

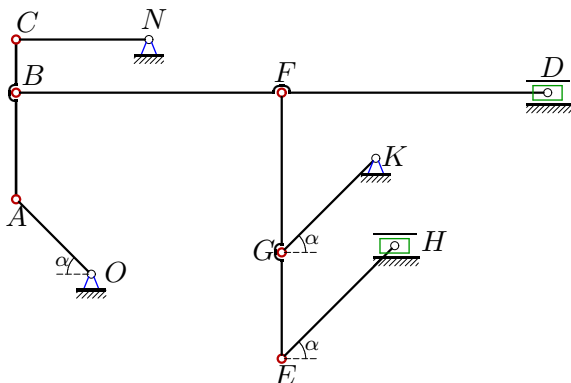
Кинематический анализ механизма (7 звеньев)

Плоский многозвенный 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.

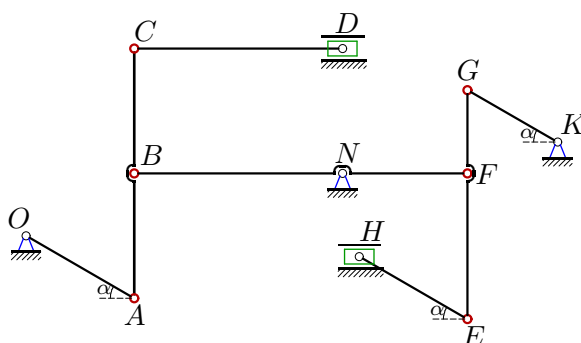
Горелова Валерия



$$\begin{aligned} \omega_{NC} &= 4 \text{ рад/с}, \alpha = 45^\circ, \\ AB &= 20, BC = 10, \\ BF &= 50, FD = 50, \\ NC &= 25, EH = 30, \\ FE &= 50, FG = 30, \\ OA &= 20, KG = 25. \end{aligned}$$

Задача К-9.2.

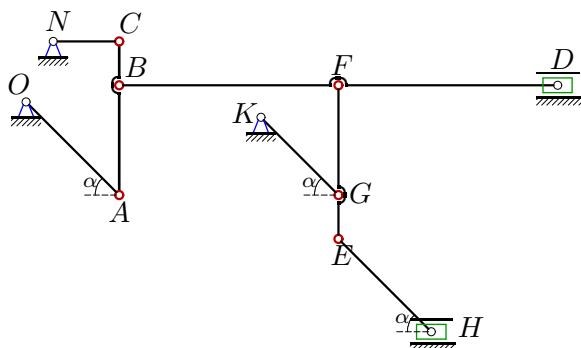
Горин Николай



$$\begin{aligned} \omega_{OA} &= 3 \text{ рад/с}, \alpha = 30^\circ, \\ AB &= 30, BC = 30, \\ NB &= 50, NF = 30, \\ CD &= 50, EH = 30, \\ FE &= 35, FG = 20, \\ OA &= 30, KG = 25. \end{aligned}$$

Задача К-9.3.

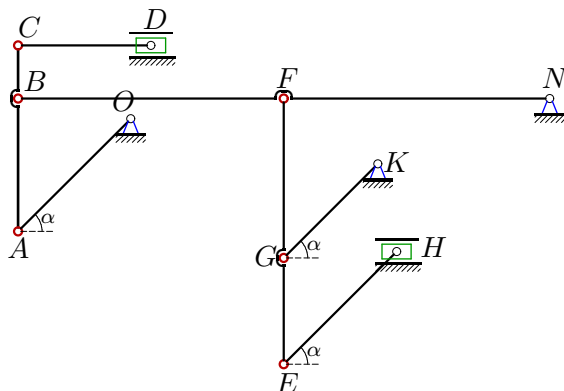
Гурьянова Ксения



$$\begin{aligned} \omega_{NC} &= 2 \text{ рад/с}, \alpha = 45^\circ, \\ AB &= 25, BC = 10, \\ BF &= 50, FD = 50, \\ NC &= 15, EH = 30, \\ FE &= 35, FG = 25, \\ OA &= 30, KG = 25. \end{aligned}$$

Задача К-9.4.

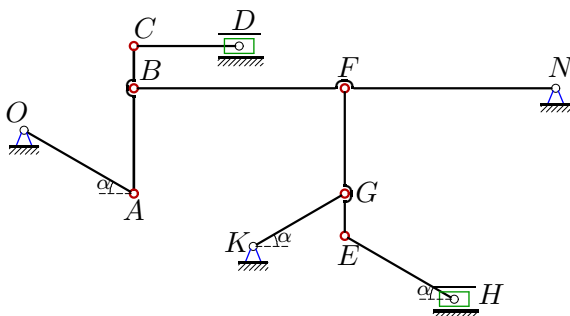
Дардас Халед



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

Задача К-9.5.

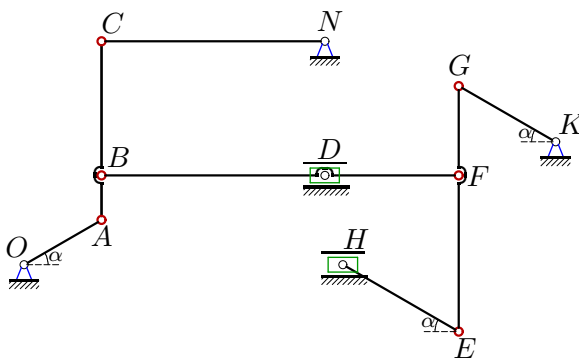
Душеин Александр



$\omega_{NB} = 2$ 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-9.6.

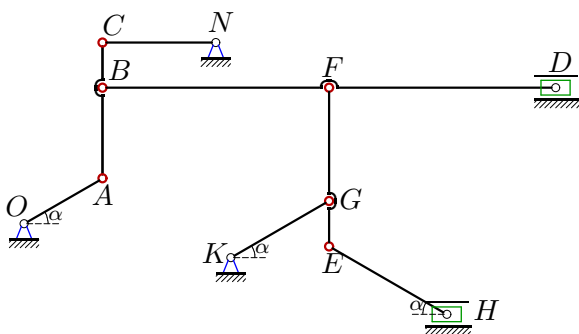
Коваль Данил



$\omega_{NC} = 4$ рад/с, $\alpha = 30^\circ$,
 $AB = 10$, $BC = 30$,
 $DB = 50$, $DF = 30$,
 $NC = 50$, $EH = 30$,
 $FE = 35$, $FG = 20$,
 $OA = 20$, $KG = 25$.

Задача К-9.7.

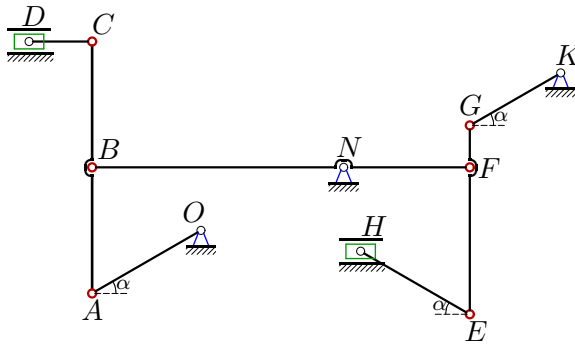
Куликов Алексей



$\omega_{OA} = 1$ 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.

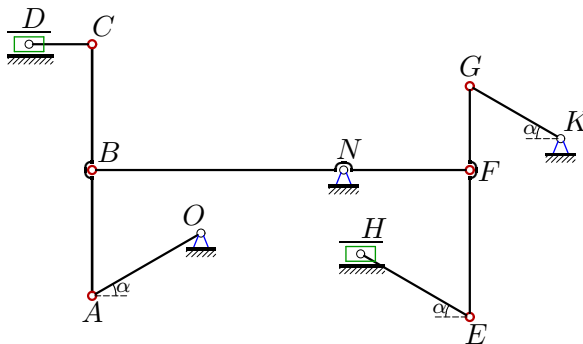
Лезин Владислав



$$\begin{aligned} \omega_{KG} &= 4 \text{ рад/с}, \alpha = 30^\circ, \\ AB &= 30, BC = 30, \\ NB &= 60, NF = 30, \\ CD &= 15, EH = 30, \\ FE &= 35, FG = 10, \\ OA &= 30, KG = 25. \end{aligned}$$

Задача К-9.9.

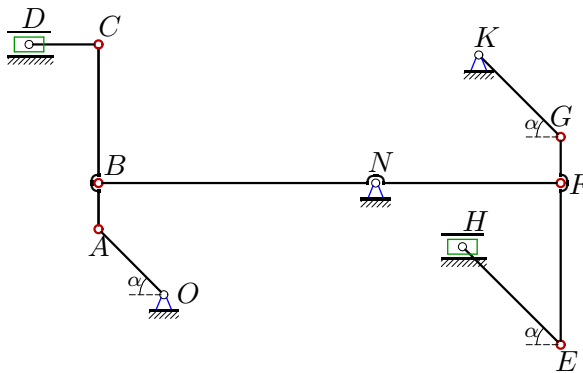
Макаров Станислав



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

Задача К-9.10.

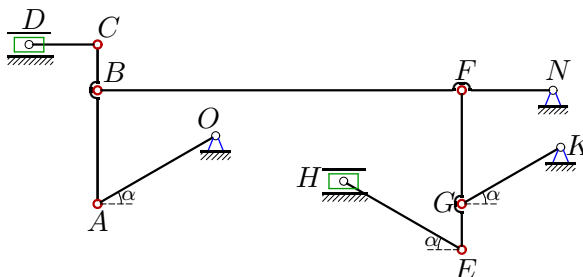
Мамедов Роман



$$\begin{aligned} \omega_{KG} &= 4 \text{ рад/с}, \alpha = 45^\circ, \\ AB &= 10, BC = 30, \\ NB &= 60, NF = 40, \\ CD &= 15, EH = 30, \\ FE &= 35, FG = 10, \\ OA &= 20, KG = 25. \end{aligned}$$

Задача К-9.11.

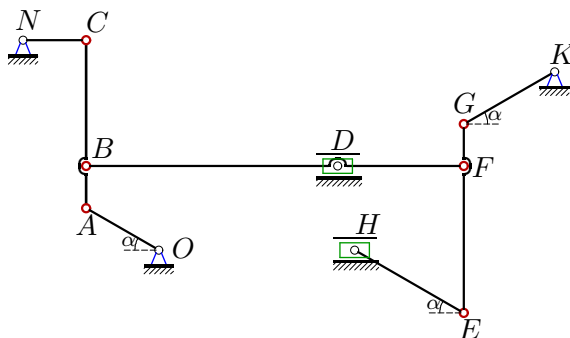
Мордасов Денис



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

Задача К-9.12.

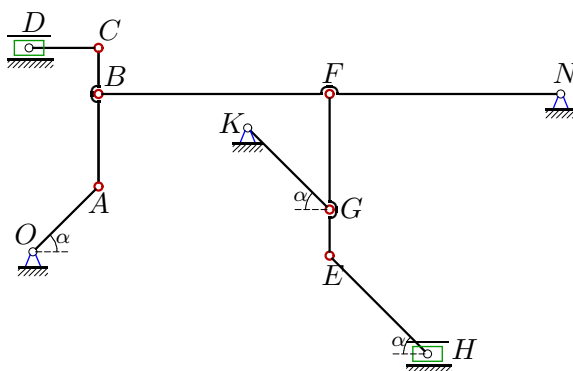
Обьянникова Варвара



$\omega_{NC} = 1$ 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-9.13.

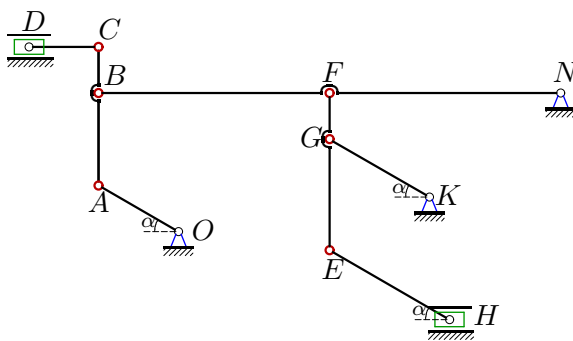
Олиференко Ярослав



$\omega_{OA} = 4$ 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-9.14.

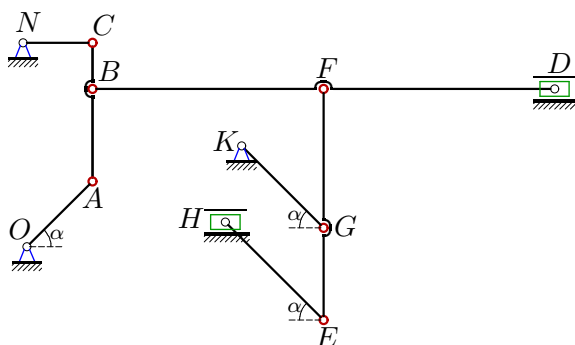
Опеньшев Роман



$\omega_{NB} = 2$ рад/с, $\alpha = 30^\circ$,
 $AB = 20$, $BC = 10$,
 $BF = 50$, $NF = 50$,
 $CD = 15$, $EH = 30$,
 $FG = 10$, $GE = 24$,
 $OA = 20$, $KG = 25$.

Задача К-9.15.

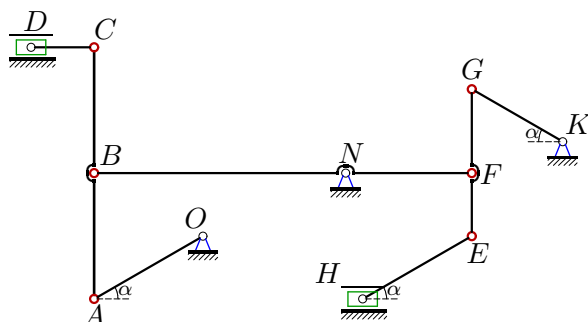
Прыгов Артём



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

Задача К-9.16.

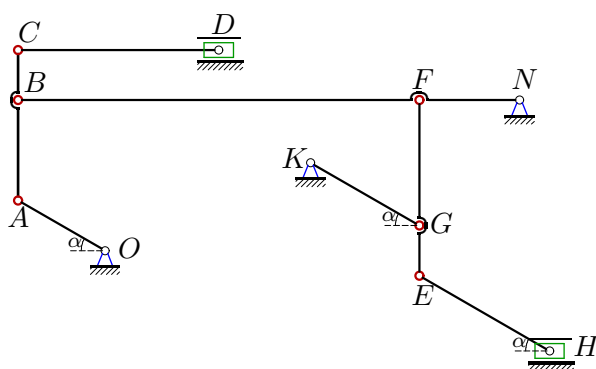
Терзе Сергей



$\omega_{OA} = 4$ рад/с, $\alpha = 30^\circ$,
 $AB = 30$, $BC = 30$,
 $NB = 60$, $NF = 30$,
 $CD = 15$, $EH = 30$,
 $FE = 15$, $FG = 20$,
 $OA = 30$, $KG = 25$.

Задача К-9.17.

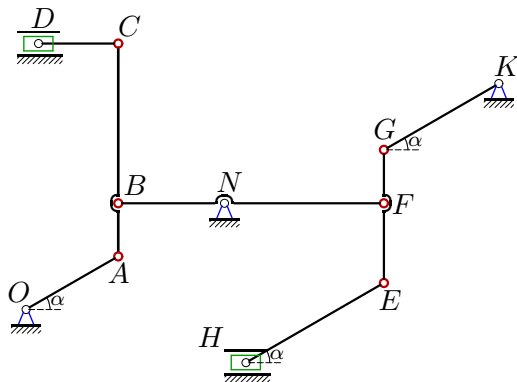
Чалжиев Магомед



$\omega_{KG} = 2$ рад/с, $\alpha = 30^\circ$,
 $AB = 20$, $BC = 10$,
 $BF = 80$, $NF = 20$,
 $CD = 40$, $EH = 30$,
 $FG = 25$, $GE = 10$,
 $OA = 20$, $KG = 25$.

Задача К-9.18.

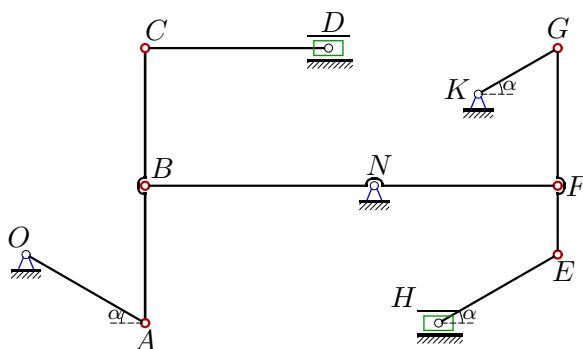
Чехлов Степан



$\omega_{KG} = 4$ 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-9.19.

Шурова Юлия



$\omega_{OA} = 1$ рад/с, $\alpha = 30^\circ$,
 $AB = 30$, $BC = 30$,
 $NB = 50$, $NF = 40$,
 $CD = 40$, $EH = 30$,
 $FE = 15$, $FG = 30$,
 $OA = 30$, $KG = 20$.