

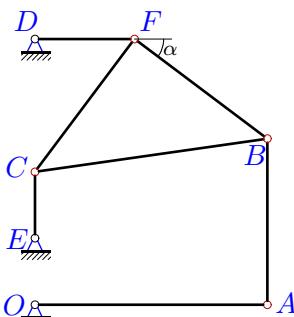
Кинематический анализ механизма (5 звеньев)

В указанном положении механизма задана угловая скорость одного из его звеньев. Длины звеньев даны в сантиметрах. Стержни, направление которых не указано, считать вертикальными или горизонтальными. Найти угловые скорости звеньев механизма.

Кирсанов М.Н. Решебник. Теоретическая механика/Под ред. А. И. Кириллова.– М.: ФИЗМАТЛИТ, 2008. – 384 с. (с.158.)

Задача 23.1.

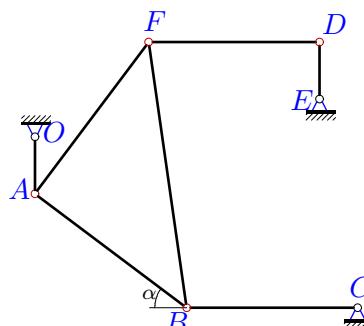
Аксенов Юрий



$\omega_{OA} = 5 \text{ рад/с}$, $OA = 7$, $AB = 5$, $BF = FC = 5$, $CE = 2$, $DF = 3$, $\cos \alpha = 0.8$, $FB \perp CF$.

Задача 23.3.

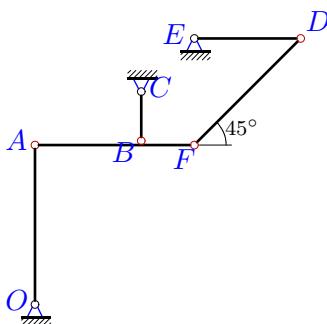
Бублей Александр



$\omega_{OA} = 18 \text{ рад/с}$, $OA = 3$, $AB = AF = 10$, $BC = 9$, $DF = 9$, $DE = 3$, $\cos \alpha = 0.8$, $AB \perp AF$.

Задача 23.5.

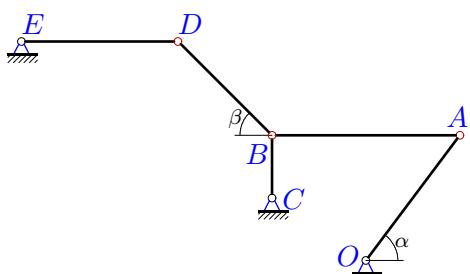
Гаджиев Джамал



$\omega_{OA} = 2 \text{ рад/с}$, $OA = 3$, $AB = 2$, $BF = 1$, $BC = 1$, $DE = 2$, $DF = 2\sqrt{2}$.

Задача 23.2.

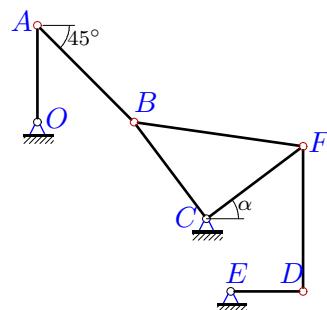
Бондаренко В.



$\omega_{OA} = 30 \text{ рад/с}$, $OA = 5$, $AB = 6$, $BC = 2$, $DE = 5$, $BD = 3\sqrt{2}$, $\cos \alpha = 0.6$, $\beta = 45^\circ$.

Задача 23.4.

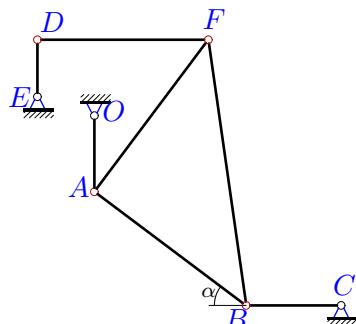
Воробьев Кирилл



$\omega_{OA} = 3 \text{ рад/с}$, $OA = 4$, $DF = 6$, $BC = CF = 5$, $AB = 4\sqrt{2}$, $DE = 3$, $\cos \alpha = 0.8$, $CB \perp CF$.

Задача 23.6.

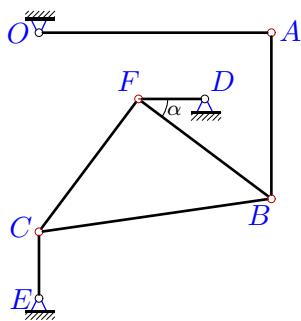
Грицай Виктор



$\omega_{OA} = 45 \text{ рад/с}$, $OA = 4$, $AB = AF = 10$, $BC = 5$, $DF = 9$, $DE = 3$, $\cos \alpha = 0.8$, $AB \perp AF$.

Задача 23.7.

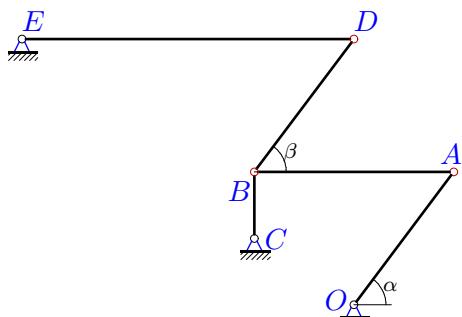
Желябовская Юля



$\omega_{OA} = 10 \text{ рад/с}$, $OA = 7$, $AB = 5$, $BF = FC = 5$, $CE = 2$, $DF = 2$, $\cos \alpha = 0.8$, $FB \perp CF$.

Задача 23.9.

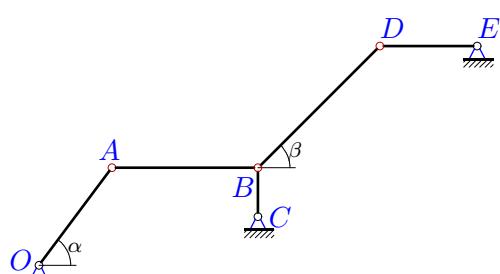
Колесник Анастасия



$\omega_{OA} = 10 \text{ рад/с}$, $OA = 5$, $AB = 6$, $BC = 2$, $DE = 10$, $BD = 5$, $\cos \alpha = 0.6$, $\cos \beta = 0.6$.

Задача 23.11.

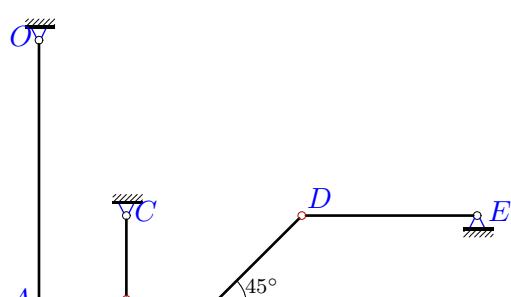
Коротеев Александр



$\omega_{OA} = 10 \text{ рад/с}$, $OA = 5$, $AB = 6$, $BC = 2$, $DE = 4$, $BD = 5\sqrt{2}$, $\cos \alpha = 0.6$, $\beta = 45^\circ$.

Задача 23.13.

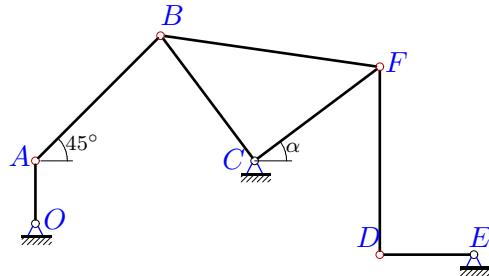
Мальцев Александр



$\omega_{OA} = 2 \text{ рад/с}$, $OA = 3$, $AB = 1$, $BF = 1$, $BC = 1$, $DE = 2$, $DF = \sqrt{2}$.

Задача 23.8.

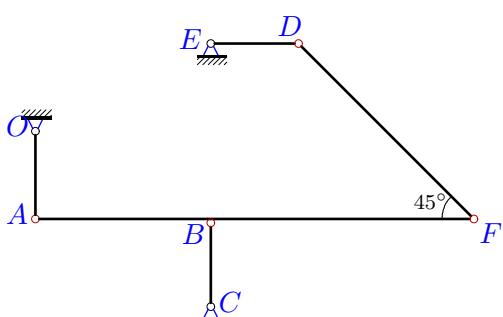
Зайцева Евгения



$\omega_{OA} = 42 \text{ рад/с}$, $OA = 2$, $DF = 6$, $BC = CF = 5$, $AB = 4\sqrt{2}$, $DE = 3$, $\cos \alpha = 0.8$, $CB \perp CF$.

Задача 23.10.

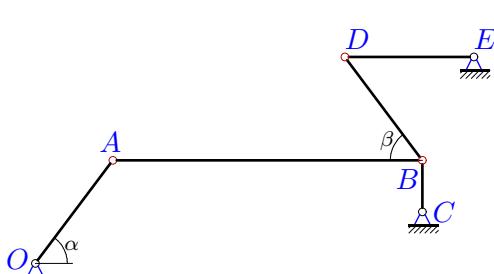
Костюков Дмитрий



$\omega_{OA} = 2 \text{ рад/с}$, $OA = 1$, $AB = 2$, $BF = 3$, $BC = 1$, $DE = 1$, $DF = 2\sqrt{2}$.

Задача 23.12.

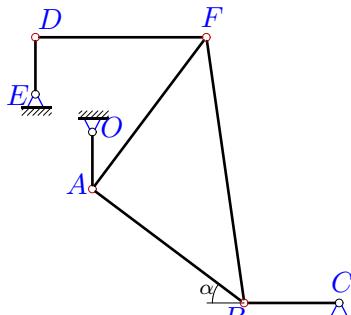
Котенко Вячеслав



$\omega_{OA} = 20 \text{ рад/с}$, $OA = 5$, $AB = 12$, $BC = 2$, $DE = 5$, $BD = 5$, $\cos \alpha = 0.6$, $\cos \beta = 0.6$.

Задача 23.14.

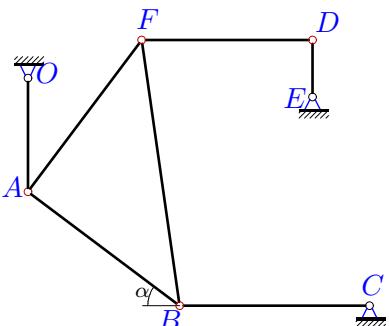
Настаева Зухра



$\omega_{OA} = 30 \text{ рад/с}$, $OA = 3$, $AB = AF = 10$, $BC = 5$, $DF = 9$, $DE = 3$, $\cos \alpha = 0.8$, $AB \perp AF$.

Задача 23.15.

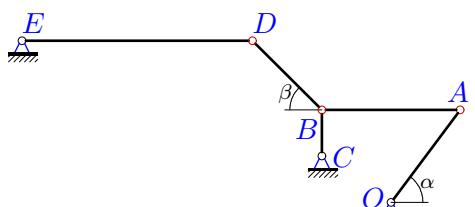
Светлов Вадим



$\omega_{OA} = 15 \text{ рад/с}$, $OA = 6$, $AB = AF = 10$,
 $BC = 10$, $DF = 9$, $DE = 3$, $\cos \alpha = 0.8$, $AB \perp AF$.

Задача 23.17.

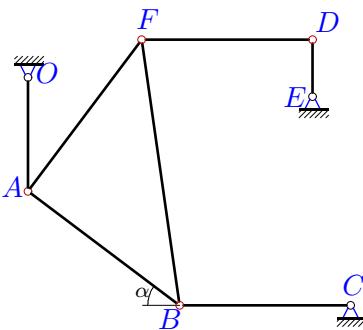
Степин Илья



$\omega_{OA} = 30 \text{ рад/с}$, $OA = 5$, $AB = 6$, $BC = 2$,
 $DE = 10$, $BD = 3\sqrt{2}$, $\cos \alpha = 0.6$, $\beta = 45^\circ$.

Задача 23.19.

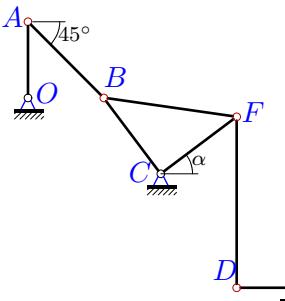
Ченцов Максим



$\omega_{OA} = 9 \text{ рад/с}$, $OA = 6$, $AB = AF = 10$,
 $BC = 9$, $DF = 9$, $DE = 3$, $\cos \alpha = 0.8$, $AB \perp AF$.

Задача 23.21.

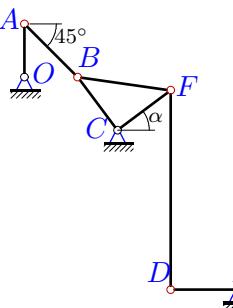
Шабан Михаил



$\omega_{OA} = 3 \text{ рад/с}$, $OA = 4$, $DF = 9$, $BC = CF = 5$,
 $AB = 4\sqrt{2}$, $DE = 3$, $\cos \alpha = 0.8$, $CB \perp CF$.

Задача 23.16.

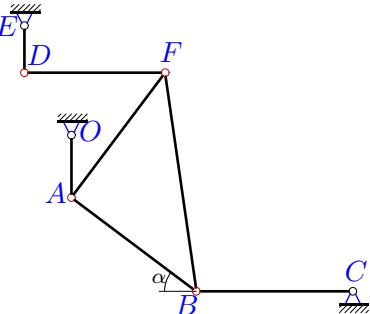
Смирнова Анастасия



$\omega_{OA} = 5 \text{ рад/с}$, $OA = 4$, $DF = 15$, $BC = CF = 5$,
 $AB = 4\sqrt{2}$, $DE = 5$, $\cos \alpha = 0.8$, $CB \perp CF$.

Задача 23.18.

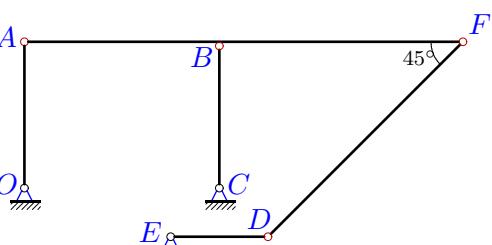
Цвирко Федор



$\omega_{OA} = 45 \text{ рад/с}$, $OA = 4$, $AB = AF = 10$,
 $BC = 10$, $DF = 9$, $DE = 3$, $\cos \alpha = 0.8$, $AB \perp AF$.

Задача 23.20.

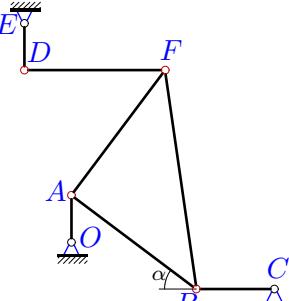
Чигидина Лиза



$\omega_{OA} = 4 \text{ рад/с}$, $OA = 3$, $AB = 4$, $BF = 5$,
 $BC = 3$, $DE = 2$, $DF = 4\sqrt{2}$.

Задача 23.22.

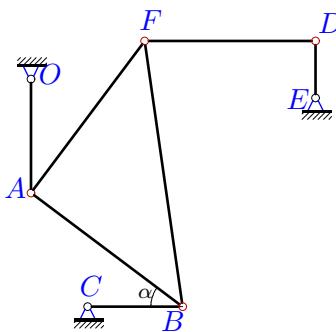
Шевцов Никита



$\omega_{OA} = 30 \text{ рад/с}$, $OA = 3$, $AB = AF = 10$,
 $BC = 5$, $DF = 9$, $DE = 3$, $\cos \alpha = 0.8$, $AB \perp AF$.

Задача 23.23.

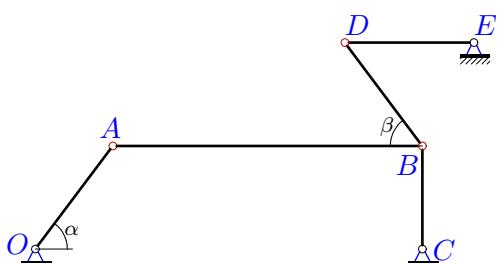
Шимарова Светлана



$\omega_{OA} = 15 \text{ рад/с}$, $OA = 6$, $AB = AF = 10$,
 $BC = 5$, $DF = 9$, $DE = 3$, $\cos \alpha = 0.8$, $AB \perp AF$.

Задача 23.24.

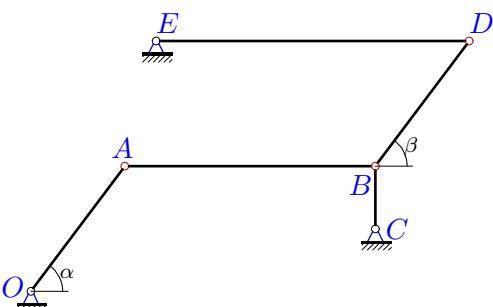
Шинкина Анна



$\omega_{OA} = 20 \text{ рад/с}$, $OA = 5$, $AB = 12$, $BC = 4$,
 $DE = 5$, $BD = 5$, $\cos \alpha = 0.6$, $\cos \beta = 0.6$.

Задача 23.25.

Шуйчиков Артем



$\omega_{OA} = 40 \text{ рад/с}$, $OA = 5$, $AB = 8$, $BC = 2$,
 $DE = 10$, $BD = 5$, $\cos \alpha = 0.6$, $\cos \beta = 0.6$.