

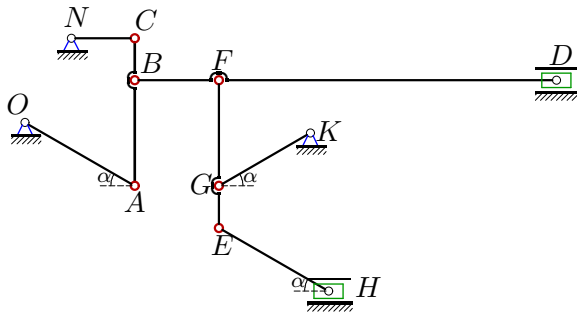
Кинематический анализ механизма (7 звеньев)

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.

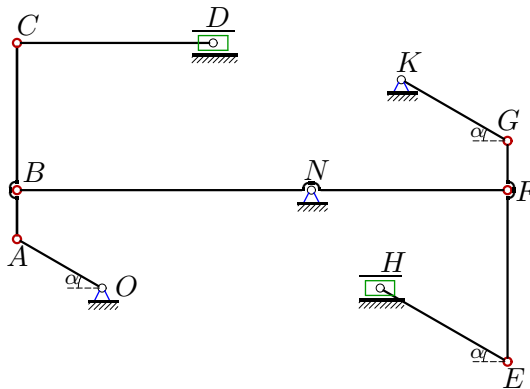
Аленичкин Александр



$\omega_{OA} = 3 \text{ рад/с}$, $\alpha = 30^\circ$,
 $AB = 25$, $BC = 10$,
 $BF = 20$, $FD = 80$,
 $NC = 15$, $EH = 30$,
 $FE = 35$, $FG = 25$,
 $OA = 30$, $KG = 25$.

Задача К-9.2.

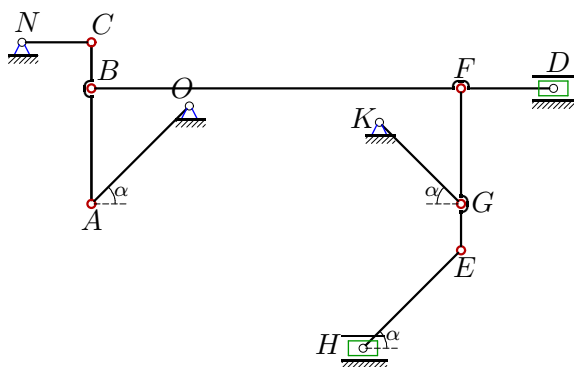
Белый Алексей



$\omega_{KG} = 1 \text{ рад/с}$, $\alpha = 30^\circ$,
 $AB = 10$, $BC = 30$,
 $NB = 60$, $NF = 40$,
 $CD = 40$, $EH = 30$,
 $FE = 35$, $FG = 10$,
 $OA = 20$, $KG = 25$.

Задача К-9.3.

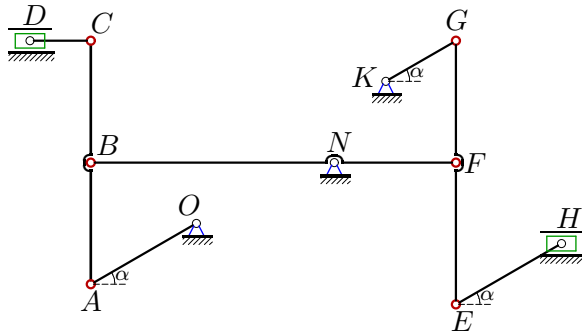
Бирюков Антон



$\omega_{OA} = 1 \text{ рад/с}$, $\alpha = 45^\circ$,
 $AB = 25$, $BC = 10$,
 $BF = 80$, $FD = 20$,
 $NC = 15$, $EH = 30$,
 $FE = 35$, $FG = 25$,
 $OA = 30$, $KG = 25$.

Задача К-9.4.

Боржов Роман



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

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

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

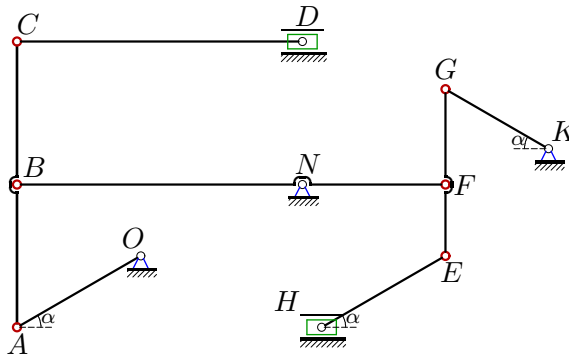
$$CD = 15, EH = 30,$$

$$FE = 35, FG = 30,$$

$$OA = 30, KG = 20.$$

Задача К-9.5.

Галустров Владимир



$$\omega_{BF} = 1 \text{ рад/с}, \alpha = 30^\circ,$$

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

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

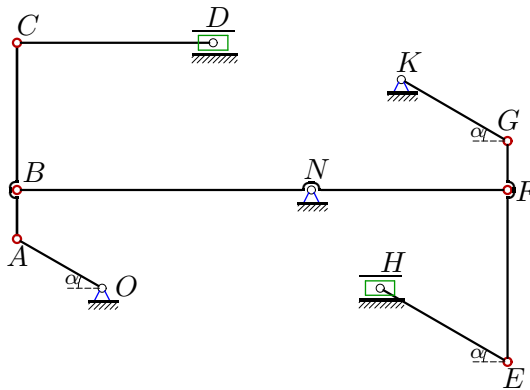
$$CD = 60, EH = 30,$$

$$FE = 15, FG = 20,$$

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

Задача К-9.6.

Дмитриева Марина



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

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

$$NB = 60, NF = 40,$$

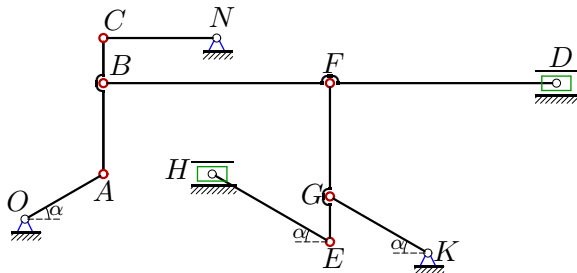
$$CD = 40, EH = 30,$$

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

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

Задача К-9.7.

Ельникова Ирина



$$\omega_{NC} = 3 \text{ рад/с}, \alpha = 30^\circ,$$

$$AB = 20, BC = 10,$$

$$BF = 50, FD = 50,$$

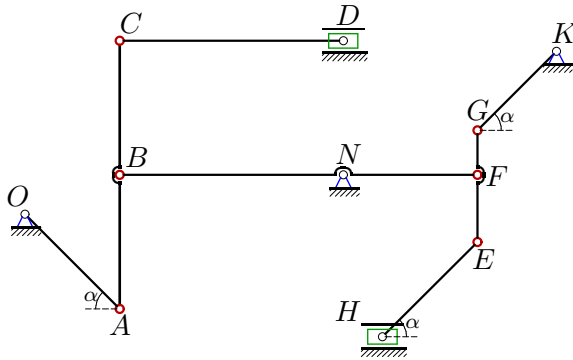
$$NC = 25, EH = 30,$$

$$FE = 35, FG = 25,$$

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

Задача К-9.8.

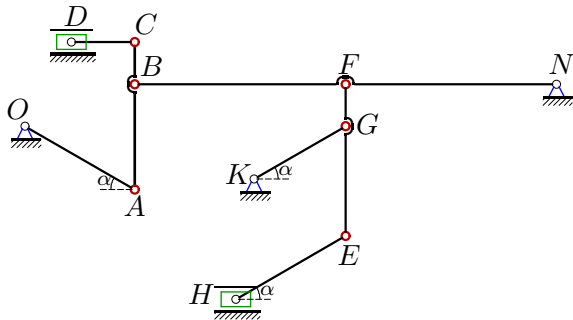
Кильдиватова Полина



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

Задача К-9.9.

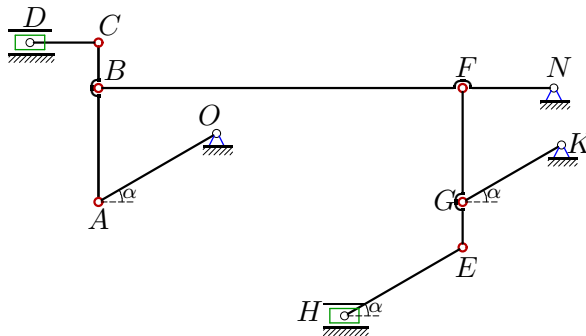
Кильчанов Сергей



$\omega_{NB} = 4$ рад/с, $\alpha = 30^\circ$,
 $AB = 25$, $BC = 10$,
 $BF = 50$, $NF = 50$,
 $CD = 15$, $EH = 30$,
 $FG = 10$, $GE = 26$,
 $OA = 30$, $KG = 25$.

Задача К-9.10.

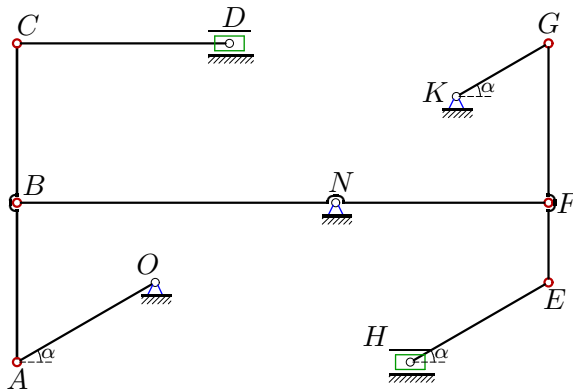
Коннов Сергей



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

Задача К-9.11.

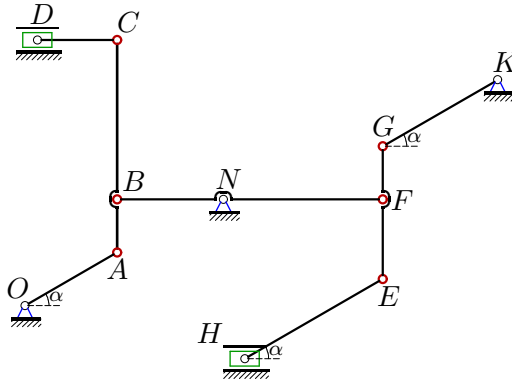
Красненко Дарья



$\omega_{BF} = 1$ рад/с, $\alpha = 30^\circ$,
 $AB = 30$, $BC = 30$,
 $NB = 60$, $NF = 40$,
 $CD = 40$, $EH = 30$,
 $FE = 15$, $FG = 30$,
 $OA = 30$, $KG = 20$.

Задача К-9.12.

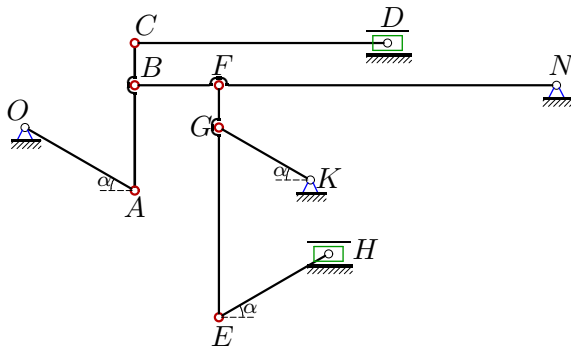
Крупинин Андрей



$\omega_{OA} = 2$ рад/с, $\alpha = 30^\circ$,
 $AB = 10$, $BC = 30$,
 $NB = 20$, $NF = 30$,
 $CD = 15$, $EH = 30$,
 $FE = 15$, $FG = 10$,
 $OA = 20$, $KG = 25$.

Задача К-9.13.

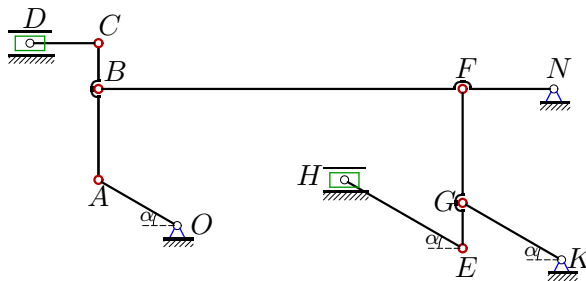
Миргасов Алексей



$\omega_{KG} = 3$ рад/с, $\alpha = 30^\circ$,
 $AB = 25$, $BC = 10$,
 $BF = 20$, $NF = 80$,
 $CD = 60$, $EH = 30$,
 $FG = 10$, $GE = 45$,
 $OA = 30$, $KG = 25$.

Задача К-9.14.

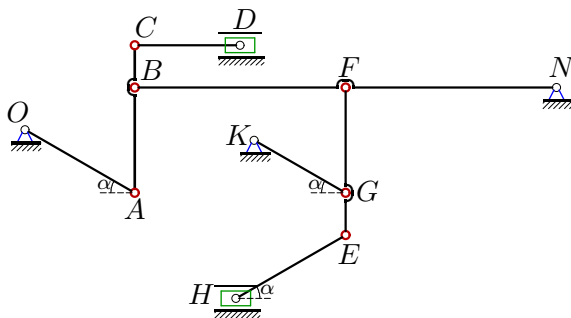
Миронова Дарья



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

Задача К-9.15.

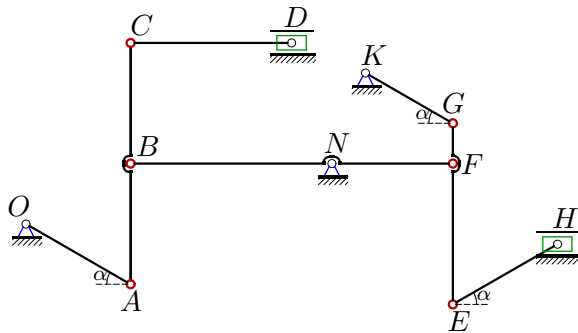
Набиев Артур



$\omega_{OA} = 3$ рад/с, $\alpha = 30^\circ$,
 $AB = 25$, $BC = 10$,
 $BF = 50$, $NF = 50$,
 $CD = 25$, $EH = 30$,
 $FG = 25$, $GE = 10$,
 $OA = 30$, $KG = 25$.

Задача К-9.16.

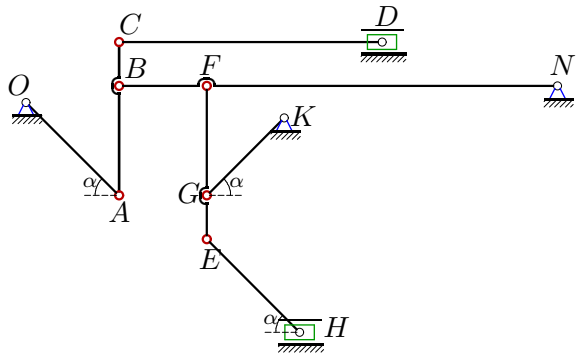
Назаренко Анастасия



$\omega_{OA} = 4$ рад/с, $\alpha = 30^\circ$,
 $AB = 30$, $BC = 30$,
 $NB = 50$, $NF = 30$,
 $CD = 40$, $EH = 30$,
 $FE = 35$, $FG = 10$,
 $OA = 30$, $KG = 25$.

Задача К-9.17.

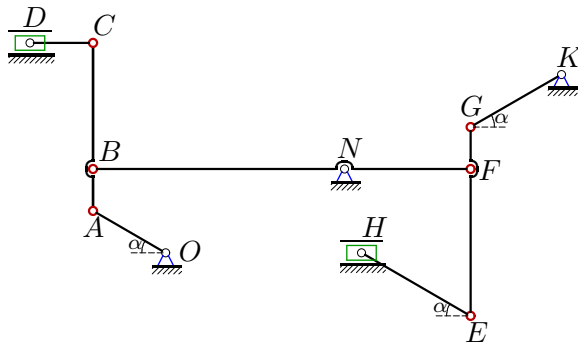
Ни Владислав



$\omega_{NB} = 1$ рад/с, $\alpha = 45^\circ$,
 $AB = 25$, $BC = 10$,
 $BF = 20$, $NF = 80$,
 $CD = 60$, $EH = 30$,
 $FG = 25$, $GE = 10$,
 $OA = 30$, $KG = 25$.

Задача К-9.18.

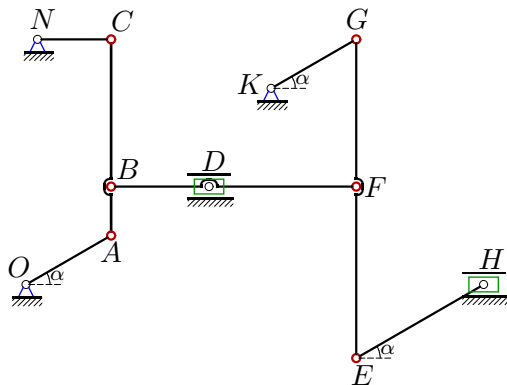
Сергеев Михаил



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

Задача К-9.19.

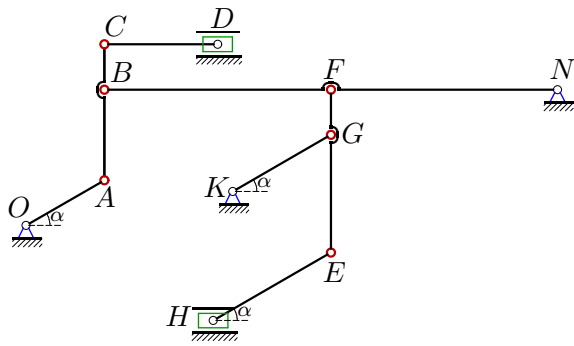
Склярченко Никита



$\omega_{OA} = 3$ рад/с, $\alpha = 30^\circ$,
 $AB = 10$, $BC = 30$,
 $DB = 20$, $DF = 30$,
 $NC = 15$, $EH = 30$,
 $FE = 35$, $FG = 30$,
 $OA = 20$, $KG = 20$.

Задача К-9.20.

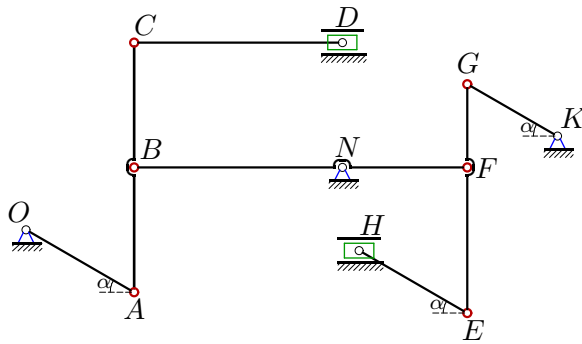
Филатов Иван



$\omega_{NB} = 1 \text{ рад/с}$, $\alpha = 30^\circ$,
 $AB = 20$, $BC = 10$,
 $BF = 50$, $NF = 50$,
 $CD = 25$, $EH = 30$,
 $FG = 10$, $GE = 26$,
 $OA = 20$, $KG = 25$.

Задача К-9.21.

Шеповаленко Ангелина



$\omega_{KG} = 1 \text{ рад/с}$, $\alpha = 30^\circ$,
 $AB = 30$, $BC = 30$,
 $NB = 50$, $NF = 30$,
 $CD = 50$, $EH = 30$,
 $FE = 35$, $FG = 20$,
 $OA = 30$, $KG = 25$.