

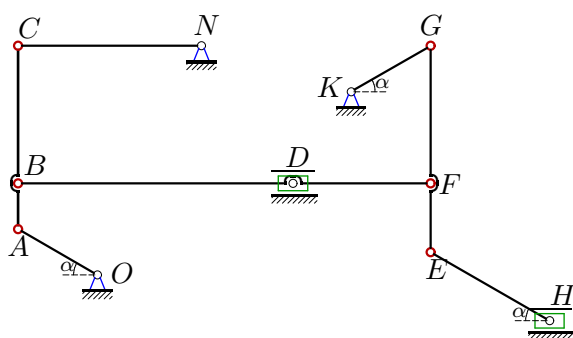
Кинематический анализ механизма (7 звеньев)

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 9.1.

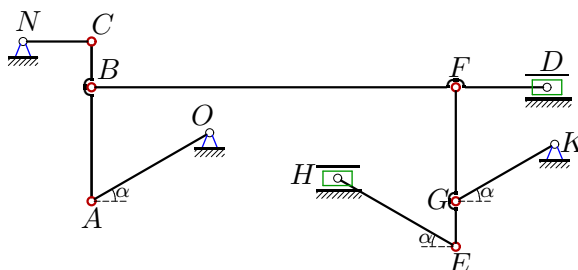
Гарбузов Иван Дмитриевич



$\omega_{OA} = 4 \text{ рад/с}, \alpha = 30^\circ,$
 $AB = 10, BC = 30,$
 $DB = 60, DF = 30,$
 $NC = 40, EH = 30,$
 $FE = 15, FG = 30,$
 $OA = 20, KG = 20.$

Задача 9.2.

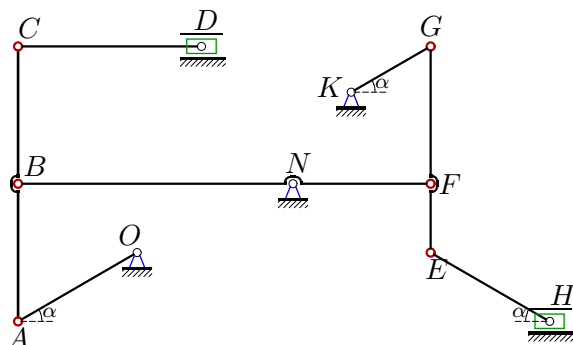
Ерочкина Софья Сергеевна



$\omega_{NC} = 2 \text{ рад/с}, \alpha = 30^\circ,$
 $AB = 25, BC = 10,$
 $BF = 80, FD = 20,$
 $NC = 15, EH = 30,$
 $FE = 35, FG = 25,$
 $OA = 30, KG = 25.$

Задача 9.3.

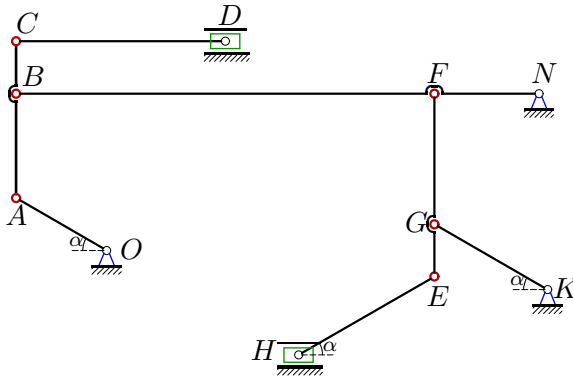
Жирнова Анна Олеговна



$\omega_{BF} = 2 \text{ рад/с}, \alpha = 30^\circ,$
 $AB = 30, BC = 30,$
 $NB = 60, NF = 30,$
 $CD = 40, EH = 30,$
 $FE = 15, FG = 30,$
 $OA = 30, KG = 20.$

Задача 9.4.

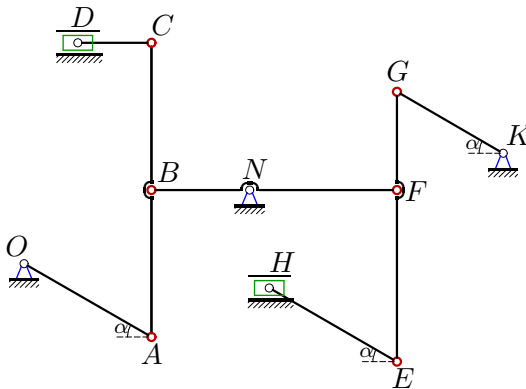
Ильин Георгий Сергеевич



$\omega_{OA} = 2$ 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 9.5.

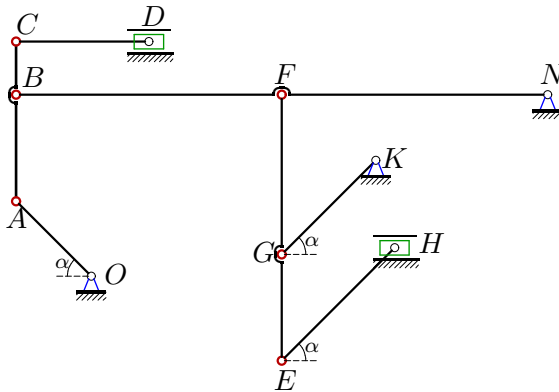
Лиманская Ева Евгеньевна



$\omega_{OA} = 4$ 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 9.6.

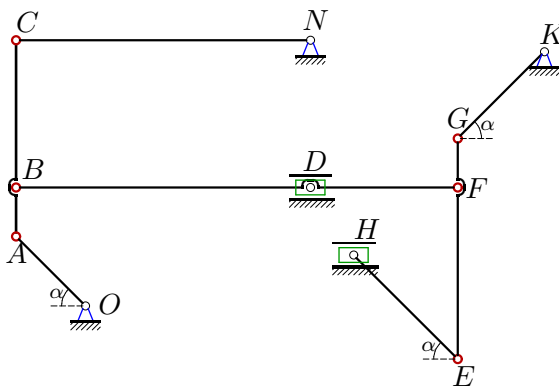
Набатова Ксения Михайловна



$\omega_{OA} = 4$ рад/с, $\alpha = 45^\circ$,
 $AB = 20$, $BC = 10$,
 $BF = 50$, $NF = 50$,
 $CD = 25$, $EH = 30$,
 $FG = 30$, $GE = 20$,
 $OA = 20$, $KG = 25$.

Задача 9.7.

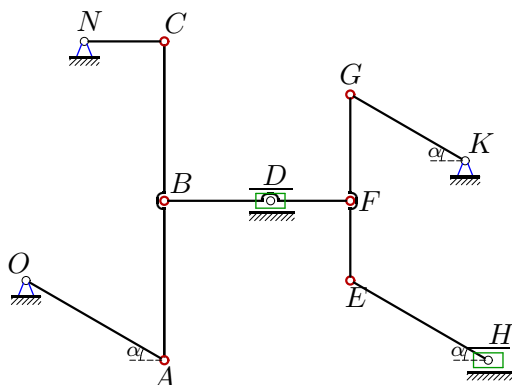
Осипова Светлана Сергеевна



$\omega_{OA} = 2$ рад/с, $\alpha = 45^\circ$,
 $AB = 10$, $BC = 30$,
 $DB = 60$, $DF = 30$,
 $NC = 60$, $EH = 30$,
 $FE = 35$, $FG = 10$,
 $OA = 20$, $KG = 25$.

Задача 9.8.

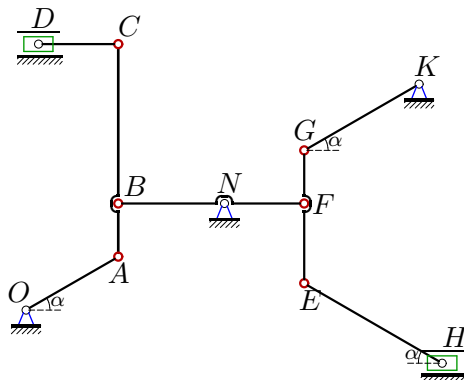
Петров Константин Эдуардович



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

Задача 9.9.

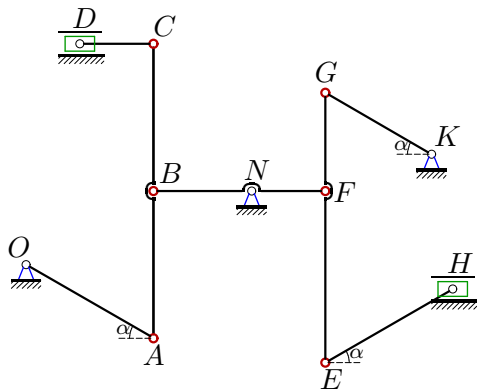
Садовников Владимир Дмитриевич



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

Задача 9.10.

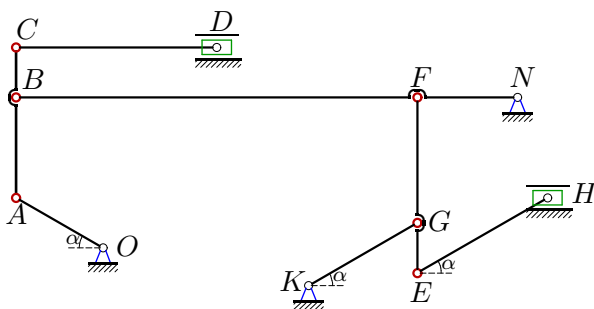
Самигуллина Камилла Равилевна



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

Задача 9.11.

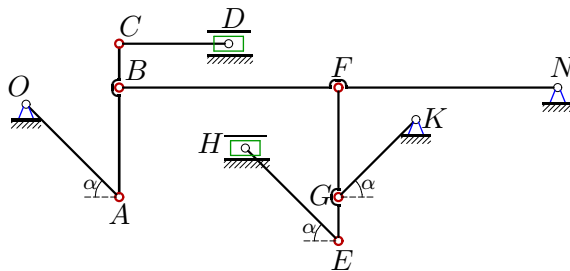
Сныткин Александр Евгеньевич



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

Задача 9.12.

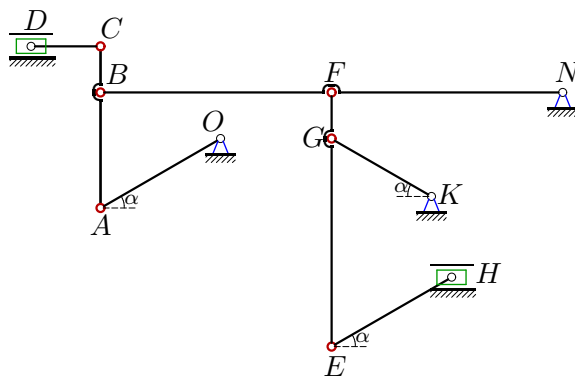
Хисматова Динара Ильнарловна



$\omega_{NB} = 3$ рад/с, $\alpha = 45^\circ$,
 $AB = 25$, $BC = 10$,
 $BF = 50$, $NF = 50$,
 $CD = 25$, $EH = 30$,
 $FG = 25$, $GE = 10$,
 $OA = 30$, $KG = 25$.

Задача 9.13.

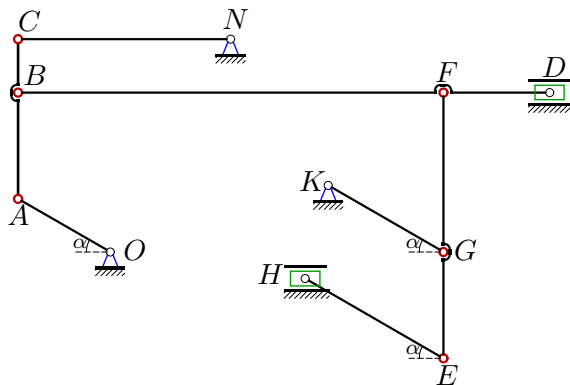
Чернат Герман Сергеевич



$\omega_{NB} = 4$ рад/с, $\alpha = 30^\circ$,
 $AB = 25$, $BC = 10$,
 $BF = 50$, $NF = 50$,
 $CD = 15$, $EH = 30$,
 $FG = 10$, $GE = 45$,
 $OA = 30$, $KG = 25$.

Задача 9.14.

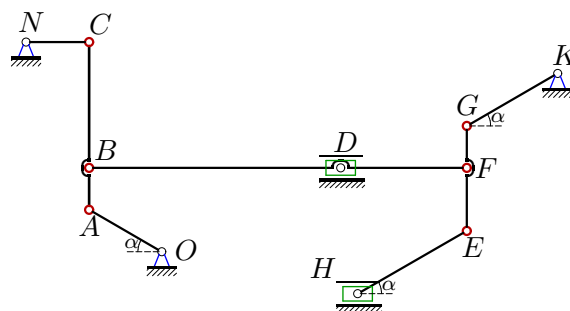
Щепотьев Никита Юрьевич



$\omega_{OA} = 2$ рад/с, $\alpha = 30^\circ$,
 $AB = 20$, $BC = 10$,
 $BF = 80$, $FD = 20$,
 $NC = 40$, $EH = 30$,
 $FE = 50$, $FG = 30$,
 $OA = 20$, $KG = 25$.

Задача 9.15.

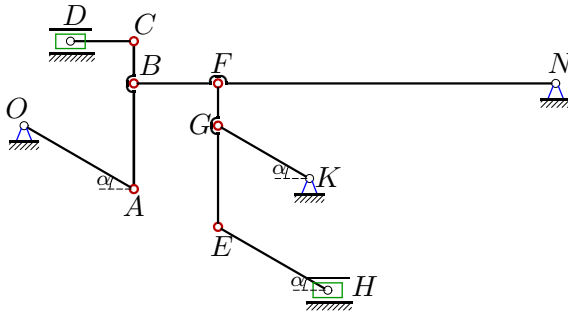
Акопова Анна Юрьевна



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

Задача 9.16.

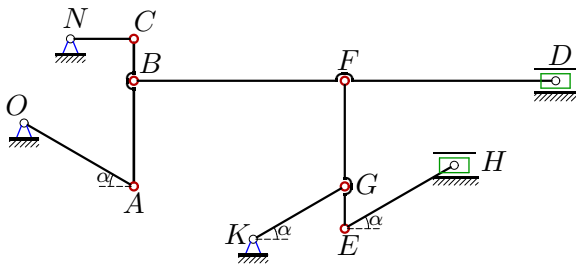
Ахмедов Джамал Магомедович



$$\begin{aligned} \omega_{NB} &= 2 \text{ рад/с}, \alpha = 30^\circ, \\ AB &= 25, BC = 10, \\ BF &= 20, NF = 80, \\ CD &= 15, EH = 30, \\ FG &= 10, GE = 24, \\ OA &= 30, KG = 25. \end{aligned}$$

Задача 9.17.

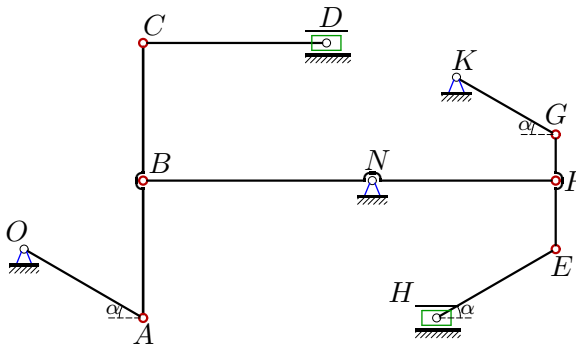
Бадаев Абдурашид Алибекович



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

Задача 9.18.

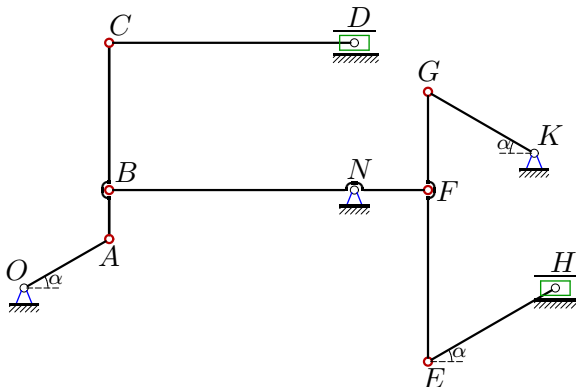
Бондарева Анна Дмитриевна



$$\begin{aligned} \omega_{BF} &= 2 \text{ рад/с}, \alpha = 30^\circ, \\ AB &= 30, BC = 30, \\ NB &= 50, NF = 40, \\ CD &= 40, EH = 30, \\ FE &= 15, FG = 10, \\ OA &= 30, KG = 25. \end{aligned}$$

Задача 9.19.

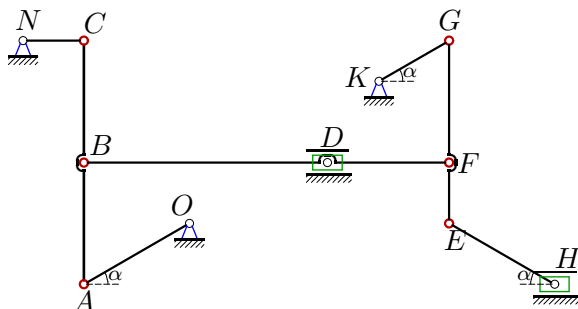
Гаевой Дмитрий Александрович



$$\begin{aligned} \omega_{OA} &= 2 \text{ рад/с}, \alpha = 30^\circ, \\ AB &= 10, BC = 30, \\ NB &= 50, NF = 15, \\ CD &= 50, EH = 30, \\ FE &= 35, FG = 20, \\ OA &= 20, KG = 25. \end{aligned}$$

Задача 9.20.

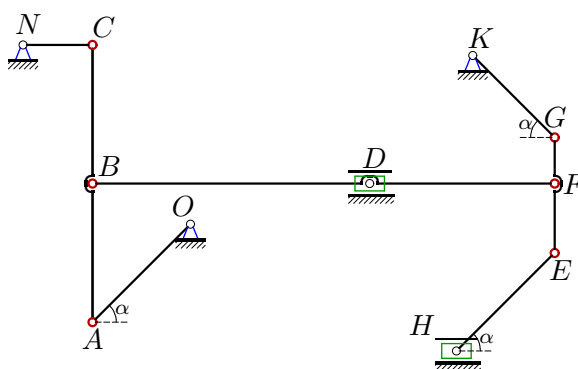
Гильмутдинов Раиль Ильнарович



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

Задача 9.21.

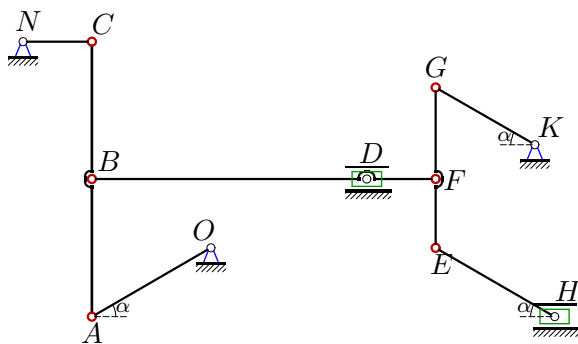
Котельников Клим Константинович



$\omega_{NC} = 1 \text{ рад/с}, \alpha = 45^\circ,$
 $AB = 30, BC = 30,$
 $DB = 60, DF = 40,$
 $NC = 15, EH = 30,$
 $FE = 15, FG = 10,$
 $OA = 30, KG = 25.$

Задача 9.22.

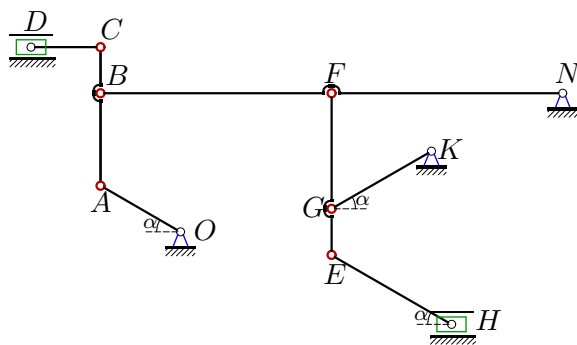
Кривова Ольга Викторовна



$\omega_{OA} = 1 \text{ рад/с}, \alpha = 30^\circ,$
 $AB = 30, BC = 30,$
 $DB = 60, DF = 15,$
 $NC = 15, EH = 30,$
 $FE = 15, FG = 20,$
 $OA = 30, KG = 25.$

Задача 9.23.

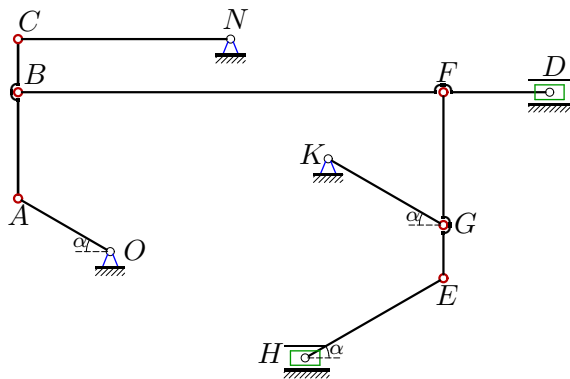
Моисеев Александр Викторович



$\omega_{KG} = 3 \text{ рад/с}, \alpha = 30^\circ,$
 $AB = 20, BC = 10,$
 $BF = 50, NF = 50,$
 $CD = 15, EH = 30,$
 $FG = 25, GE = 10,$
 $OA = 20, KG = 25.$

Задача 9.24.

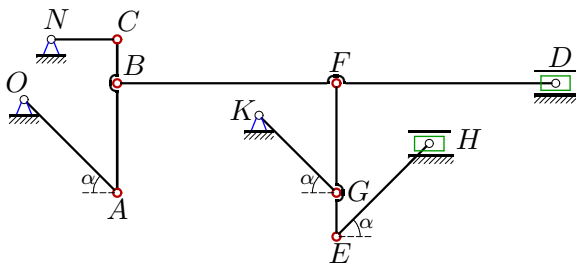
Мхитарян Анжела Манвеловна



$\omega_{OA} = 3 \text{ рад/с}, \alpha = 30^\circ,$
 $AB = 20, BC = 10,$
 $BF = 80, FD = 20,$
 $NC = 40, EH = 30,$
 $FE = 35, FG = 25,$
 $OA = 20, KG = 25.$

Задача 9.25.

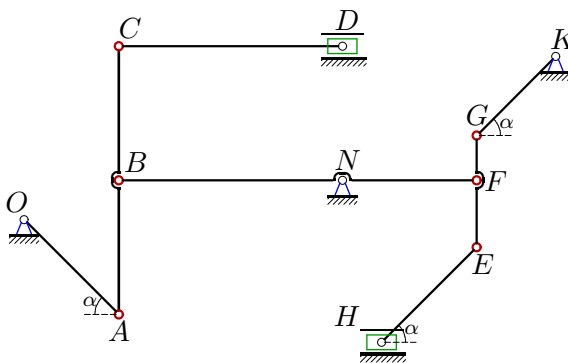
Савин Руслан Викторович



$\omega_{OA} = 1 \text{ рад/с}, \alpha = 45^\circ,$
 $AB = 25, BC = 10,$
 $BF = 50, FD = 50,$
 $NC = 15, EH = 30,$
 $FE = 35, FG = 25,$
 $OA = 30, KG = 25.$

Задача 9.26.

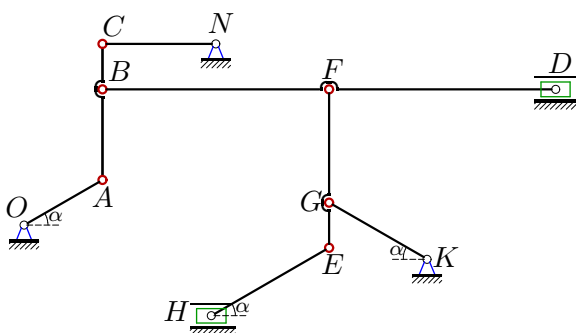
Самойленко Кристина Дмитриевна



$\omega_{OA} = 3 \text{ рад/с}, \alpha = 45^\circ,$
 $AB = 30, BC = 30,$
 $NB = 50, NF = 30,$
 $CD = 50, EH = 30,$
 $FE = 15, FG = 10,$
 $OA = 30, KG = 25.$

Задача 9.27.

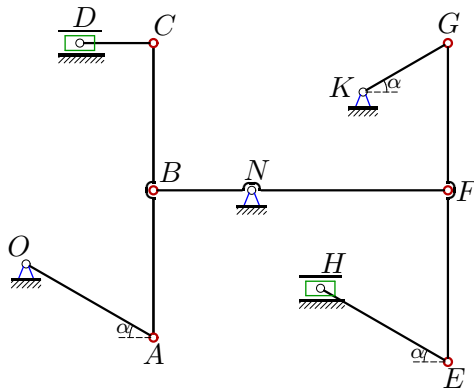
Скаржевская Ганна Алексеевна



$\omega_{OA} = 2 \text{ рад/с}, \alpha = 30^\circ,$
 $AB = 20, BC = 10,$
 $BF = 50, FD = 50,$
 $NC = 25, EH = 30,$
 $FE = 35, FG = 25,$
 $OA = 20, KG = 25.$

Задача 9.28.

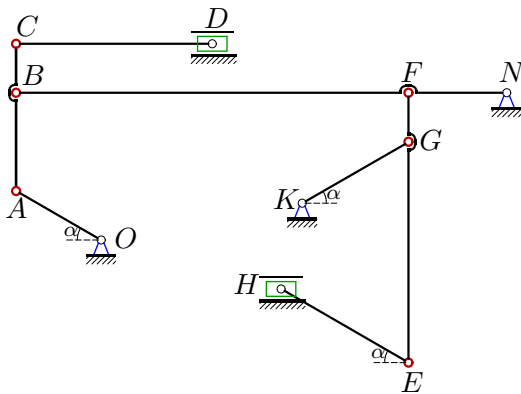
Сучкова Мария Витальевна



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

Задача 9.29.

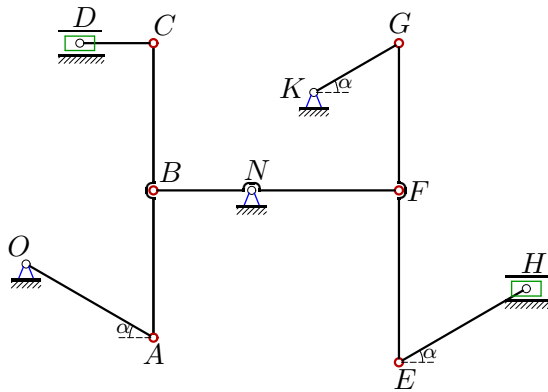
Шагиева Самира Маратовна



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

Задача 9.30.

Шмелева Валерия Сергеевна



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