

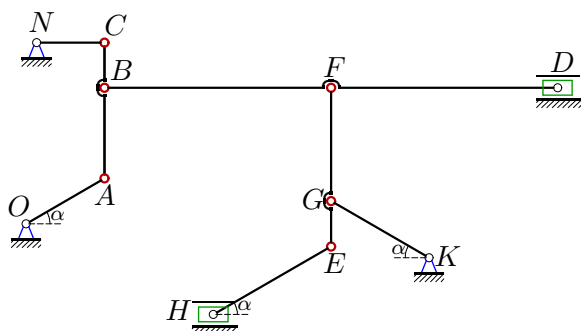
Кинематический анализ механизма (7 звеньев)

Плоский многозвенный механизм с одной степенью свободы приводится в движение кривошипом, который вращается против часовой стрелки с постоянной угловой скоростью. Найти скорости всех шарниров механизма (в см/с) и ускорения трех заданных шарниров (в м/с²). 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.

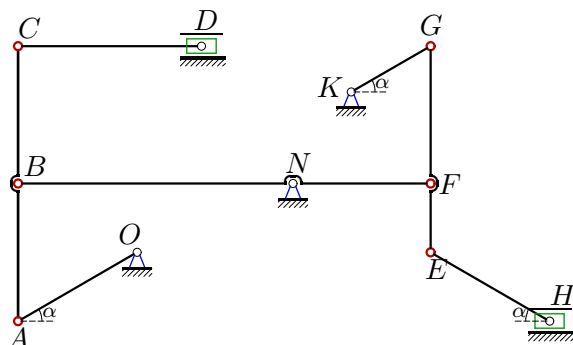
Бабченко Аким Сергеевич



$\omega_{OA} = 3$ рад/с, $\alpha = 30^\circ$,
 $AB = 20$, $BC = 10$,
 $BF = 50$, $FD = 50$,
 $NC = 15$, $EH = 30$,
 $FE = 35$, $FG = 25$,
 $OA = 20$, $KG = 25$.
 a_A , a_B , a_C - ?

Задача 9.2.

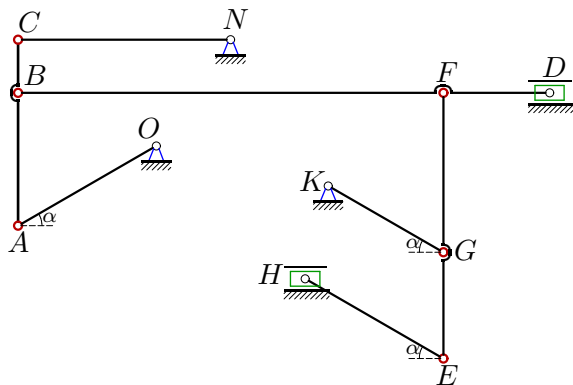
Баннов Иван Алексеевич



$\omega_{KG} = 4$ рад/с, $\alpha = 30^\circ$,
 $AB = 30$, $BC = 30$,
 $NB = 60$, $NF = 30$,
 $CD = 40$, $EH = 30$,
 $FE = 15$, $FG = 30$,
 $OA = 30$, $KG = 20$.
 a_G , a_F , a_E - ?

Задача 9.3.

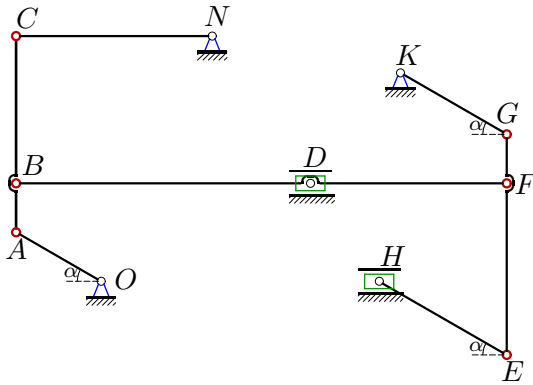
Баранов Егор Михайлович



$\omega_{OA} = 4$ рад/с, $\alpha = 30^\circ$,
 $AB = 25$, $BC = 10$,
 $BF = 80$, $FD = 20$,
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 $FE = 50$, $FG = 30$,
 $OA = 30$, $KG = 25$.
 a_A , a_B , a_C - ?

Задача 9.4.

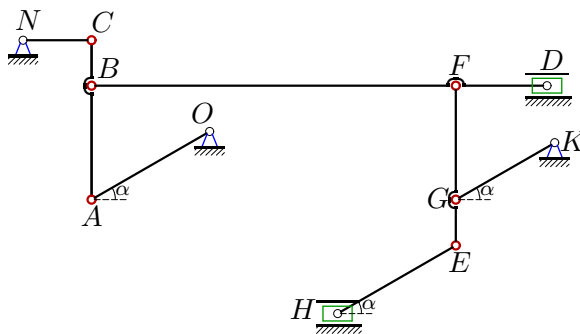
Батуро Кирилл Михайлович



$\omega_{OA} = 2$ рад/с, $\alpha = 30^\circ$,
 $AB = 10$, $BC = 30$,
 $DB = 60$, $DF = 40$,
 $NC = 40$, $EH = 30$,
 $FE = 35$, $FG = 10$,
 $OA = 20$, $KG = 25$.
 a_A , a_B , a_C - ?

Задача 9.5.

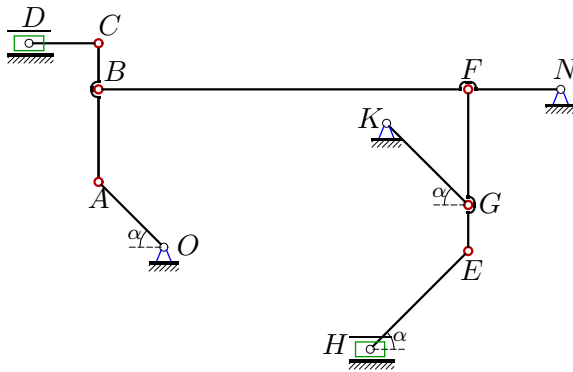
Брыксина Кристина Евгеньевна



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

Задача 9.6.

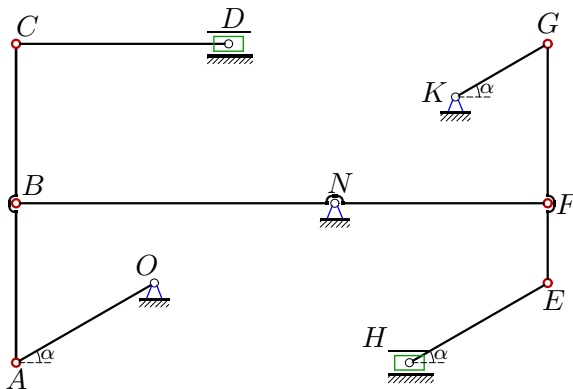
Викторов Кирилл Дмитриевич



$\omega_{NB} = 1$ рад/с, $\alpha = 45^\circ$,
 $AB = 20$, $BC = 10$,
 $BF = 80$, $NF = 20$,
 $CD = 15$, $EH = 30$,
 $FG = 25$, $GE = 10$,
 $OA = 20$, $KG = 25$.
 a_A , a_B , a_C - ?

Задача 9.7.

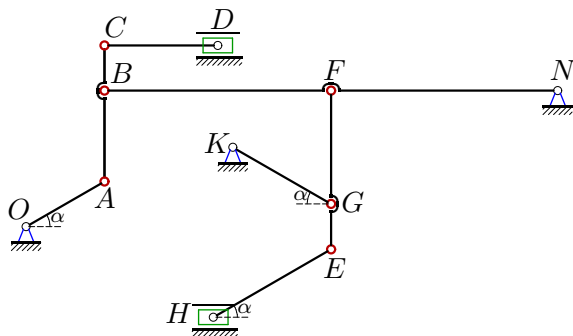
Воронин Ярослав Алексеевич



$\omega_{KG} = 3$ рад/с, $\alpha = 30^\circ$,
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 $NB = 60$, $NF = 40$,
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 $OA = 30$, $KG = 20$.
 a_G , a_F , a_E - ?

Задача 9.8.

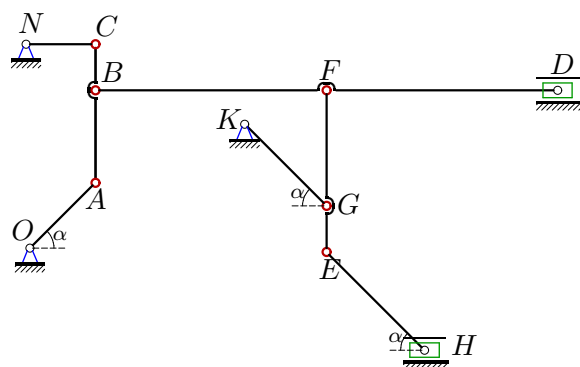
Гричанюк Елена Владимировна



$\omega_{NB} = 4$ рад/с, $\alpha = 30^\circ$,
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 $OA = 20$, $KG = 25$.
 a_A , a_B , a_C - ?

Задача 9.9.

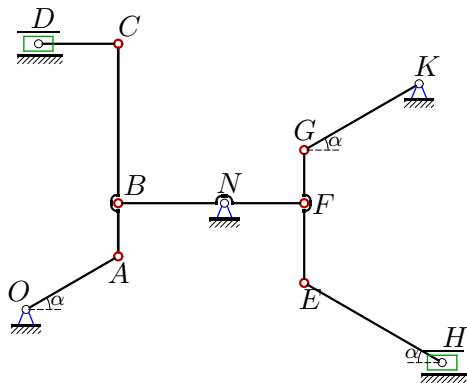
Карасев Иван Андреевич



$\omega_{OA} = 3$ рад/с, $\alpha = 45^\circ$,
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 $BF = 50$, $FD = 50$,
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 $FE = 35$, $FG = 25$,
 $OA = 20$, $KG = 25$.
 a_A , a_B , a_C - ?

Задача 9.10.

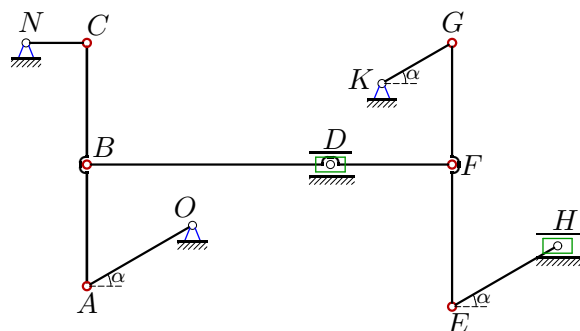
Макарова Ирина Сергеевна



$\omega_{BF} = 4$ рад/с, $\alpha = 30^\circ$,
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 $NB = 20$, $NF = 15$,
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 a_A , a_B , a_C - ?

Задача 9.11.

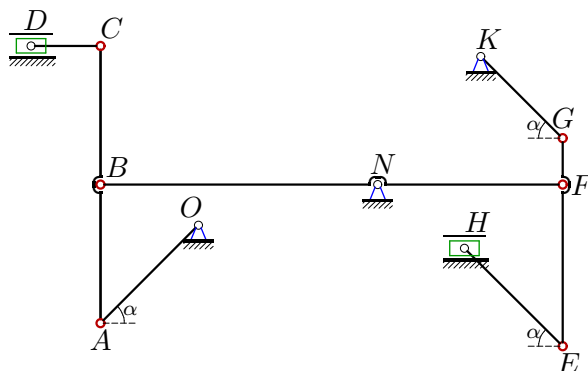
Мальсагов Аланбек



$\omega_{OA} = 1$ рад/с, $\alpha = 30^\circ$,
 $AB = 30$, $BC = 30$,
 $DB = 60$, $DF = 30$,
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 $FE = 35$, $FG = 30$,
 $OA = 30$, $KG = 20$.
 a_A , a_B , a_C - ?

Задача 9.12.

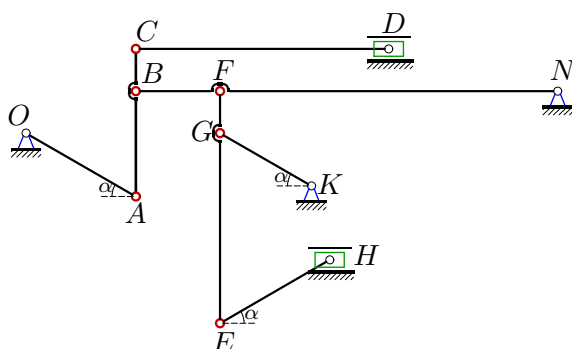
Мартыненко Александр



$\omega_{BF} = 4 \text{ рад/с}$, $\alpha = 45^\circ$,
 $AB = 30$, $BC = 30$,
 $NB = 60$, $NF = 40$,
 $CD = 15$, $EH = 30$,
 $FE = 35$, $FG = 10$,
 $OA = 30$, $KG = 25$.
 a_A , a_B , a_C - ?

Задача 9.13.

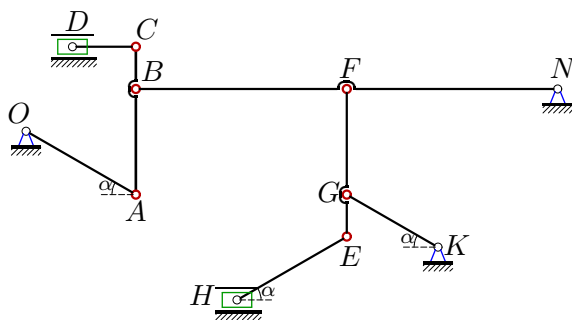
Пономарев Александр



$\omega_{KG} = 3 \text{ рад/с}$, $\alpha = 30^\circ$,
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 $OA = 30$, $KG = 25$.
 a_G , a_F , a_E - ?

Задача 9.14.

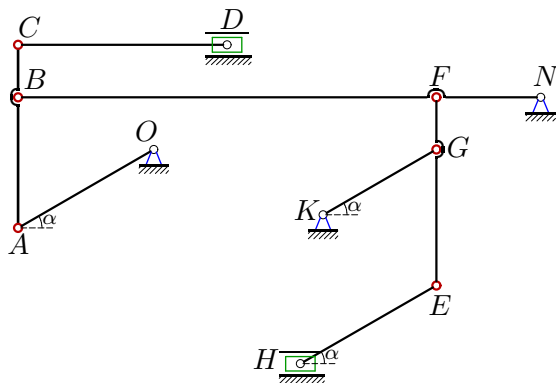
Романков Николай Андреевич



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

Задача 9.15.

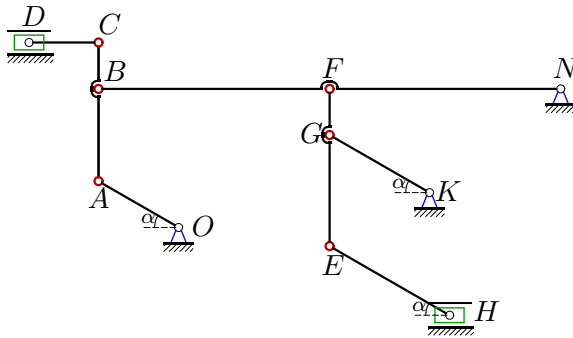
Семенов Александр



$\omega_{NB} = 4 \text{ рад/с}$, $\alpha = 30^\circ$,
 $AB = 25$, $BC = 10$,
 $BF = 80$, $NF = 20$,
 $CD = 40$, $EH = 30$,
 $FG = 10$, $GE = 26$,
 $OA = 30$, $KG = 25$.
 a_A , a_B , a_C - ?

Задача 9.16.

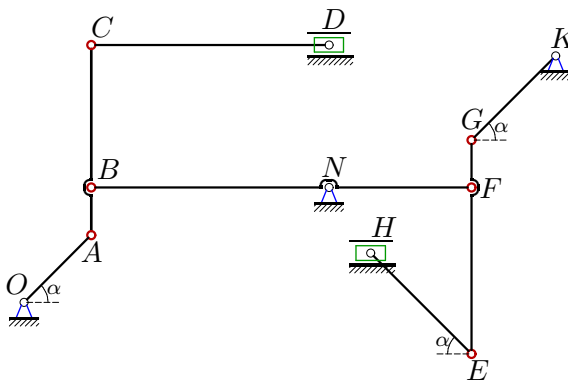
Слепцов Вадим Дмитриевич



$\omega_{KG} = 4$ рад/с, $\alpha = 30^\circ$,
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 $BF = 50$, $NF = 50$,
 $CD = 15$, $EH = 30$,
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 $OA = 20$, $KG = 25$.
 a_G , a_F , a_E - ?

Задача 9.17.

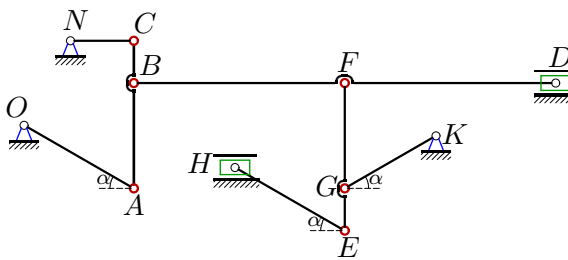
Сурков Георгий Вячеславович



$\omega_{OA} = 4$ рад/с, $\alpha = 45^\circ$,
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 $NB = 50$, $NF = 30$,
 $CD = 50$, $EH = 30$,
 $FE = 35$, $FG = 10$,
 $OA = 20$, $KG = 25$.
 a_A , a_B , a_C - ?

Задача 9.18.

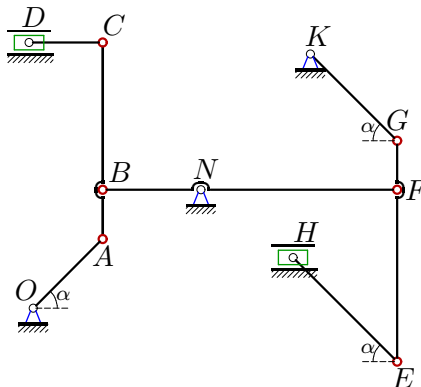
Сюржев Андрей Дмитриевич



$\omega_{NC} = 4$ рад/с, $\alpha = 30^\circ$,
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 a_A , a_B , a_C - ?

Задача 9.19.

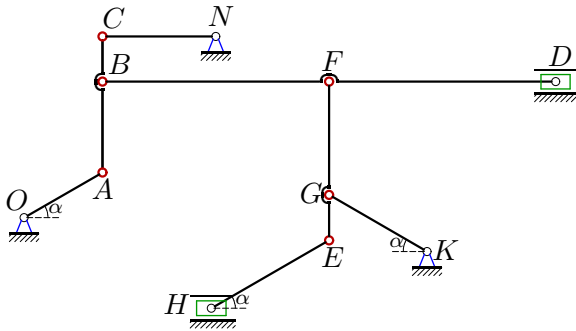
Фоменко Алексей Андреевич



$\omega_{BF} = 3$ рад/с, $\alpha = 45^\circ$,
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 $FE = 35$, $FG = 10$,
 $OA = 20$, $KG = 25$.
 a_A , a_B , a_C - ?

Задача 9.20.

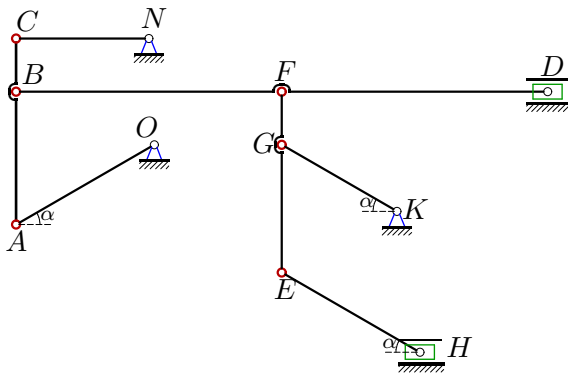
Чембилеев Данил Николаевич



$\omega_{NC} = 4 \text{ рад/с}$, $\alpha = 30^\circ$,
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 $OA = 20$, $KG = 25$.
 a_A , a_B , a_C - ?

Задача 9.21.

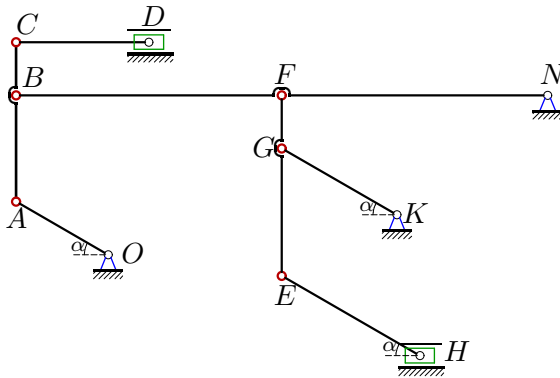
Юферов Андрей Андреевич



$\omega_{NC} = 3 \text{ рад/с}$, $\alpha = 30^\circ$,
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 $OA = 30$, $KG = 25$.
 a_A , a_B , a_C - ?

Задача 9.22.

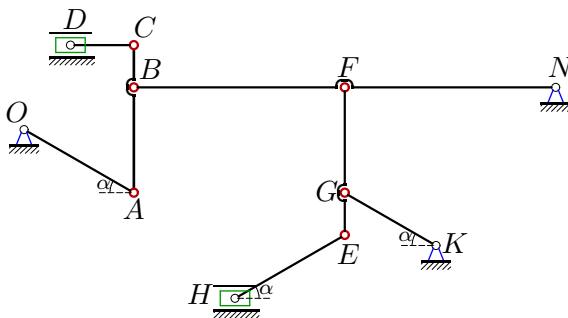
Верещагина Елизавета



$\omega_{KG} = 2 \text{ рад/с}$, $\alpha = 30^\circ$,
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 $FG = 10$, $GE = 24$,
 $OA = 20$, $KG = 25$.
 a_G , a_F , a_E - ?

Задача 9.23.

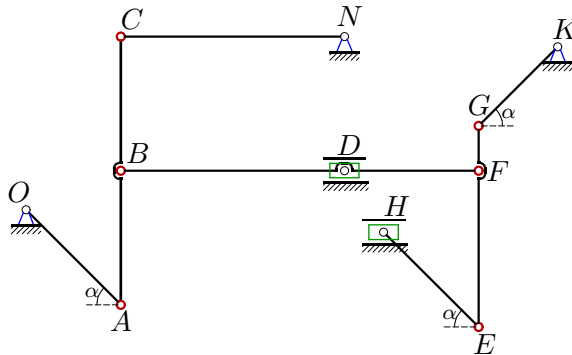
Вычужина Злата



$\omega_{KG} = 1 \text{ рад/с}$, $\alpha = 30^\circ$,
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 $BF = 50$, $NF = 50$,
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 $FG = 25$, $GE = 10$,
 $OA = 30$, $KG = 25$.
 a_G , a_F , a_E - ?

Задача 9.24.

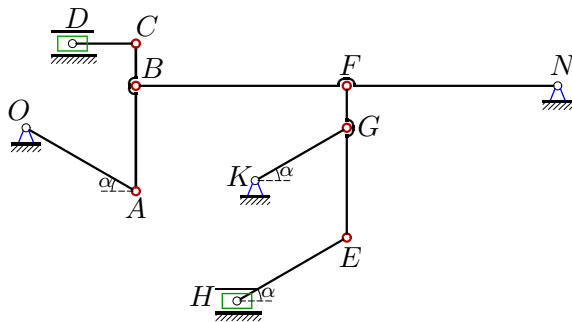
Галеев Максим Рамильевич



$\omega_{NC} = 4 \text{ рад/с}, \alpha = 45^\circ,$
 $AB = 30, BC = 30,$
 $DB = 50, DF = 30,$
 $NC = 50, EH = 30,$
 $FE = 35, FG = 10,$
 $OA = 30, KG = 25.$
 $a_A, a_B, a_C - ?$

Задача 9.25.

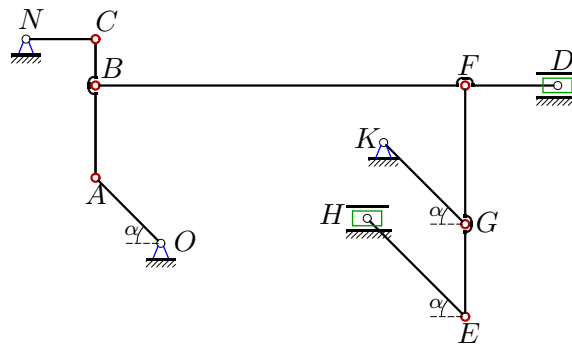
Гусев Олег Александрович



$\omega_{KG} = 2 \text{ рад/с}, \alpha = 30^\circ,$
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 $BF = 50, NF = 50,$
 $CD = 15, EH = 30,$
 $FG = 10, GE = 26,$
 $OA = 30, KG = 25.$
 $a_G, a_F, a_E - ?$

Задача 9.26.

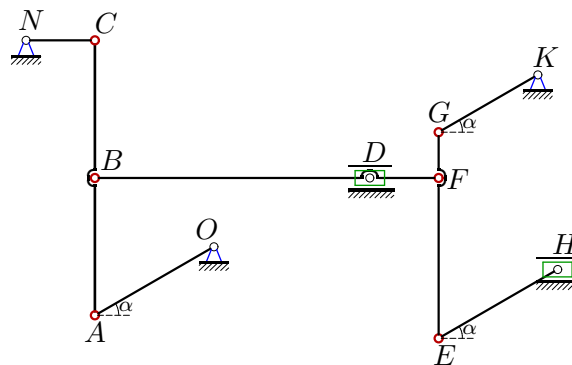
Ивкин Даниил Валерьевич



$\omega_{NC} = 1 \text{ рад/с}, \alpha = 45^\circ,$
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 $BF = 80, FD = 20,$
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 $FE = 50, FG = 30,$
 $OA = 20, KG = 25.$
 $a_A, a_B, a_C - ?$

Задача 9.27.

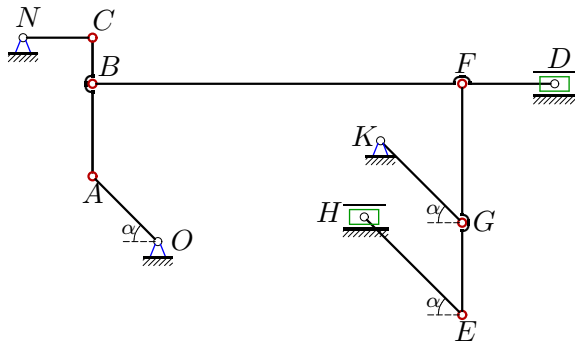
Корнев Никита Андреевич



$\omega_{OA} = 1 \text{ рад/с}, \alpha = 30^\circ,$
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 $DB = 60, DF = 15,$
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 $FE = 35, FG = 10,$
 $OA = 30, KG = 25.$
 $a_A, a_B, a_C - ?$

Задача 9.28.

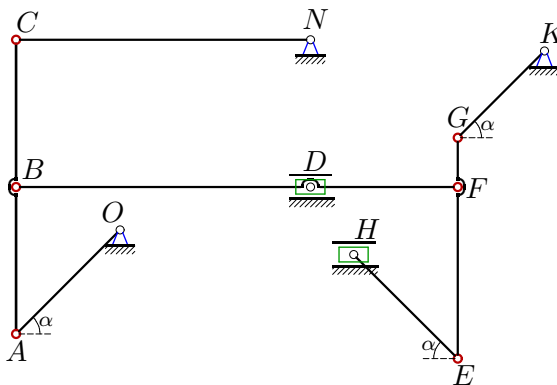
Корочкин Дмитрий Сергеевич



$\omega_{OA} = 4$ рад/с, $\alpha = 45^\circ$,
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 $BF = 80$, $FD = 20$,
 $NC = 15$, $EH = 30$,
 $FE = 50$, $FG = 30$,
 $OA = 20$, $KG = 25$.
 a_A , a_B , a_C - ?

Задача 9.29.

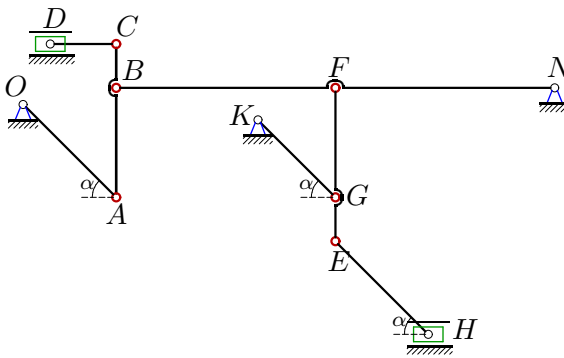
Ларионов Николай Юрьевич



$\omega_{OA} = 2$ рад/с, $\alpha = 45^\circ$,
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 $FE = 35$, $FG = 10$,
 $OA = 30$, $KG = 25$.
 a_A , a_B , a_C - ?

Задача 9.30.

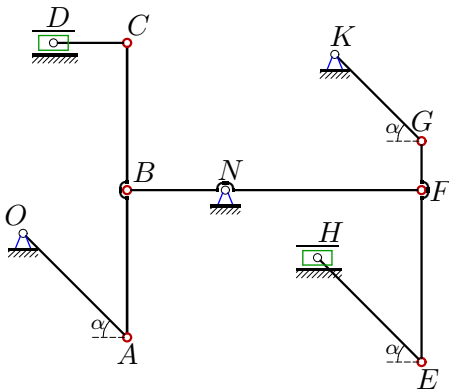
Максимов Михаил



$\omega_{KG} = 3$ рад/с, $\alpha = 45^\circ$,
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 $BF = 50$, $NF = 50$,
 $CD = 15$, $EH = 30$,
 $FG = 25$, $GE = 10$,
 $OA = 30$, $KG = 25$.
 a_G , a_F , a_E - ?

Задача 9.31.

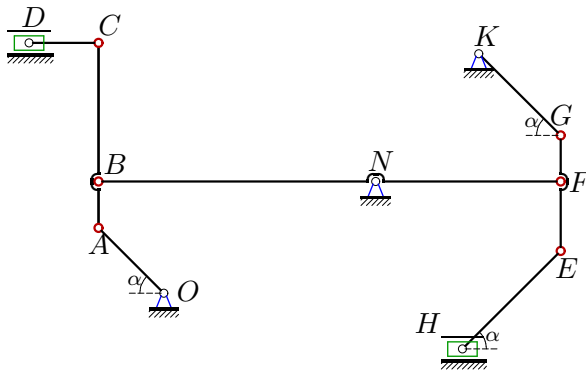
Мальков Дмитрий Николаевич



$\omega_{KG} = 1$ рад/с, $\alpha = 45^\circ$,
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 $NB = 20$, $NF = 40$,
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 $FE = 35$, $FG = 10$,
 $OA = 30$, $KG = 25$.
 a_G , a_F , a_E - ?

Задача 9.32.

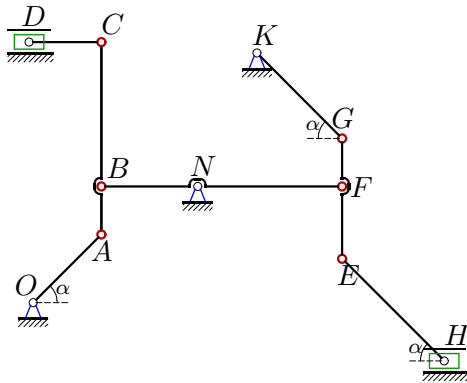
Манукало Арсений Сергеевич



$\omega_{KG} = 3 \text{ рад/с}, \alpha = 45^\circ,$
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 $NB = 60, NF = 40,$
 $CD = 15, EH = 30,$
 $FE = 15, FG = 10,$
 $OA = 20, KG = 25.$
 $a_G, a_F, a_E - ?$

Задача 9.33.

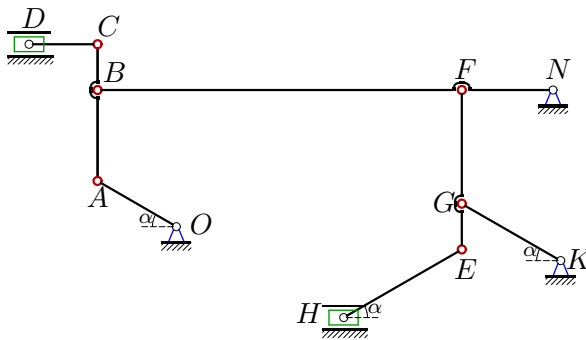
Моторин Кирилл Андреевич



$\omega_{OA} = 2 \text{ рад/с}, \alpha = 45^\circ,$
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 $NB = 20, NF = 30,$
 $CD = 15, EH = 30,$
 $FE = 15, FG = 10,$
 $OA = 20, KG = 25.$
 $a_A, a_B, a_C - ?$

Задача 9.34.

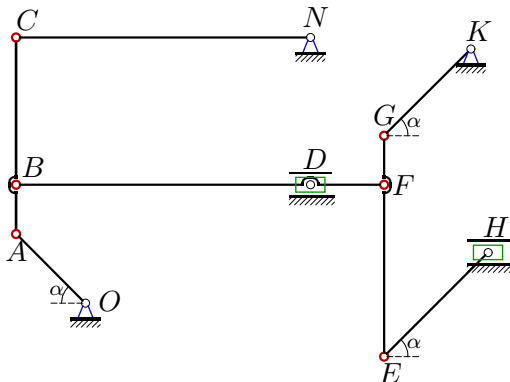
Панькин Александр Сергеевич



$\omega_{OA} = 3 \text{ рад/с}, \alpha = 30^\circ,$
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 $BF = 80, NF = 20,$
 $CD = 15, EH = 30,$
 $FG = 25, GE = 10,$
 $OA = 20, KG = 25.$
 $a_A, a_B, a_C - ?$

Задача 9.35.

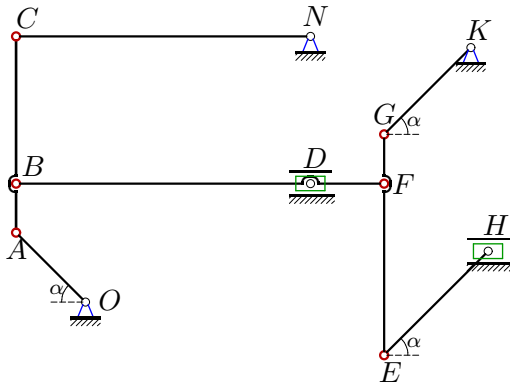
Райков Александр Сергеевич



$\omega_{OA} = 1 \text{ рад/с}, \alpha = 45^\circ,$
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 $DB = 60, DF = 15,$
 $NC = 60, EH = 30,$
 $FE = 35, FG = 10,$
 $OA = 20, KG = 25.$
 $a_A, a_B, a_C - ?$

Задача 9.36.

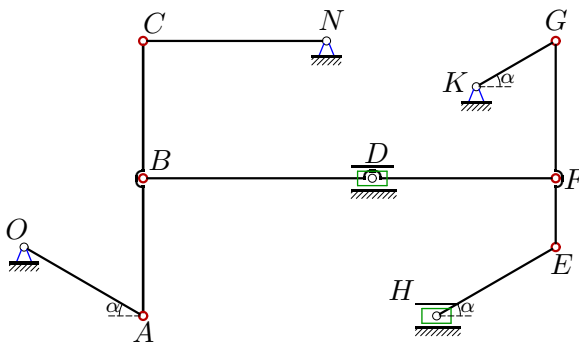
Ревюк Всеволод Игоревич



$\omega_{NC} = 4 \text{ рад/с}, \alpha = 45^\circ,$
 $AB = 10, BC = 30,$
 $DB = 60, DF = 15,$
 $NC = 60, EH = 30,$
 $FE = 35, FG = 10,$
 $OA = 20, KG = 25.$
 $a_A, a_B, a_C - ?$

Задача 9.37.

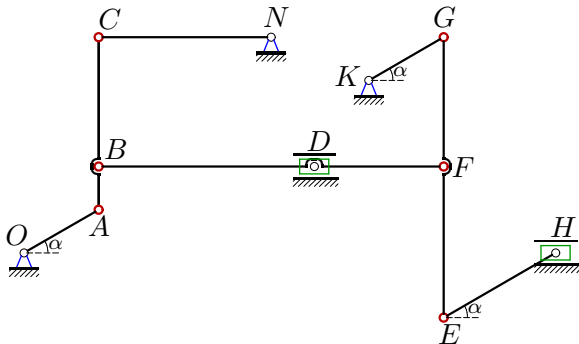
Ринчинова Сэлмэг Баировна



$\omega_{OA} = 4 \text{ рад/с}, \alpha = 30^\circ,$
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 $DB = 50, DF = 40,$
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 $OA = 30, KG = 20.$
 $a_A, a_B, a_C - ?$

Задача 9.38.

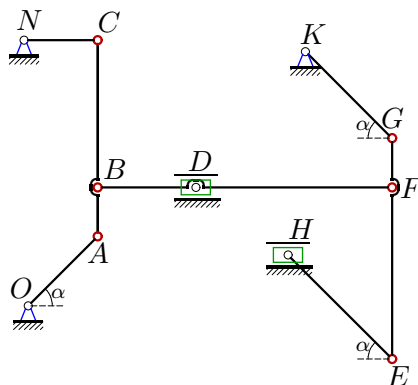
Савина Мария Сергеевна



$\omega_{NC} = 4 \text{ рад/с}, \alpha = 30^\circ,$
 $AB = 10, BC = 30,$
 $DB = 50, DF = 30,$
 $NC = 40, EH = 30,$
 $FE = 35, FG = 30,$
 $OA = 20, KG = 20.$
 $a_A, a_B, a_C - ?$

Задача 9.39.

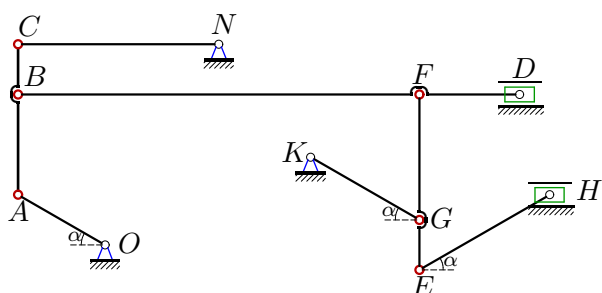
Черниговская Анастасия



$\omega_{NC} = 2 \text{ рад/с}, \alpha = 45^\circ,$
 $AB = 10, BC = 30,$
 $DB = 20, DF = 40,$
 $NC = 15, EH = 30,$
 $FE = 35, FG = 10,$
 $OA = 20, KG = 25.$
 $a_A, a_B, a_C - ?$

Задача 9.40.

Юрин Кирилл Дмитриевич



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