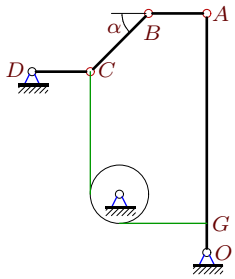
Плоский механизм с блоком

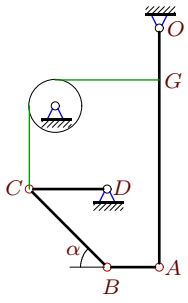
В указанном положении механизма задана угловая скорость одного из звеньев ($с^{-1}$). Длины звеньев даны в сантиметрах. Стержни и нити, направление которых не указано, считать горизонтальными или вертикальными. Нить огибает диск радиусом r без проскальзывания. Найти угловые скорости всех звеньев механизма.

Задача К-28.1. *Акперов Эмиль*



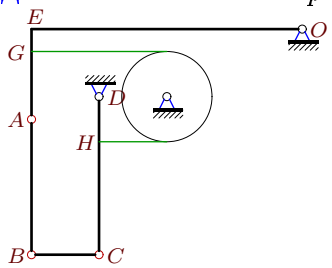
$OA = 8, CB = 2\sqrt{2}, CD = AB = 2, OG = 1,$ $r = 1, \omega_{disk} = 2, \alpha = 45°.$

Задача К-28.2. *Алексеев Максим*



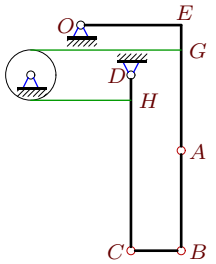
$OA = 9, CB = 3\sqrt{2}, CD = 3, AB = 2,$ $OG = 2, r = 1, \omega_{AB} = 33, \alpha = 45°.$

Задача К-28.3. *Архипова Евгения*



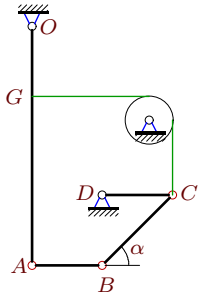
$OE = 12, CB = 3, AB = 6, CD = 7, r = 2,$ $CH = 5, AG = 3, GE = 1, \omega_{CD} = 2.$

Задача К-28.4. *Борисов Илья*



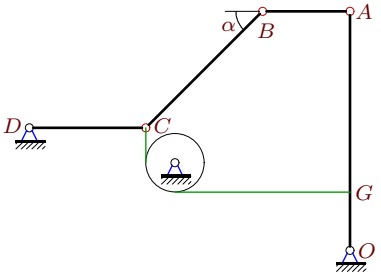
$OE = 4, CB = 2, AB = 4, CD = 7, r = 1,$ $CH = 6, AG = 4, GE = 1, \omega_{disk} = 1.$

Задача К-28.5. *Горюнов Антон*



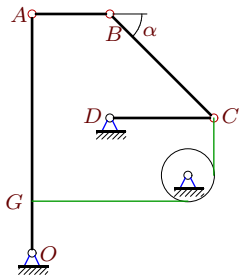
$OA = 10, CB = 3\sqrt{2}, CD = AB = 3, OG =$ $3, r = 1, \omega_{AB} = 13, \alpha = 45°.$

Задача К-28.6. *Давтян Инга*



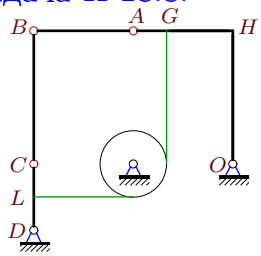
$OA = 8, CB = 4\sqrt{2}, CD = 4, AB = 3,$ $OG = 2, r = 1, \omega_{disk} = 12, \alpha = 45°.$

Задача К-28.7. *Дзядевич Дмитрий*



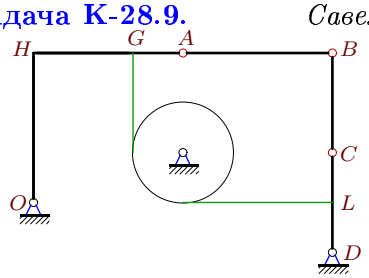
$OA = 9$, $CB = 4\sqrt{2}$, $CD = 4$, $AB = 3$, $OG = 2$, $r = 1$, $\omega_{CD} = 6$, $\alpha = 45°$.

Задача К-28.8. *Ефимов Василий*



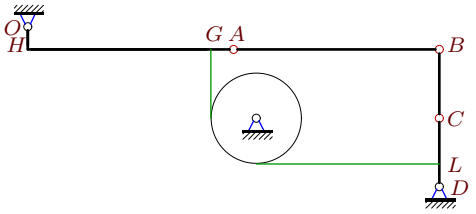
$OH = 4$, $CB = 4$, $HA = AB = 3$, $CD = 2$, $r = 1$, $CL = 1$, $AG = 1$, $\omega_{CD} = 2$.

Задача К-28.9. *Савельев Никита*



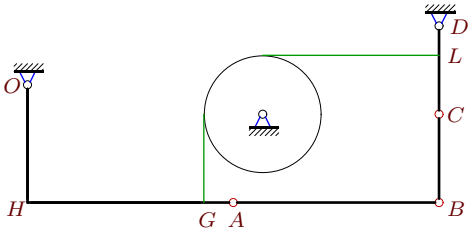
$OH = 3$, $CB = 2$, $HA = AB = 3$, $CD = 2$, $r = 1$, $CL = 1$, $AG = 1$, $\omega_{AB} = -2$.

Задача К-28.10. *Захаров Алексей*



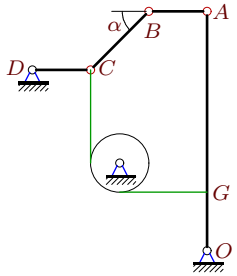
$OH = 1$, $CB = 3$, $HA = AB = 9$, $CD = 3$, $r = 2$, $CL = 2$, $AG = 1$, $\omega_{AB} = -3$.

Задача К-28.11. *Золотых Дмитрий*



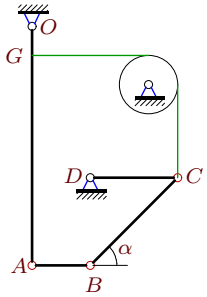
$OH = 4$, $CB = 3$, $HA = AB = 7$, $CD = 3$, $r = 2$, $CL = 2$, $AG = 1$, $\omega_{disk} = -9$.

Задача К-28.12. *Бондаренко Дарья*



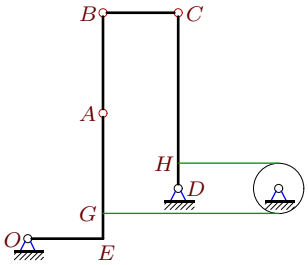
$OA = 8$, $CB = 2\sqrt{2}$, $CD = AB = 2$, $OG = 2$, $r = 1$, $\omega_{disk} = 2$, $\alpha = 45°$.

Задача К-28.13. *Зяблицын Даниил*



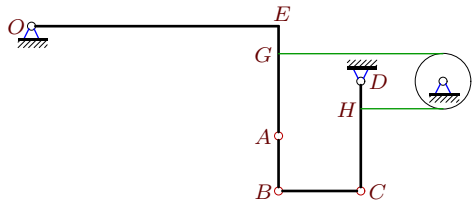
$OA = 8$, $CB = 3\sqrt{2}$, $CD = 3$, $AB = 2$, $OG = 1$, $r = 1$, $\omega_{disk} = 6$, $\alpha = 45°$.

Задача К-28.14. *Кирюхин Антон*



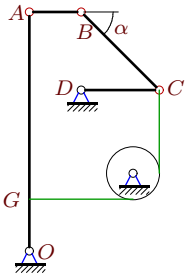
$OE = 3$, $CB = 3$, $AB = 4$, $CD = 7$, $r = 1$, $CH = 6$, $AG = 4$, $GE = 1$, $\omega_{OA} = -1$.

Задача К-28.15. *Мамонов Богдан*



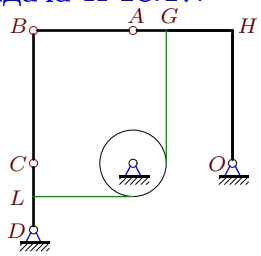
$OE = 9$, $CB = 3$, $AB = 2$, $CD = 4$, $r = 1$, $CH = AG = 3$, $GE = 1$, $\omega_{CD} = 1$.

Задача К-28.16. *Молдареева Мария*



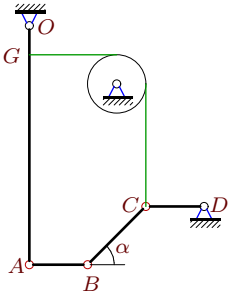
$OA = 9$, $CB = 3\sqrt{2}$, $CD = 3$, $AB = 2$, $OG = 2$, $r = 1$, $\omega_{disk} = 12$, $\alpha = 45°$.

Задача К-28.17. *Морозов Максим*



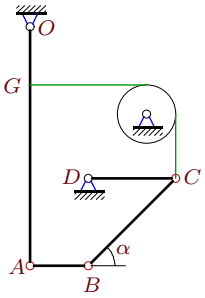
$OH = 4$, $CB = 4$, $HA = AB = 3$, $CD = 2$, $r = 1$, $CL = 1$, $AG = 1$, $\omega_{disk} = -2$.

Задача К-28.18. *Мурушкин Сергей*



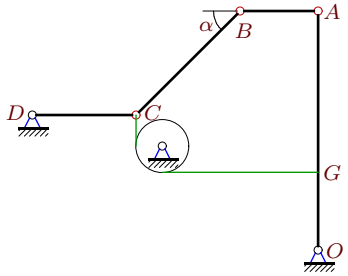
$OA = 8$, $CB = 2\sqrt{2}$, $CD = AB = 2$, $OG = 1$, $r = 1$, $\omega_{OA} = -2$, $\alpha = 45°$.

Задача К-28.19. *Обновленный Михаил*



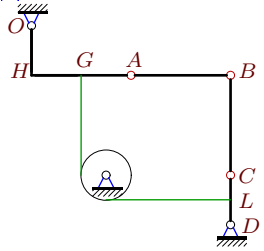
$OA = 8$, $CB = 3\sqrt{2}$, $CD = 3$, $AB = 2$, $OG = 2$, $r = 1$, $\omega_{CB} = -8$, $\alpha = 45°$.

Задача К-28.20. *Султыгов Али*



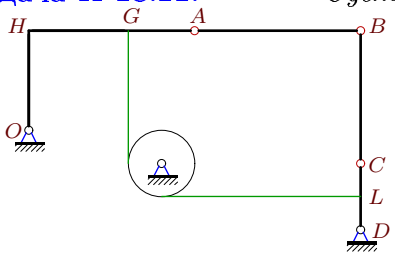
$OA = 9$, $CB = 4\sqrt{2}$, $CD = 4$, $AB = 3$, $OG = 3$, $r = 1$, $\omega_{CD} = -3$, $\alpha = 45°$.

Задача К-28.21. *Сурков Вячеслав*



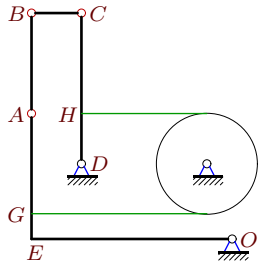
$OH = 2$, $CB = HA = AB = 4$, $CD = 2$, $r = 1$, $CL = 1$, $AG = 2$, $\omega_{AB} = -2$.

Задача К-28.22. *Суслов Даниил*



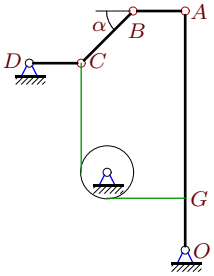
$OH = 3$, $CB = 4$, $HA = AB = 5$, $CD = 2$, $r = 1$, $CL = 1$, $AG = 2$, $\omega_{CD} = 12$.

Задача К-28.23. *Сясикова Валерия*



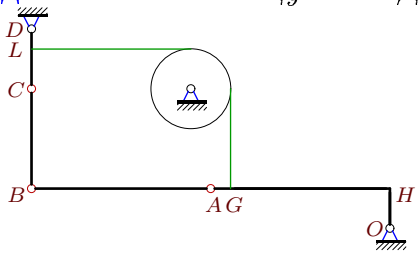
$OE = 8$, $CB = 2$, $AB = 4$, $CD = 6$, $r = 2$, $CH = AG = 4$, $GE = 1$, $\omega_{OA} = -2$.

Задача К-28.24. *Фандеев Алексей*



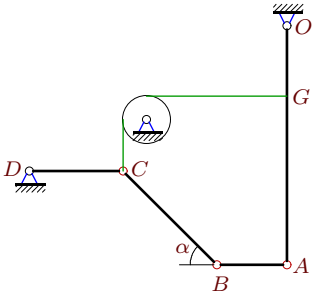
$OA = 9$, $CB = 2\sqrt{2}$, $CD = AB = 2$, $OG = 2$, $r = 1$, $\omega_{AB} = 11$, $\alpha = 45°$.

Задача К-28.25. *Цупенков Дмитрий*



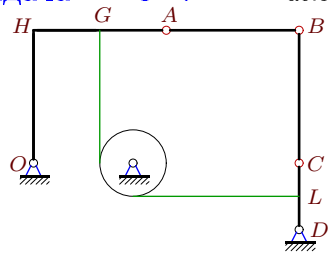
$OH = 2$, $CB = 5$, $HA = AB = 9$, $CD = 3$, $r = 2$, $CL = 2$, $AG = 1$, $\omega_{CB} = -26$.

Задача К-28.26. *Чечнева Наталья*



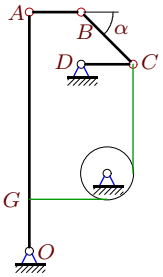
$OA = 10$, $CB = 4\sqrt{2}$, $CD = 4$, $AB = 3$, $OG = 3$, $r = 1$, $\omega_{AB} = 52$, $\alpha = 45°$.

Задача К-28.27. *Чижова Александра*



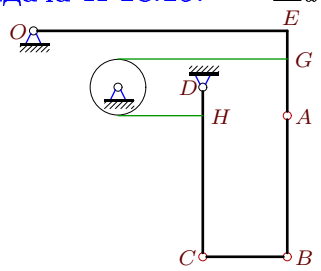
$OH = 4$, $CB = HA = AB = 4$, $CD = 2$, $r = 1$, $CL = 1$, $AG = 2$, $\omega_{OA} = 1$.

Задача К-28.28. *Шаронова Дарья*



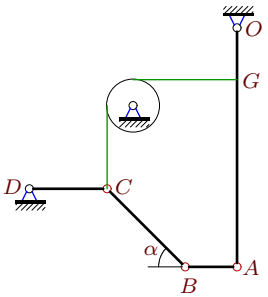
$OA = 9$, $CB = 2\sqrt{2}$, $CD = AB = 2$, $OG = 2$, $r = 1$, $\omega_{OA} = -2$, $\alpha = 45°$.

Задача К-28.29. *Шашелко Арсентий*



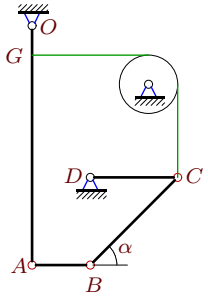
$OE = 9$, $CB = 3$, $AB = 5$, $CD = 6$, $r = 1$, $CH = 5$, $AG = 2$, $GE = 1$, $\omega_{AB} = 9$.

Задача К-28.30.



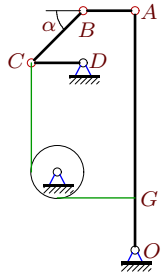
$OA = 9$, $CB = 3\sqrt{2}$, $CD = 3$, $AB = 2$, $OG = 2$, $r = 1$, $\omega_{CD} = -4$, $\alpha = 45°$.

Задача К-28.31.



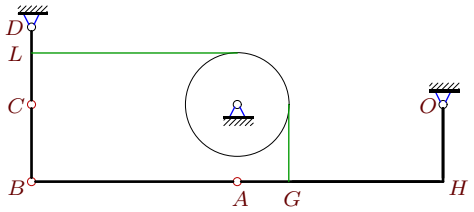
$OA = 8$, $CB = 3\sqrt{2}$, $CD = 3$, $AB = 2$, $OG = 1$, $r = 1$, $\omega_{OA} = -6$, $\alpha = 45°$.

Задача К-28.32.



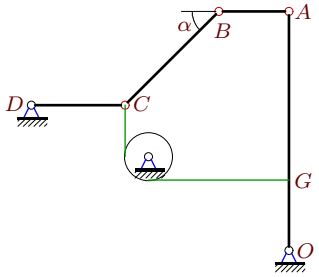
$OA = 9, CB = 2\sqrt{2}, CD = AB = 2, OG = 2$, $r = 1$, $\omega_{OA} = -2$, $\alpha = 45°$.

Задача К-28.33.



$OH = 3$, $CB = 3$, $HA = AB = 8$, $CD = 3$, $r = 2$, $CL = 2$, $AG = 2$, $\omega_{disk} = -3$.

Задача К-28.34.



$OA = 10$, $CB = 4\sqrt{2}$, $CD = 4$, $AB = 3$, $OG = 3$, $r = 1$, $\omega_{CD} = -9$, $\alpha = 45°$.