

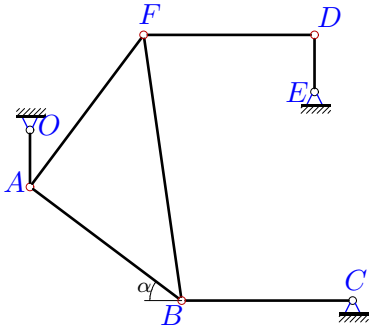
Кинематический анализ механизма (5 звеньев)

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. **Решбник. Теоретическая механика**/Под ред. А. И. Кириллова. – М.: ФИЗМАТЛИТ, 2008. — 384 с. (с.158.)

Задача 23.1.

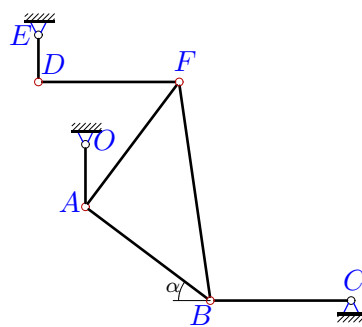
Лисов Максим



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

Задача 23.2.

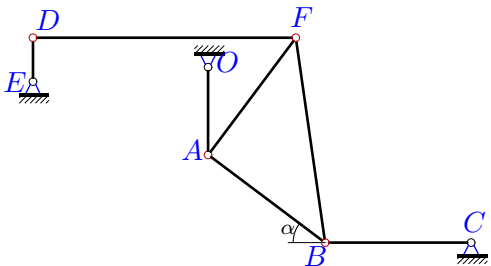
Николаев Олег



$\omega_{OA} = 27$ рад/с, $OA = 4$, $AB = AF = 10$,
 $BC = 9$, $DF = 9$, $DE = 3$, $\cos \alpha = 0.8$, $AB \perp AF$.

Задача 23.3.

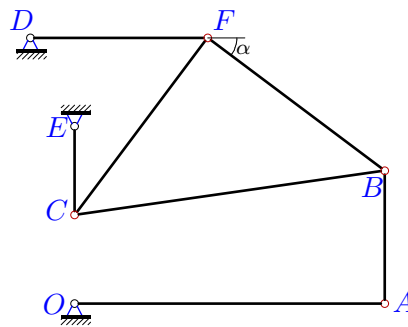
Пашенцев Дмитрий



$\omega_{OA} = 15$ рад/с, $OA = 6$, $AB = AF = 10$,
 $BC = 10$, $DF = 18$, $DE = 3$, $\cos \alpha = 0.8$, $AB \perp AF$.

Задача 23.4.

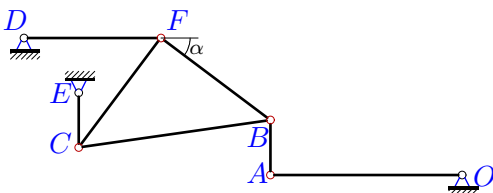
Петрова Инга



$\omega_{OA} = 4$ рад/с, $OA = 7$, $AB = 3$, $BF = FC = 5$,
 $CE = 2$, $DF = 4$, $\cos \alpha = 0.8$, $FB \perp CF$.

Задача 23.5.

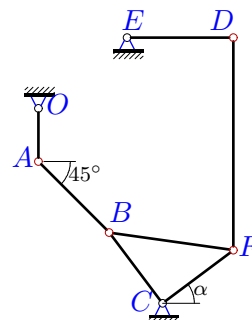
Росляков Евгений



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

Задача 23.6.

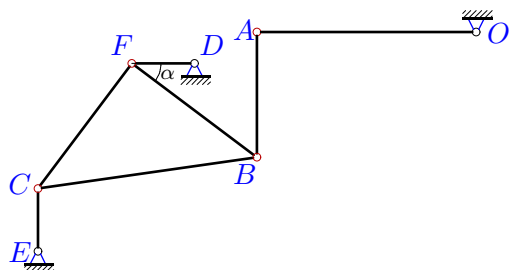
Садовников Юрий



$\omega_{OA} = 4$ рад/с, $OA = 3$, $DF = 12$, $BC = CF = 5$,
 $AB = 4\sqrt{2}$, $DE = 6$, $\cos \alpha = 0.8$, $CB \perp CF$.

Задача 23.7.

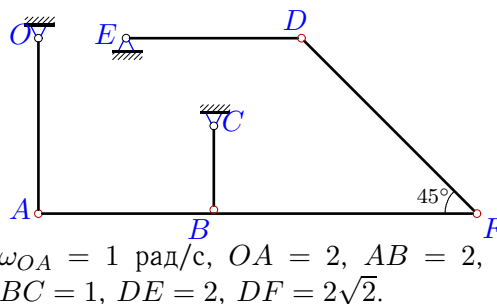
Солодовников Владимир



$\omega_{OA} = 4 \text{ рад/с}$, $OA = 7$, $AB = 4$, $BF = FC = 5$,
 $CE = 2$, $DF = 2$, $\cos \alpha = 0.8$, $FB \perp CF$.

Задача 23.8.

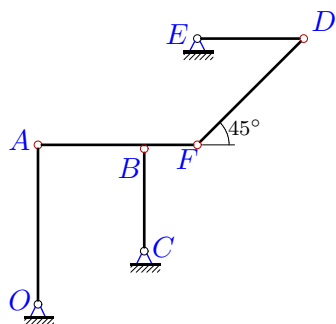
Тимошков Александр



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

Задача 23.9.

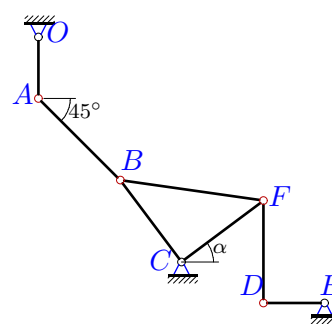
Ершов Андрей



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

Задача 23.10.

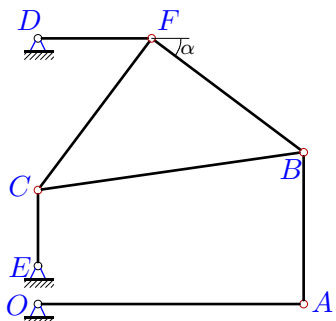
Апасьев Евгений



$\omega_{OA} = 20 \text{ рад/с}$, $OA = 3$, $DF = 5$, $BC = CF = 5$,
 $AB = 4\sqrt{2}$, $DE = 3$, $\cos \alpha = 0.8$, $CB \perp CF$.

Задача 23.11.

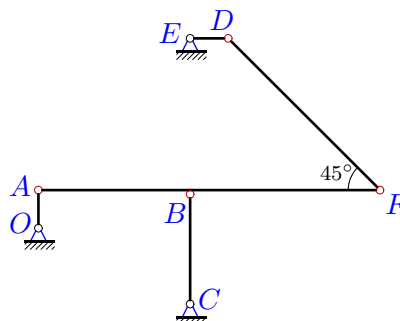
Болошевич Антон



$\omega_{OA} = 4 \text{ рад/с}$, $OA = 7$, $AB = 4$, $BF = FC = 5$,
 $CE = 2$, $DF = 3$, $\cos \alpha = 0.8$, $FB \perp CF$.

Задача 23.12.

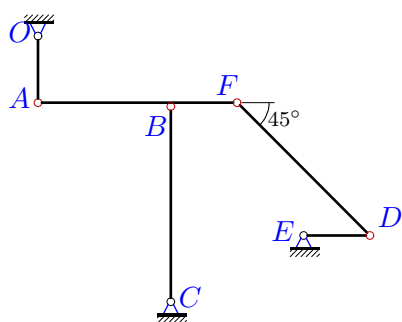
Лебедев Алексей



$\omega_{OA} = 12 \text{ рад/с}$, $OA = 1$, $AB = 4$, $BF = 5$,
 $BC = 3$, $DE = 1$, $DF = 4\sqrt{2}$.

Задача 23.13.

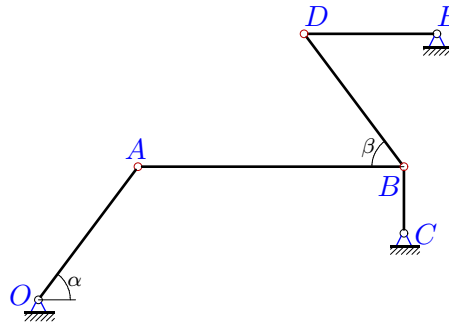
Лукьянов Степан



$\omega_{OA} = 6 \text{ рад/с}$, $OA = 1$, $AB = 2$, $BF = 1$,
 $BC = 3$, $DE = 1$, $DF = 2\sqrt{2}$.

Задача 23.14.

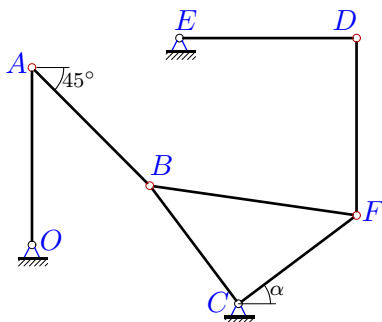
Болтышев Николай



$\omega_{OA} = 8 \text{ рад/с}$, $OA = 5$, $AB = 8$, $BC = 2$,
 $DE = 4$, $BD = 5$, $\cos \alpha = 0.6$, $\cos \beta = 0.6$.

Задача 23.15.

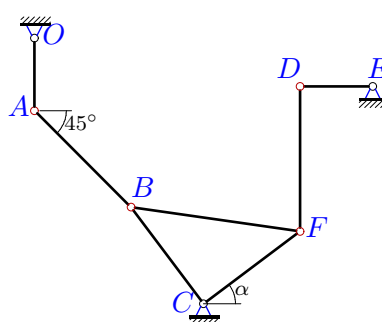
Шахбазян Манвел



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

Задача 23.16.

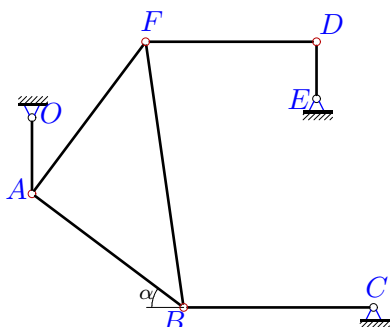
Шилов Никита



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

Задача 23.17.

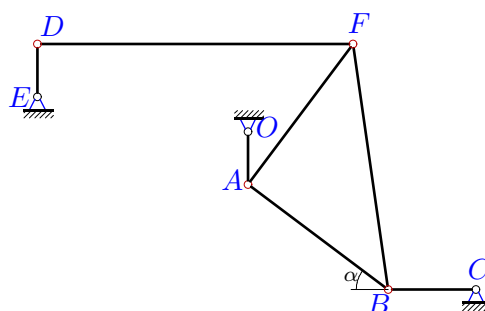
Давидян Артём



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

Задача 23.18.

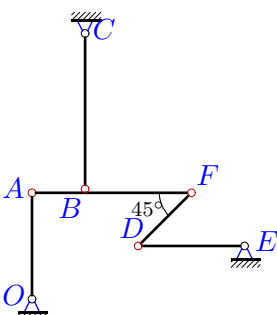
Шильников Владислав



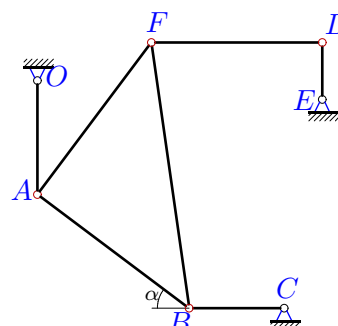
$\omega_{OA} = 30$ рад/с, $OA = 3$, $AB = AF = 10$,
 $BC = 5$, $DF = 18$, $DE = 3$, $\cos \alpha = 0.8$, $AB \perp AF$.

Задача 23.19.

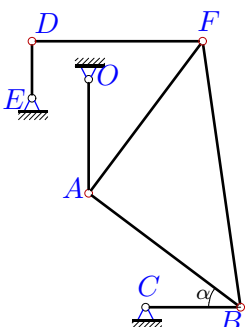
Рудаков Александр



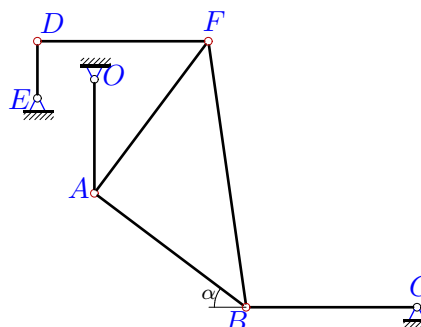
$\omega_{OA} = 3$ рад/с, $OA = 2$, $AB = 1$, $BF = 2$,
 $BC = 3$, $DE = 2$, $DF = \sqrt{2}$.

Задача 23.20.


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

Задача 23.21.


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

Задача 23.22.


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