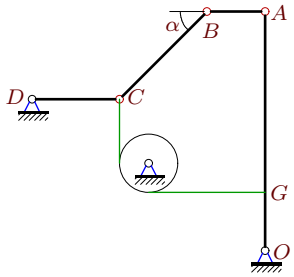
$OE = 6$, $CB = 3$, $AB = 4$, $CD = 5$, $r = 2$, $CH = AG = 3$, $GE = 1$, $\omega_{AB} = 13$.

Задача К-28.22.



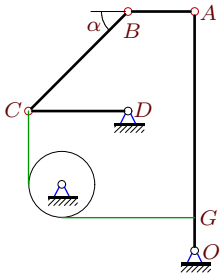
$OE = 8$, $CB = 2$, $AB = 5$, $CD = 7$, $r = 2$, $CH = 5$, $AG = 4$, $GE = 1$, $\omega_{CB} = 40$.

Задача К-28.23.



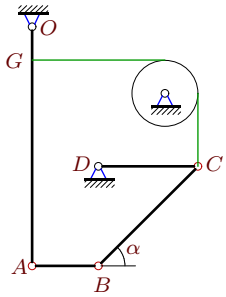
$OA = 8$, $CB = 3\sqrt{2}$, $CD = 3$, $AB = 2$, $OG = 2$, $r = 1$, $\omega_{AB} = 15$, $\alpha = 45°$.

Задача К-28.24.



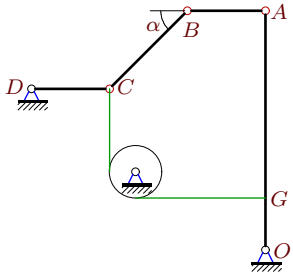
$OA = 7$, $CB = 3\sqrt{2}$, $CD = 3$, $AB = 2$, $OG = 1$, $r = 1$, $\omega_{AB} = 12$, $\alpha = 45°$.

Задача К-28.25.



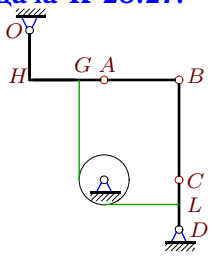
$OA = 7$, $CB = 3\sqrt{2}$, $CD = 3$, $AB = 2$, $OG = 1$, $r = 1$, $\omega_{disk} = 3$, $\alpha = 45°$.

Задача К-28.26.



$OA = 9$, $CB = 3\sqrt{2}$, $CD = AB = 3$, $OG = 2$, $r = 1$, $\omega_{disk} = 6$, $\alpha = 45°$.

Задача К-28.27.



$OH = 2$, $CB = 4$, $HA = AB = 3$, $CD = 2$, $r = 1$, $CL = 1$, $AG = 1$, $\omega_{disk} = -4$.