

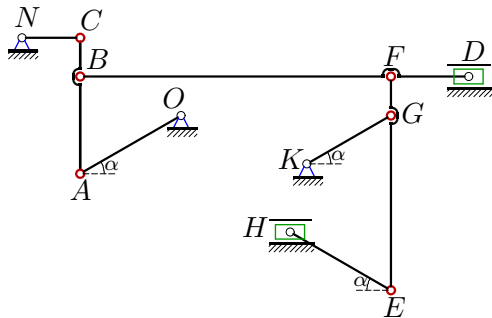
Кинематический анализ механизма (7 звеньев)

Плоский многосвязный механизм с одной степенью свободы приводится в движение кривошипом, который вращается против часовой стрелки с постоянной угловой скоростью. Найти скорости всех шарниров 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 К-9.1.

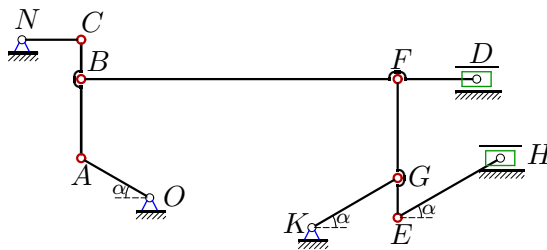
Антипенкова Анастасия



$\omega_{NC} = 2$ рад/с, $\alpha = 30^\circ$,
 $AB = 25$, $BC = 10$,
 $BF = 80$, $FD = 20$,
 $NC = 15$, $EH = 30$,
 $FE = 55$, $FG = 10$,
 $OA = 30$, $KG = 25$.
 a_A , a_B , a_C — ?

Задача К-9.2.

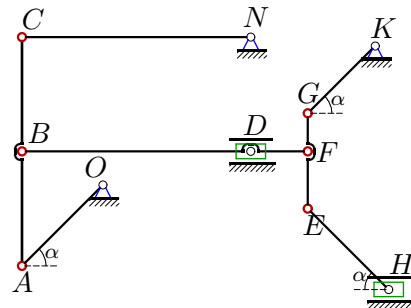
Бабайцева Ксения



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

Задача К-9.3.

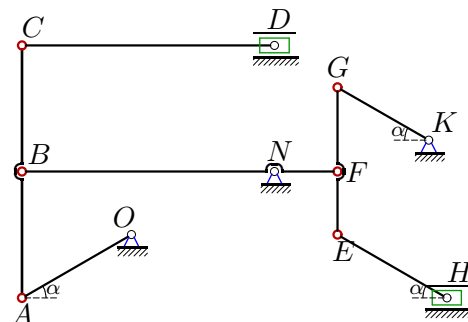
Булатова Елизавета



$\omega_{NC} = 3$ рад/с, $\alpha = 45^\circ$,
 $AB = 30$, $BC = 30$,
 $DB = 60$, $DF = 15$,
 $NC = 60$, $EH = 30$,
 $FE = 15$, $FG = 10$,
 $OA = 30$, $KG = 25$.
 a_A , a_B , a_C — ?

Задача К-9.4.

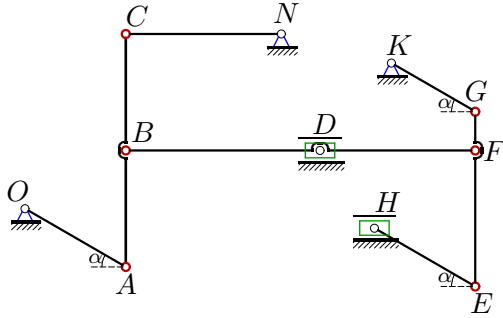
Висков Андрей



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

Задача К-9.5.

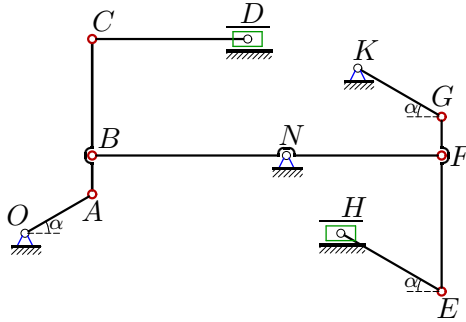
Габриелян Георгий



$\omega_{OA} = 1$ рад/с, $\alpha = 30^\circ$,
 $AB = 30$, $BC = 30$,
 $DB = 50$, $DF = 40$,
 $NC = 40$, $EH = 30$,
 $FE = 35$, $FG = 10$,
 $OA = 30$, $KG = 25$.
 a_A , a_B , a_C - ?

Задача К-9.6.

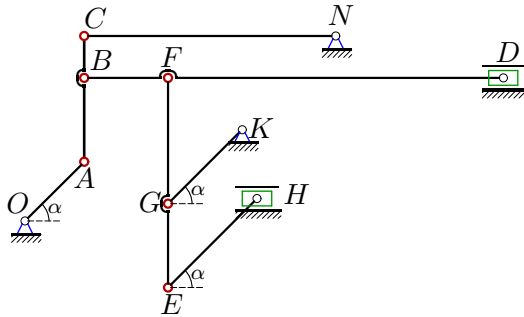
Галина Анастасия



$\omega_{OA} = 2$ рад/с, $\alpha = 30^\circ$,
 $AB = 10$, $BC = 30$,
 $NB = 50$, $NF = 40$,
 $CD = 40$, $EH = 30$,
 $FE = 35$, $FG = 10$,
 $OA = 20$, $KG = 25$.
 a_A , a_B , a_C - ?

Задача К-9.7.

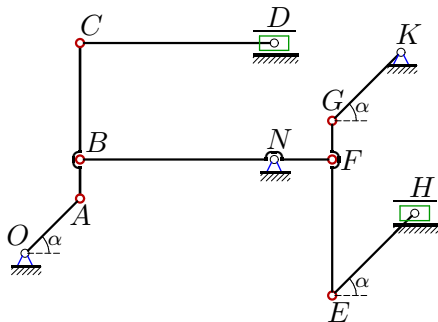
Журавлева Каролина



$\omega_{NC} = 4$ рад/с, $\alpha = 45^\circ$,
 $AB = 20$, $BC = 10$,
 $BF = 20$, $FD = 80$,
 $NC = 60$, $EH = 30$,
 $FE = 50$, $FG = 30$,
 $OA = 20$, $KG = 25$.
 a_A , a_B , a_C - ?

Задача К-9.8.

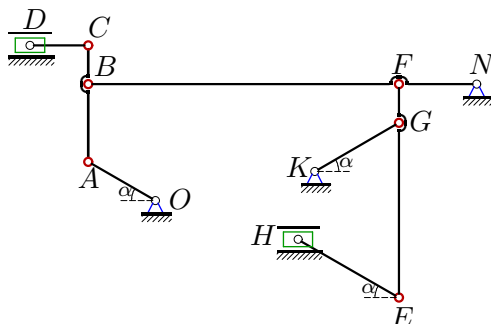
Калашникова Дарья



$\omega_{KG} = 2$ рад/с, $\alpha = 45^\circ$,
 $AB = 10$, $BC = 30$,
 $NB = 50$, $NF = 15$,
 $CD = 50$, $EH = 30$,
 $FE = 35$, $FG = 10$,
 $OA = 20$, $KG = 25$.
 a_G , a_F , a_E - ?

Задача К-9.9.

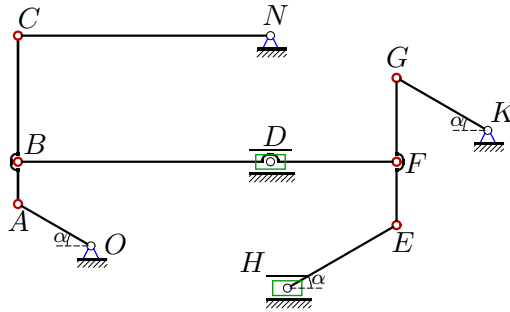
Каткова Ольга



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

Задача К-9.10.

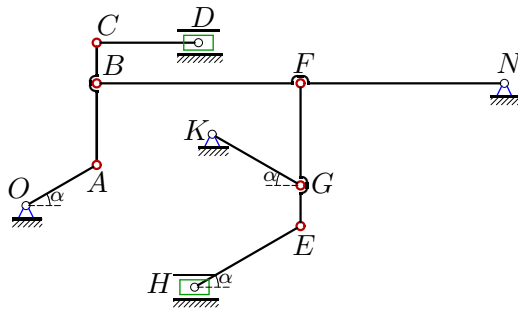
Ковальчук Наталия



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

Задача К-9.11.

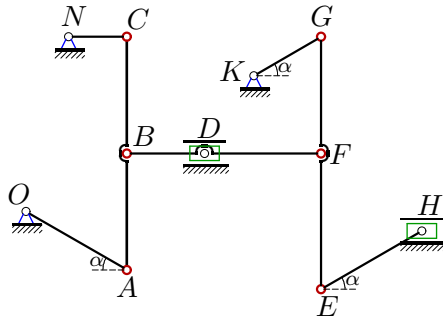
Козлова Анна



$\omega_{OA} = 2$ рад/с, $\alpha = 30^\circ$,
 $AB = 20$, $BC = 10$,
 $BF = 50$, $NF = 50$,
 $CD = 25$, $EH = 30$,
 $FG = 25$, $GE = 10$,
 $OA = 20$, $KG = 25$.
 a_A , a_B , a_C - ?

Задача К-9.12.

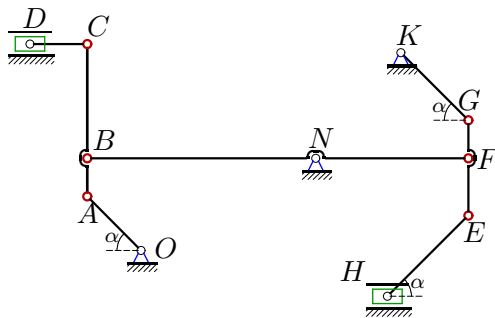
Кокарева Екатерина



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

Задача К-9.13.

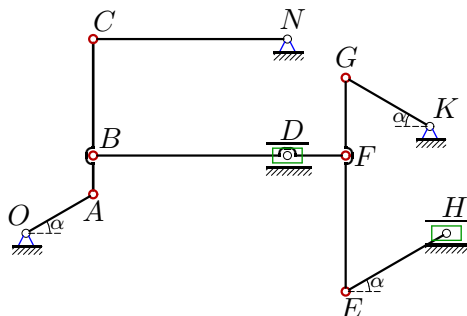
Конго Анна



$\omega_{BF} = 1$ рад/с, $\alpha = 45^\circ$,
 $AB = 10$, $BC = 30$,
 $NB = 60$, $NF = 40$,
 $CD = 15$, $EH = 30$,
 $FE = 15$, $FG = 10$,
 $OA = 20$, $KG = 25$.
 a_A , a_B , a_C - ?

Задача К-9.14.

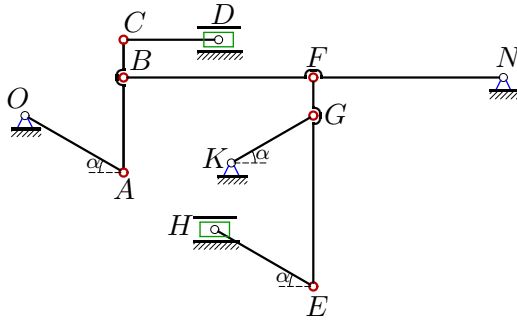
Кугуж Юрий



$\omega_{NC} = 2$ рад/с, $\alpha = 30^\circ$,
 $AB = 10$, $BC = 30$,
 $DB = 50$, $DF = 15$,
 $NC = 50$, $EH = 30$,
 $FE = 35$, $FG = 20$,
 $OA = 20$, $KG = 25$.
 a_A , a_B , a_C - ?

Задача К-9.15.

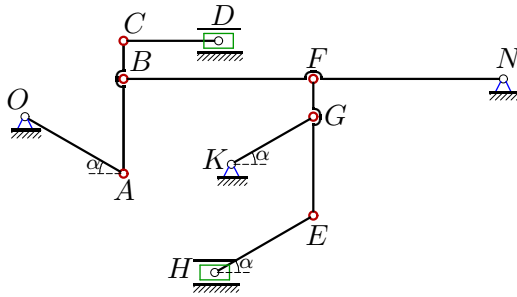
Куквякина Надежда



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

Задача К-9.16.

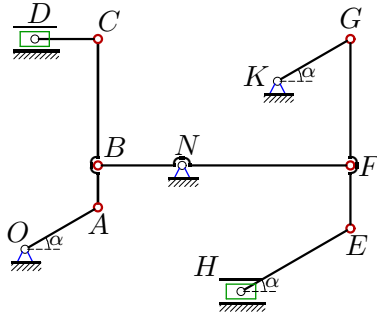
Панков Алексей



$\omega_{OA} = 2$ рад/с, $\alpha = 30^\circ$,
 $AB = 25$, $BC = 10$,
 $BF = 50$, $NF = 50$,
 $CD = 25$, $EH = 30$,
 $FG = 10$, $GE = 26$,
 $OA = 30$, $KG = 25$.
 a_A , a_B , a_C - ?

Задача К-9.17.

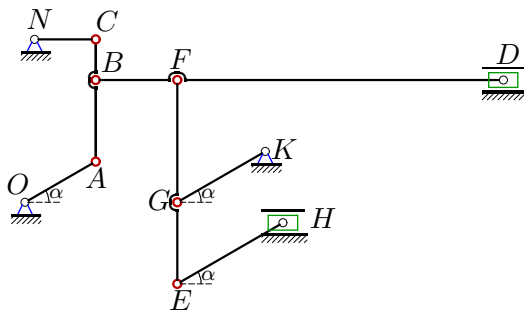
Рогачёв Дмитрий



$\omega_{BF} = 4$ рад/с, $\alpha = 30^\circ$,
 $AB = 10$, $BC = 30$,
 $NB = 20$, $NF = 40$,
 $CD = 15$, $EH = 30$,
 $FE = 15$, $FG = 30$,
 $OA = 20$, $KG = 20$.
 a_A , a_B , a_C - ?

Задача К-9.18.

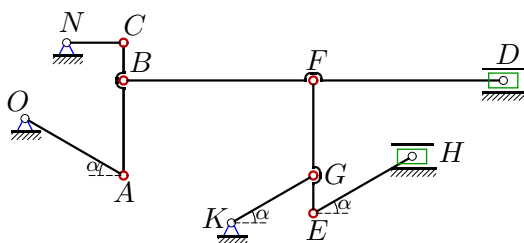
Садеева Альбина



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

Задача К-9.19.

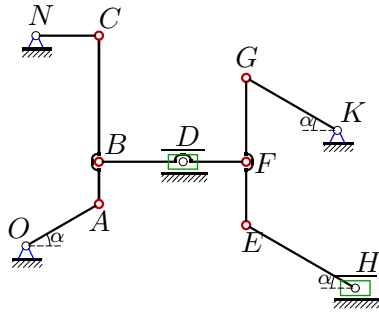
Сиротенко Григорий



$\omega_{OA} = 2$ рад/с, $\alpha = 30^\circ$,
 $AB = 25$, $BC = 10$,
 $BF = 50$, $FD = 50$,
 $NC = 15$, $EH = 30$,
 $FE = 35$, $FG = 25$,
 $OA = 30$, $KG = 25$.
 a_A , a_B , a_C - ?

Задача К-9.20.

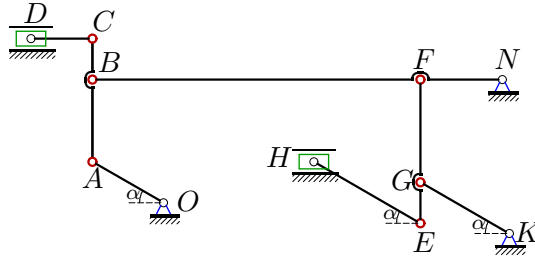
Титова Кира



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

Задача К-9.21.

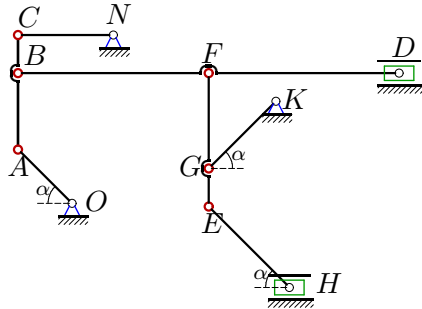
Тоболева Василина



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

Задача К-9.22.

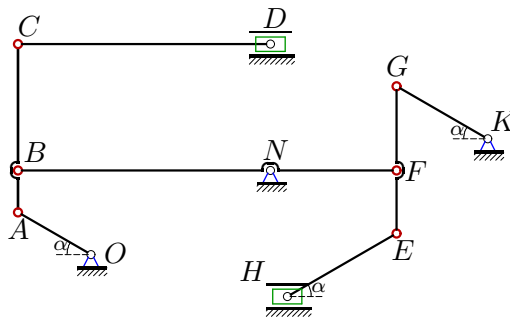
Хренникова Татъяна



$\omega_{OA} = 1$ рад/с, $\alpha = 45^\circ$,
 $AB = 20$, $BC = 10$,
 $BF = 50$, $FD = 50$,
 $NC = 25$, $EH = 30$,
 $FE = 35$, $FG = 25$,
 $OA = 20$, $KG = 25$.
 a_A , a_B , a_C - ?

Задача К-9.23.

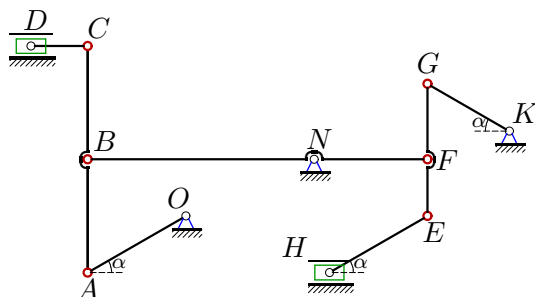
Чиченёва Ксения



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

Задача К-9.24.

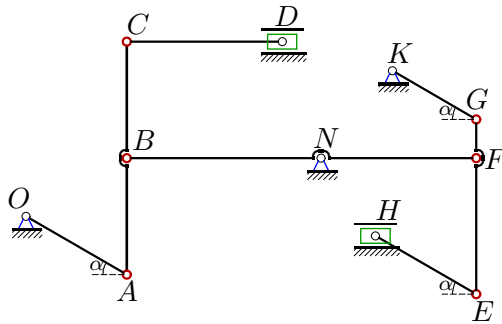
Эверскова Анастасия



$\omega_{BF} = 3$ рад/с, $\alpha = 30^\circ$,
 $AB = 30$, $BC = 30$,
 $NB = 60$, $NF = 30$,
 $CD = 15$, $EH = 30$,
 $FE = 15$, $FG = 20$,
 $OA = 30$, $KG = 25$.
 a_A , a_B , a_C - ?

Задача К-9.25.

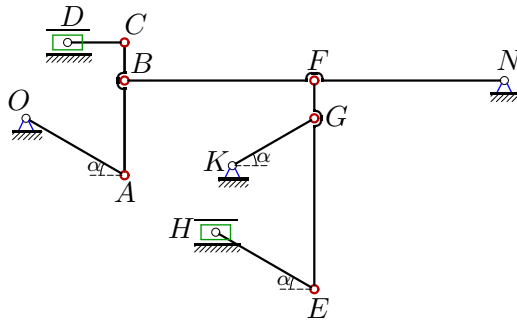
Ермаков В.



$\omega_{KG} = 3$ рад/с, $\alpha = 30^\circ$,
 $AB = 30$, $BC = 30$,
 $NB = 50$, $NF = 40$,
 $CD = 40$, $EH = 30$,
 $FE = 35$, $FG = 10$,
 $OA = 30$, $KG = 25$.
 a_G , a_F , a_E - ?

Задача К-9.26.

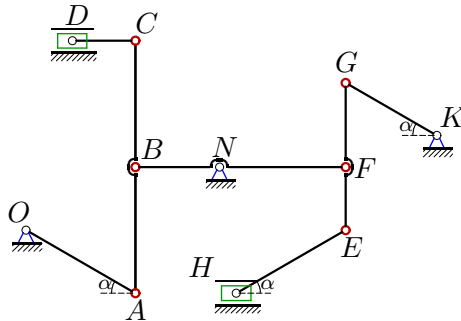
Алимов Шамиль



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

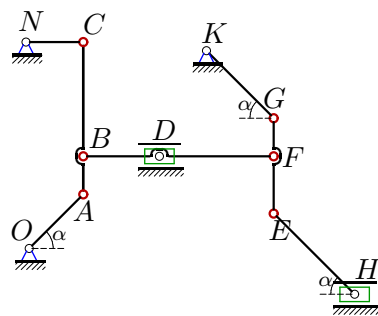
Задача К-9.27.

Зуйков Игорь



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

Задача К-9.28.



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