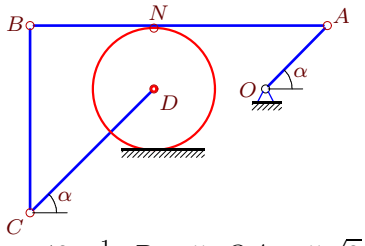
Кинематический анализ плоского механизма

В указанном положении механизма задана угловая скорость одного из звеньев. Длины звеньев даны в сантиметрах. Стержни, направление которых не указано, считать горизонтальными или вертикальными. Диск катится по горизонтальной поверхности без проскальзывания. Найти угловые скорости всех звеньев механизма.

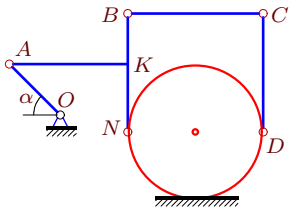
Кирсанов М.Н. **Решебник. Теоретическая механика**/Под ред. А. И. Кириллова.– М.: ФИЗМАТЛИТ, 2008. — 384 с. (с.158.)

Задача К-26.1. *Абзианидзе Габриел*



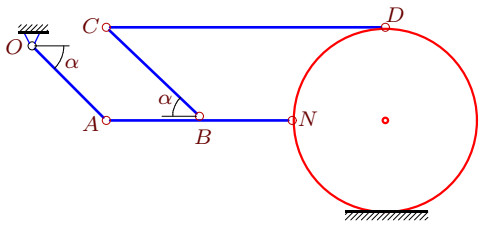
$\omega_{OA_z} = 42c^{-1}$, $R = 5$, $OA = 5\sqrt{2}$,
$CD = 10\sqrt{2}$, $AN = 14$, $AB = 24$, $\alpha = 45°$.

Задача К-26.2. *Авдонин Антон*



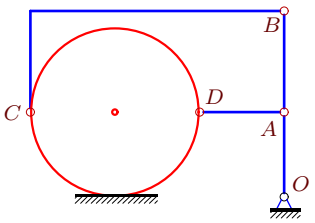
$\omega_{OA_z} = 4c^{-1}$, $R = 4$, $OA = 3\sqrt{2}$,
$AK = 7$, $BK = 3$, $KN = 4$, $CD = 7$, $\alpha = 45°$.

Задача К-26.3. *Белов Виктор*



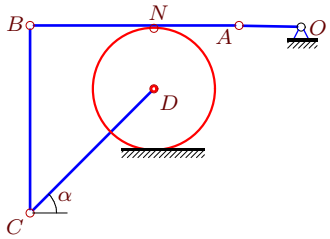
$\omega_{OA_z} = 15c^{-1}$, $R = 5$, $OA = 4\sqrt{2}$,
$AB = 5$, $BN = 5$, $BC = 5\sqrt{2}$, $CD = 15$, α=45°

Задача К-26.4. *Болотина Татьяна*



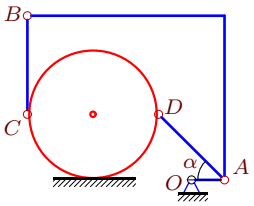
$\omega_{OA_z} = 3c^{-1}$, $R = 5$, $OA = 5$,
$AB = 6$, $AD = 5$.

Задача К-26.5. *Бубнова Ольга*



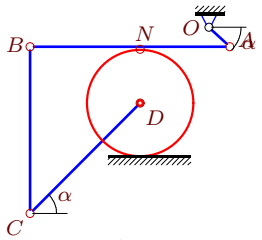
$\omega_{OA_z} = 33c^{-1}$, $R = 8$, $OA = 8$,
$CD = 16\sqrt{2}$, $AN = 11$, $AB = 27$, $\alpha = 45°$.

Задача К-26.6. *Глушенков Павел*



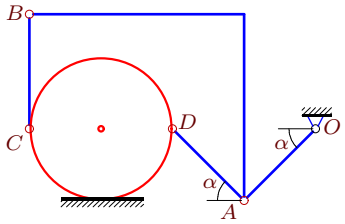
$\omega_{OA_z} = 4c^{-1}$, $R = 6$, $OA = 3$,
$AD = 6\sqrt{2}$, $BC = 9$, $\alpha = 45°$.

Задача К-26.7. *Горьков Ярослав*



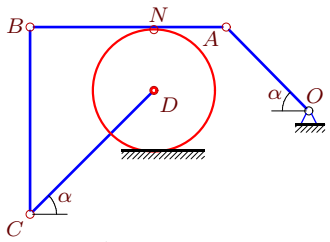
$\omega_{OA_z} = 208c^{-1}$, $R = 8$, $OA = 3\sqrt{2}$,
$CD = 16\sqrt{2}$, $AN = 13$, $AB = 29$, $\alpha = 45°$.

Задача К-26.8. *Комарова Анастасия*



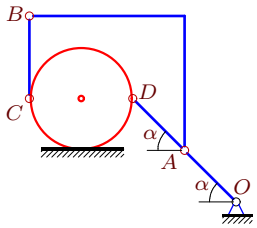
$\omega_{OA_z} = 12c^{-1}$, $R = 5$, $OA = 5\sqrt{2}$,
$AD = 5\sqrt{2}$, $BC = 8$, $\alpha = 45°$.

Задача К-26.9. *Конева Наталия*



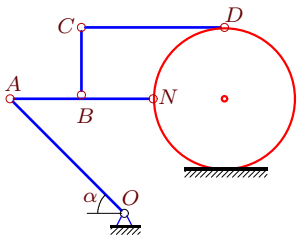
$\omega_{OA_z} = 63c^{-1}$, $R = 6$, $OA = 8\sqrt{2}$,
$CD = 12\sqrt{2}$, $AN = 7$, $AB = 19$, $\alpha = 45°$.

Задача К-26.10. *Любимов Артур*



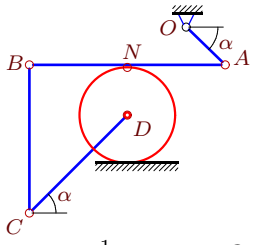
$\omega_{OA_z} = 12c^{-1}$, $R = 5$, $OA = 5\sqrt{2}$,
$AD = 5\sqrt{2}$, $BC = 8$, $\alpha = 45°$.

Задача К-26.11. *Мартьянова Мария*



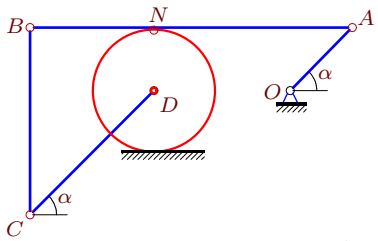
$\omega_{OA_z} = 5c^{-1}$, $R = 5$, $OA = 8\sqrt{2}$,
$AB = 5$, $BN = BC = 5$, $CD = 10$, α=45°

Задача К-26.12. *Пилягина Любовь*



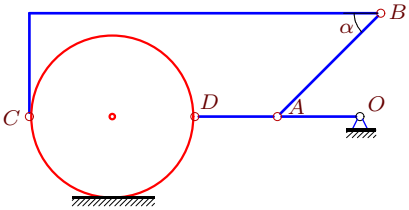
$\omega_{OA_z} = 15c^{-1}$, $R = 5$, $OA = 4\sqrt{2}$,
$CD = 10\sqrt{2}$, $AN = 10$, $AB = 20$, $\alpha = 45°$.

Задача К-26.13. *Понамарева Мария*



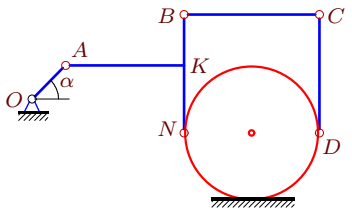
$\omega_{OA_z} = 16c^{-1}$, $R = 5$, $OA = 5\sqrt{2}$,
$CD = 10\sqrt{2}$, $AN = 16$, $AB = 26$, $\alpha = 45°$.

Задача К-26.14. *Соколова Елена*



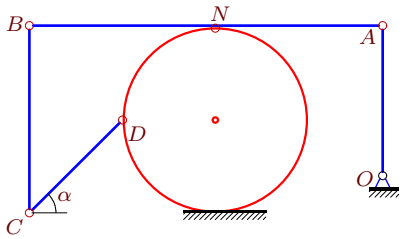
$\omega_{OA_z} = 3c^{-1}$, $R = 4$, $OA = 4$,
$AB = 5\sqrt{2}$, $AD = 4$, $\alpha = 45°$.

Задача К-26.15. *Федоренкова Ольга*



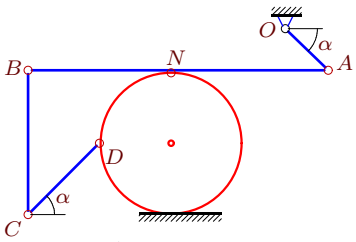
$\omega_{OA_z} = 6c^{-1}$, $R = 4$, $OA = 2\sqrt{2}$,
$AK = 7$, $BK = 3$, $KN = 4$, $CD = 7$, $\alpha = 45°$.

Задача К-26.16. *Чыонг Тхи Лан Нхи*



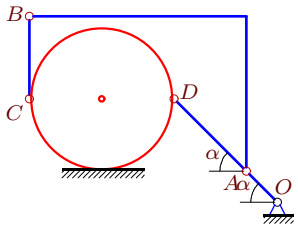
$\omega_{OA_z} = 5c^{-1}$, $R = 5$, $OA = 8$,
$CD = 5\sqrt{2}$, $AN = 9$, $AB = 19$, $\alpha = 45°$.

Задача К-26.17. *Шипаева Алена*



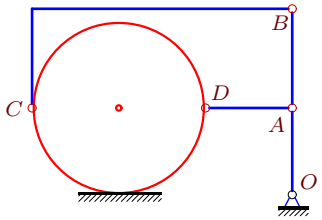
$\omega_{OA_z} = 110c^{-1}$, $R = 5$, $OA = 3\sqrt{2}$,
$CD = 5\sqrt{2}$, $AN = 11$, $AB = 21$, $\alpha = 45°$.

Задача К-26.18. *Ямалетдинова Эльвира*



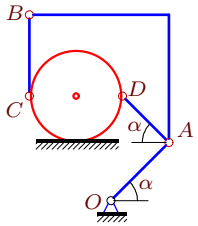
$\omega_{OA_z} = 28c^{-1}$, $R = 7$, $OA = 3\sqrt{2}$,
$AD = 7\sqrt{2}$, $BC = 8$, $\alpha = 45°$.

Задача К-26.19.



$\omega_{OA_z} = 3c^{-1}$, $R = 7$, $OA = 7$,
$AB = 8$, $AD = 7$.

Задача К-26.20.



$\omega_{OA_z} = 84c^{-1}$, $R = 4$, $OA = 5\sqrt{2}$,
$AD = 4\sqrt{2}$, $BC = 7$, $\alpha = 45°$.