

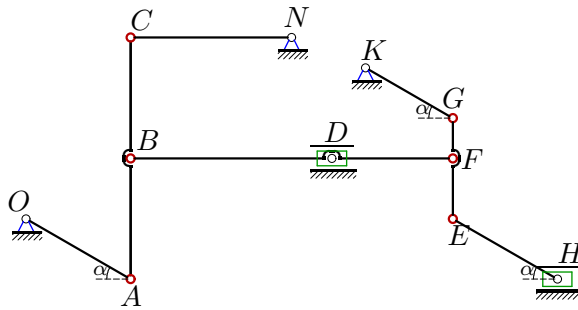
Кинематический анализ механизма (7 звеньев)

Плоский многосвязный механизм с одной степенью свободы приводится в движение кривошипом, который вращается против часовой стрелки с постоянной угловой скоростью. Найти скорости всех шарниров. Размеры даны в сантиметрах.

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

Задача К-9.1.

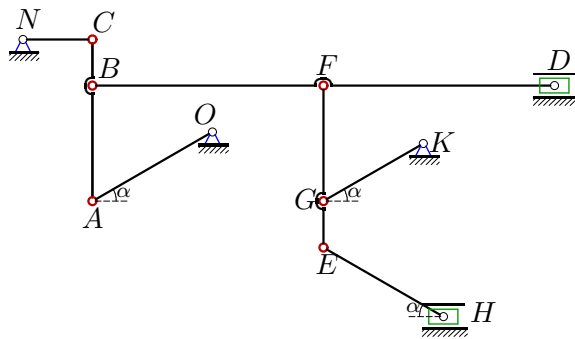
Аббуд Карам Али



$\omega_{OA} = 3 \text{ рад/с}$, $\alpha = 30^\circ$,
 $AB = 30$, $BC = 30$,
 $DB = 50$, $DF = 30$,
 $NC = 40$, $EH = 30$,
 $FE = 15$, $FG = 10$,
 $OA = 30$, $KG = 25$.

Задача К-9.2.

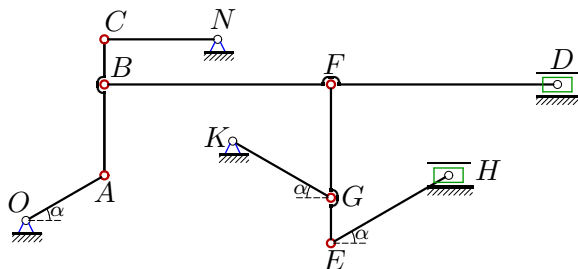
Богомолова Арина



$\omega_{OA} = 1 \text{ рад/с}$, $\alpha = 30^\circ$,
 $AB = 25$, $BC = 10$,
 $BF = 50$, $FD = 50$,
 $NC = 15$, $EH = 30$,
 $FE = 35$, $FG = 25$,
 $OA = 30$, $KG = 25$.

Задача К-9.3.

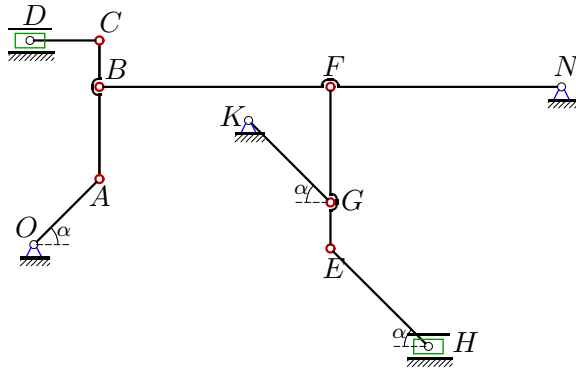
Долгушев Алексей



$\omega_{NC} = 3 \text{ рад/с}$, $\alpha = 30^\circ$,
 $AB = 20$, $BC = 10$,
 $BF = 50$, $FD = 50$,
 $NC = 25$, $EH = 30$,
 $FE = 35$, $FG = 25$,
 $OA = 20$, $KG = 25$.

Задача К-9.4.

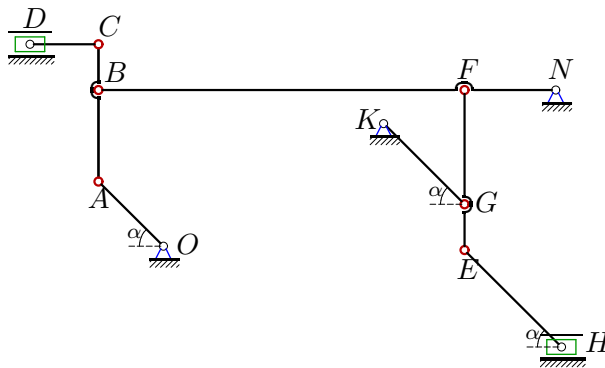
Зайцев Сергей



$\omega_{NB} = 1$ рад/с, $\alpha = 45^\circ$,
 $AB = 20$, $BC = 10$,
 $BF = 50$, $NF = 50$,
 $CD = 15$, $EH = 30$,
 $FG = 25$, $GE = 10$,
 $OA = 20$, $KG = 25$.

Задача К-9.5.

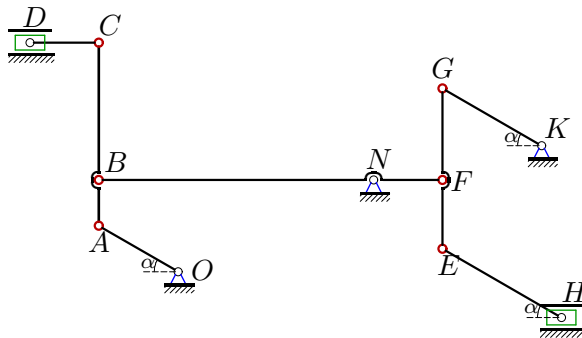
Исаев Илья



$\omega_{OA} = 4$ рад/с, $\alpha = 45^\circ$,
 $AB = 20$, $BC = 10$,
 $BF = 80$, $NF = 20$,
 $CD = 15$, $EH = 30$,
 $FG = 25$, $GE = 10$,
 $OA = 20$, $KG = 25$.

Задача К-9.6.

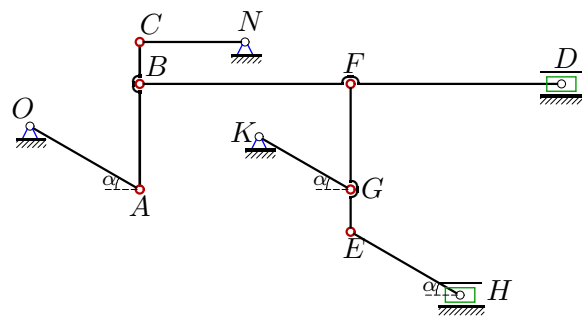
Камынин Даниил



$\omega_{BF} = 1$ рад/с, $\alpha = 30^\circ$,
 $AB = 10$, $BC = 30$,
 $NB = 60$, $NF = 15$,
 $CD = 15$, $EH = 30$,
 $FE = 15$, $FG = 20$,
 $OA = 20$, $KG = 25$.

Задача К-9.7.

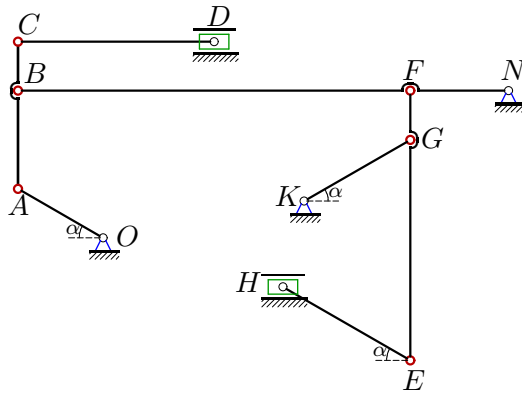
Коршиков Максим



$\omega_{NC} = 2$ рад/с, $\alpha = 30^\circ$,
 $AB = 25$, $BC = 10$,
 $BF = 50$, $FD = 50$,
 $NC = 25$, $EH = 30$,
 $FE = 35$, $FG = 25$,
 $OA = 30$, $KG = 25$.

Задача К-9.8.

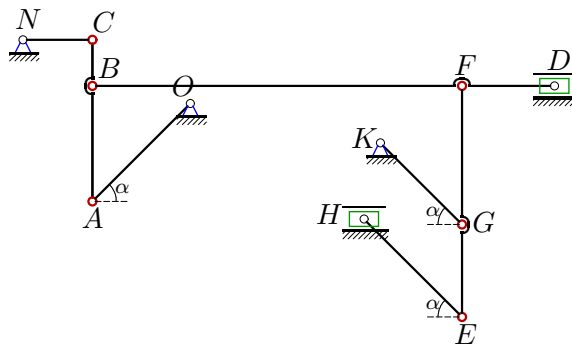
Кузнецов Иван



$\omega_{OA} = 1$ рад/с, $\alpha = 30^\circ$,
 $AB = 20$, $BC = 10$,
 $BF = 80$, $NF = 20$,
 $CD = 40$, $EH = 30$,
 $FG = 10$, $GE = 45$,
 $OA = 20$, $KG = 25$.

Задача К-9.9.

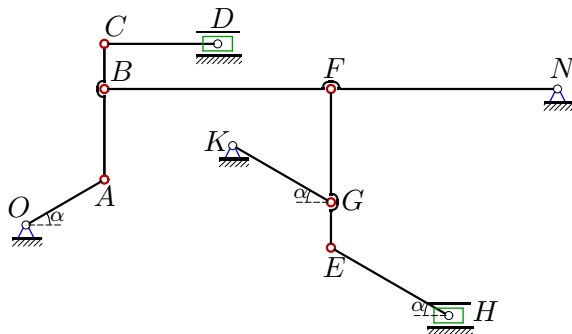
Куренкова Виктория



$\omega_{OA} = 3$ рад/с, $\alpha = 45^\circ$,
 $AB = 25$, $BC = 10$,
 $BF = 80$, $FD = 20$,
 $NC = 15$, $EH = 30$,
 $FE = 50$, $FG = 30$,
 $OA = 30$, $KG = 25$.

Задача К-9.10.

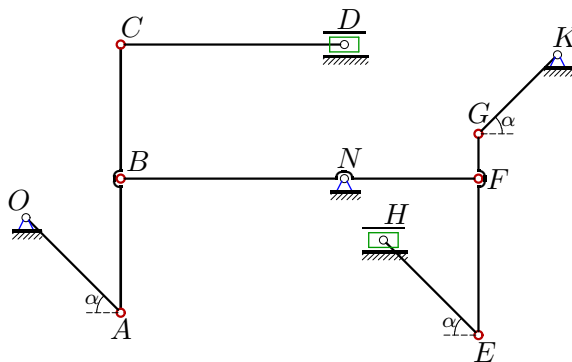
Лысенкова Анастасия



$\omega_{NB} = 1$ рад/с, $\alpha = 30^\circ$,
 $AB = 20$, $BC = 10$,
 $BF = 50$, $NF = 50$,
 $CD = 25$, $EH = 30$,
 $FG = 25$, $GE = 10$,
 $OA = 20$, $KG = 25$.

Задача К-9.11.

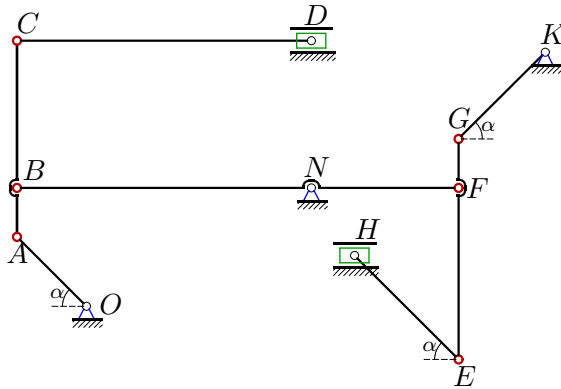
Львов Дмитрий



$\omega_{KG} = 1$ рад/с, $\alpha = 45^\circ$,
 $AB = 30$, $BC = 30$,
 $NB = 50$, $NF = 30$,
 $CD = 50$, $EH = 30$,
 $FE = 35$, $FG = 10$,
 $OA = 30$, $KG = 25$.

Задача К-9.12.

Маликова Регина



$$\omega_{BF} = 4 \text{ рад/с}, \alpha = 45^\circ,$$

$$AB = 10, BC = 30,$$

$$NB = 60, NF = 30,$$

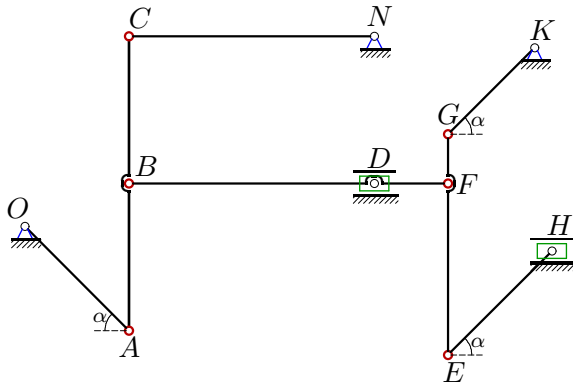
$$CD = 60, EH = 30,$$

$$FE = 35, FG = 10,$$

$$OA = 20, KG = 25.$$

Задача К-9.13.

Маневв Илья



$$\omega_{OA} = 1 \text{ рад/с}, \alpha = 45^\circ,$$

$$AB = 30, BC = 30,$$

$$DB = 50, DF = 15,$$

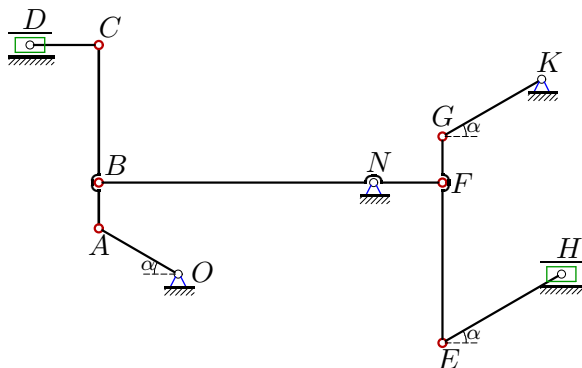
$$NC = 50, EH = 30,$$

$$FE = 35, FG = 10,$$

$$OA = 30, KG = 25.$$

Задача К-9.14.

Опрокиднёв Эрнст



$$\omega_{BF} = 2 \text{ рад/с}, \alpha = 30^\circ,$$

$$AB = 10, BC = 30,$$

$$NB = 60, NF = 15,$$

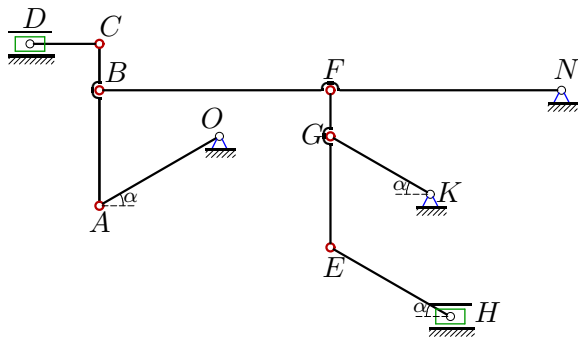
$$CD = 15, EH = 30,$$

$$FE = 35, FG = 10,$$

$$OA = 20, KG = 25.$$

Задача К-9.15.

Пошибаев Алексей



$$\omega_{NB} = 4 \text{ рад/с}, \alpha = 30^\circ,$$

$$AB = 25, BC = 10,$$

$$BF = 50, NF = 50,$$

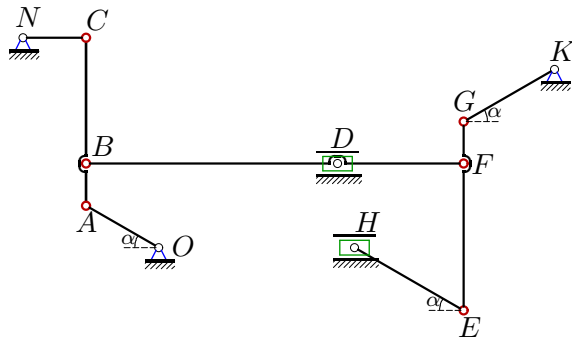
$$CD = 15, EH = 30,$$

$$FG = 10, GE = 24,$$

$$OA = 30, KG = 25.$$

Задача К-9.16.

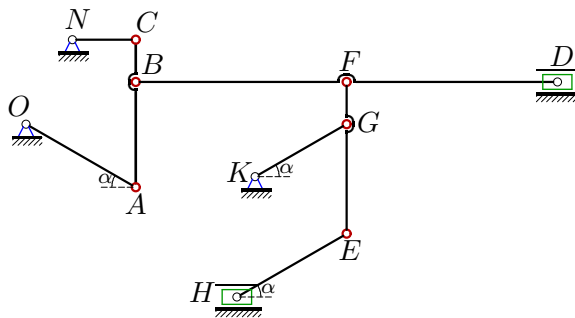
Привезенов Николай



$\omega_{OA} = 2$ рад/с, $\alpha = 30^\circ$,
 $AB = 10$, $BC = 30$,
 $DB = 60$, $DF = 30$,
 $NC = 15$, $EH = 30$,
 $FE = 35$, $FG = 10$,
 $OA = 20$, $KG = 25$.

Задача К-9.17.

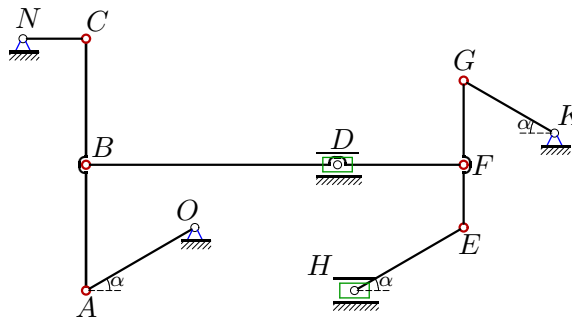
Пышкина Инна



$\omega_{OA} = 3$ рад/с, $\alpha = 30^\circ$,
 $AB = 25$, $BC = 10$,
 $BF = 50$, $FD = 50$,
 $NC = 15$, $EH = 30$,
 $FE = 36$, $FG = 10$,
 $OA = 30$, $KG = 25$.

Задача К-9.18.

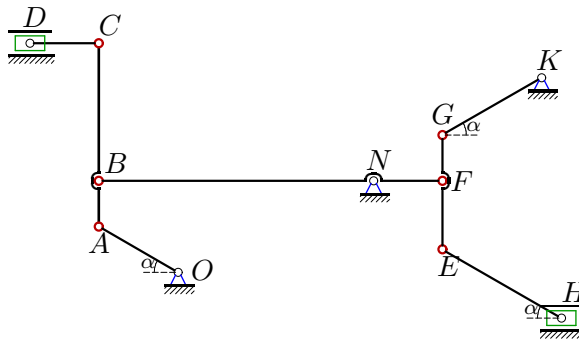
Рашитов Данил



$\omega_{NC} = 2$ рад/с, $\alpha = 30^\circ$,
 $AB = 30$, $BC = 30$,
 $DB = 60$, $DF = 30$,
 $NC = 15$, $EH = 30$,
 $FE = 15$, $FG = 20$,
 $OA = 30$, $KG = 25$.

Задача К-9.19.

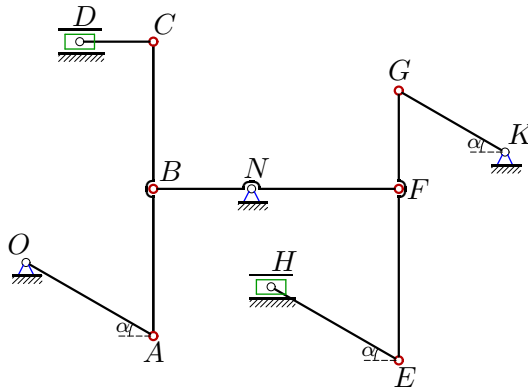
Свиридов Георгий



$\omega_{KG} = 1$ рад/с, $\alpha = 30^\circ$,
 $AB = 10$, $BC = 30$,
 $NB = 60$, $NF = 15$,
 $CD = 15$, $EH = 30$,
 $FE = 15$, $FG = 10$,
 $OA = 20$, $KG = 25$.

Задача К-9.20.

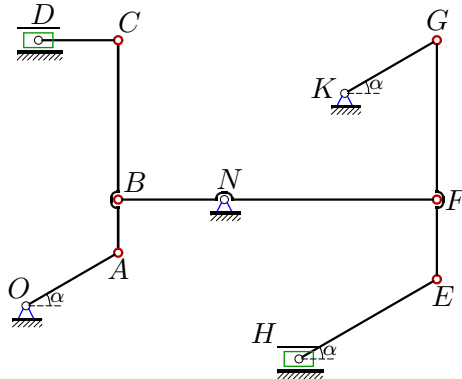
Скляр Никита



$\omega_{OA} = 1 \text{ рад/с}, \alpha = 30^\circ,$
 $AB = 30, BC = 30,$
 $NB = 20, NF = 30,$
 $CD = 15, EH = 30,$
 $FE = 35, FG = 20,$
 $OA = 30, KG = 25.$

Задача К-9.21.

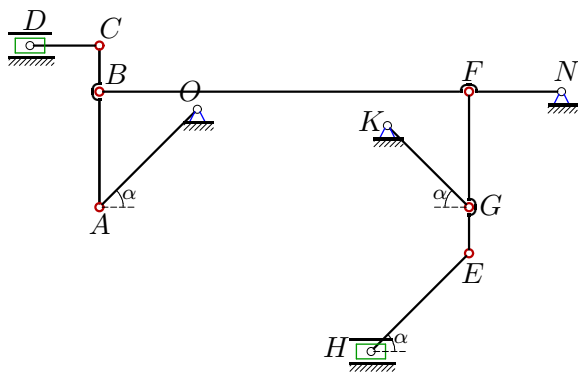
Телицын Данил



$\omega_{KG} = 1 \text{ рад/с}, \alpha = 30^\circ,$
 $AB = 10, BC = 30,$
 $NB = 20, NF = 40,$
 $CD = 15, EH = 30,$
 $FE = 15, FG = 30,$
 $OA = 20, KG = 20.$

Задача К-9.22.

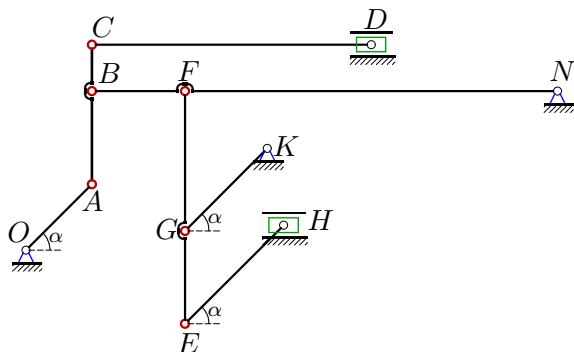
Ковалев Д.



$\omega_{KG} = 3 \text{ рад/с}, \alpha = 45^\circ,$
 $AB = 25, BC = 10,$
 $BF = 80, NF = 20,$
 $CD = 15, EH = 30,$
 $FG = 25, GE = 10,$
 $OA = 30, KG = 25.$

Задача К-9.23.

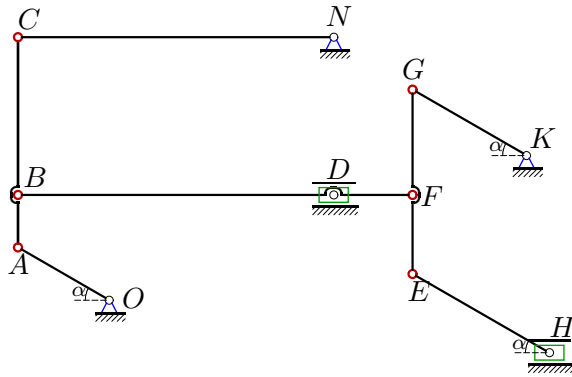
Трякин Михаил



$\omega_{KG} = 4 \text{ рад/с}, \alpha = 45^\circ,$
 $AB = 20, BC = 10,$
 $BF = 20, NF = 80,$
 $CD = 60, EH = 30,$
 $FG = 30, GE = 20,$
 $OA = 20, KG = 25.$

Задача К-9.24.

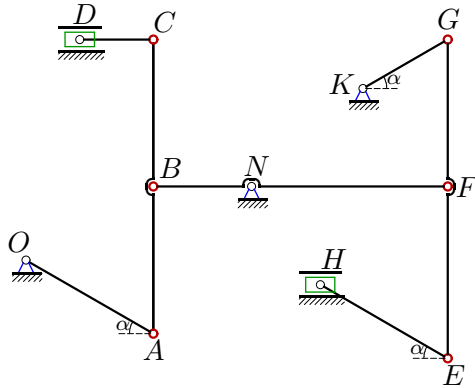
Шибин Руслан



$\omega_{NC} = 2$ рад/с, $\alpha = 30^\circ$,
 $AB = 10$, $BC = 30$,
 $DB = 60$, $DF = 15$,
 $NC = 60$, $EH = 30$,
 $FE = 15$, $FG = 20$,
 $OA = 20$, $KG = 25$.

Задача К-9.25.

Штыленко Антон



$\omega_{KG} = 1$ рад/с, $\alpha = 30^\circ$,
 $AB = 30$, $BC = 30$,
 $NB = 20$, $NF = 40$,
 $CD = 15$, $EH = 30$,
 $FE = 35$, $FG = 30$,
 $OA = 30$, $KG = 20$.