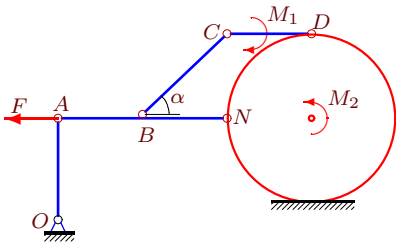


Принцип возможных перемещений (2)

Механизм с идеальными стационарными связями находится в равновесии под действием силы F и моментов M_1, M_2 . Длины звеньев даны в сантиметрах. Стержни, направление которых не указано, считать горизонтальными или вертикальными. Диск касается горизонтальной поверхности без проскальзывания. Найти величину F .

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

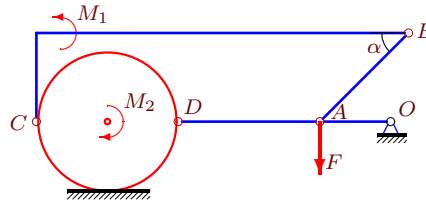
Задача D-24.1. Антипенкова Анастасия



$$M_1 = 84, M_2 = 123, R = 5, OA = 6, \\ AB = 5, BN = 5, BC = 5\sqrt{2}, CD = 5, \alpha = 45^\circ$$

Задача D-24.2.

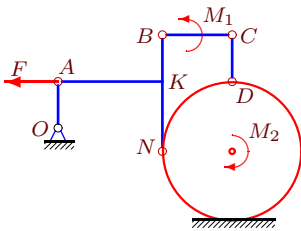
Бабайцева Ксения



$$M_1 = 80, M_2 = 49, R = 4, OA = 4, \\ AB = 5\sqrt{2}, AD = 8, \alpha = 45^\circ.$$

Задача D-24.3.

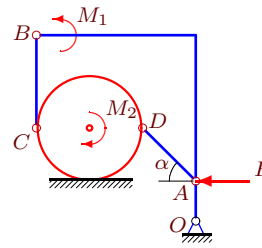
Булатова Елизавета



$$M_1 = 54, M_2 = 66, R = 6, OA = 4, \\ AK = 9, BK = 4, KN = 6, CD = 4.$$

Задача D-24.4.

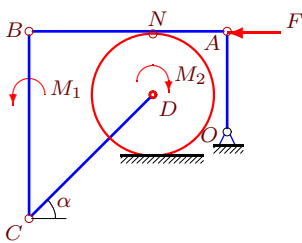
Висков Андрей



$$M_1 = 147, M_2 = 161, R = 4, OA = 3, \\ AD = 4\sqrt{2}, BC = 7, \alpha = 45^\circ.$$

Задача D-24.5.

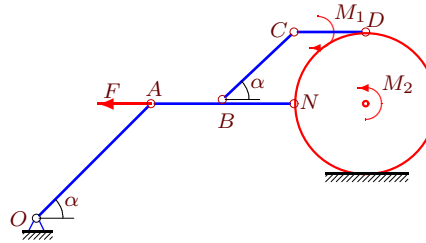
Габриелян Георгий



$$M_1 = 468, M_2 = 116, R = 5, OA = 8, \\ CD = 10\sqrt{2}, AN = 6, AB = 16, \alpha = 45^\circ.$$

Задача D-24.6.

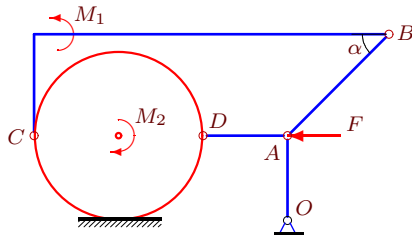
Галина Анастасия



$$M_1 = 192, M_2 = 168, R = 5, OA = 8\sqrt{2}, \\ AB = 5, BN = 5, BC = 5\sqrt{2}, CD = 5, \alpha = 45^\circ$$

Задача D-24.7.

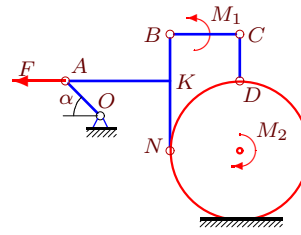
Журавлева Каролина



$M_1 = 42, M_2 = 59, R = 5, OA = 5,$
 $AB = 6\sqrt{2}, AD = 5, \alpha = 45^\circ.$

Задача D-24.8.

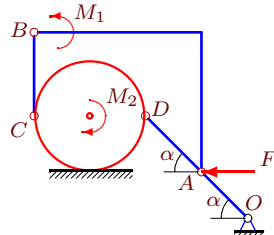
Калашникова Дарья



$M_1 = 58, M_2 = 70, R = 6, OA = 3\sqrt{2},$
 $AK = 9, BK = 4, KN = 6, CD = 4, \alpha = 45^\circ.$

Задача D-24.9.

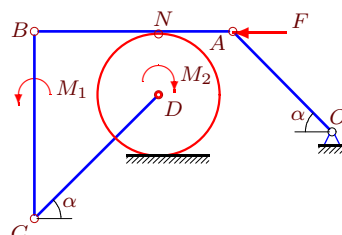
Каткова Ольга



$M_1 = 270, M_2 = 285, R = 6, OA = 5\sqrt{2},$
 $AD = 6\sqrt{2}, BC = 9, \alpha = 45^\circ.$

Задача D-24.10.

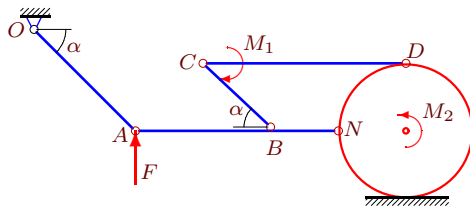
Ковальчук Наталия



$M_1 = 324, M_2 = 28, R = 5, OA = 8\sqrt{2},$
 $CD = 10\sqrt{2}, AN = 6, AB = 16, \alpha = 45^\circ.$

Задача D-24.11.

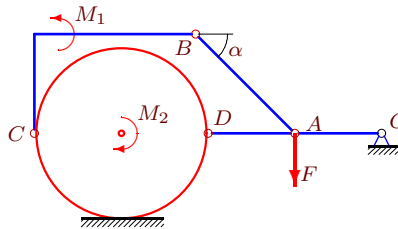
Козлова Анна



$M_1 = 39, M_2 = 38, R = 4, OA = 6\sqrt{2},$
 $AB = 8, BN = 4, BC = 4\sqrt{2}, CD = 12, \alpha = 45^\circ$

Задача D-24.12.

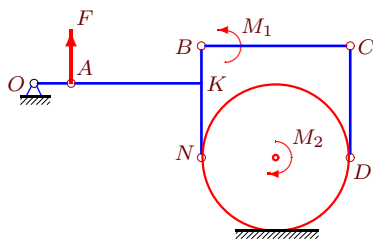
Кокарева Екатерина



$M_1 = 105, M_2 = 127, R = 7, OA = 7,$
 $AB = 8\sqrt{2}, AD = 7, \alpha = 45^\circ.$

Задача D-24.13.

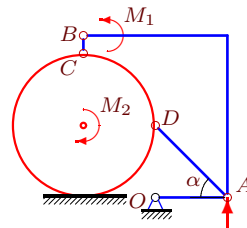
Конго Анна



$M_1 = 28, M_2 = 22, R = 4, OA = 2,$
 $AK = 7, BK = 2, KN = 4, CD = 6.$

Задача D-24.14.

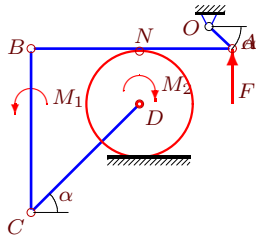
Кугук Юрий



$M_1 = 15, M_2 = 23, R = 4, OA = 4,$
 $AD = 4\sqrt{2}, BC = 1, \alpha = 45^\circ.$

Задача D-24.15.

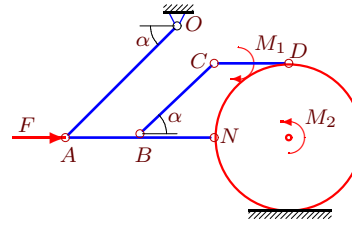
Куквякина Надежда



$M_1 = 270, M_2 = 496, R = 7, OA = 3\sqrt{2},$
 $CD = 14\sqrt{2}, AN = 12, AB = 26, \alpha = 45^\circ.$

Задача D-24.16.

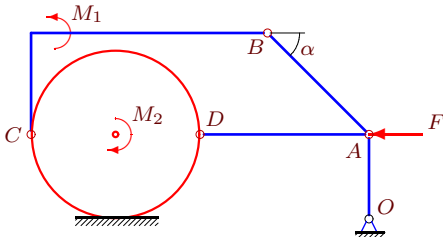
Панков Алексей



$M_1 = 27, M_2 = 33, R = 4, OA = 6\sqrt{2},$
 $AB = 4, BN = 4, BC = 4\sqrt{2}, CD = 4, \alpha = 45^\circ$

Задача D-24.17.

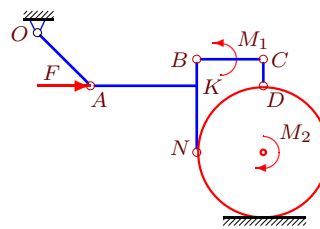
Рогачёв Дмитрий



$M_1 = 56, M_2 = 79, R = 5, OA = 5,$
 $AB = 6\sqrt{2}, AD = 10, \alpha = 45^\circ.$

Задача D-24.18.

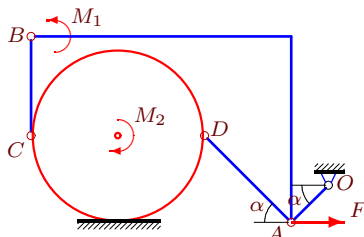
Садекова Альбина



$M_1 = M_2 = 104, R = 5, OA = 4\sqrt{2},$
 $AK = 8, BK = 2, KN = 5, CD = 2, \alpha = 45^\circ.$

Задача D-24.19.

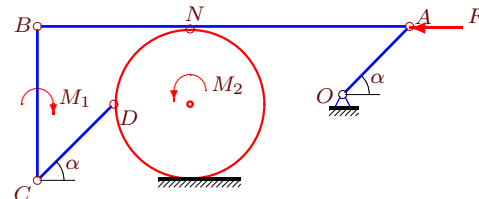
Сиротенко Григорий



$M_1 = 264, M_2 = 512, R = 7, OA = 3\sqrt{2},$
 $AD = 7\sqrt{2}, BC = 8, \alpha = 45^\circ.$

Задача D-24.20.

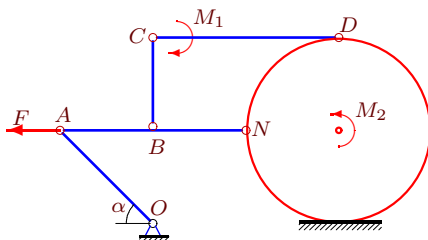
Титова Кира



$M_1 = 161, M_2 = 112, R = 8, OA = 7\sqrt{2},$
 $CD = 8\sqrt{2}, AN = 23, AB = 39, \alpha = 45^\circ.$

Задача D-24.21.

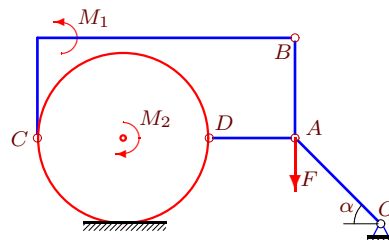
Тоболева Василина



$M_1 = 34, M_2 = 59, R = 6, OA = 6\sqrt{2},$
 $AB = 6, BN = BC = 6, CD = 12, \alpha = 45^\circ$

Задача D-24.22.

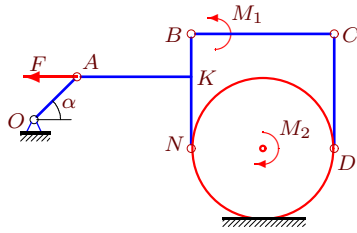
Хренникова Татьяна



$M_1 = 23, M_2 = 30, R = 6, OA = 6\sqrt{2},$
 $AB = 7, AD = 6, \alpha = 45^\circ.$

Задача D-24.23.

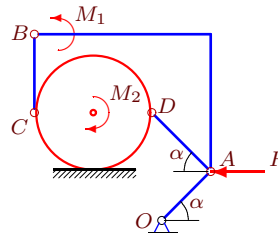
Чиченёва Ксения



$M_1 = 32, M_2 = 62, R = 5, OA = 3\sqrt{2},$
 $AK = 8, BK = 3, KN = 5, CD = 8, \alpha = 45^\circ.$

Задача D-24.24.

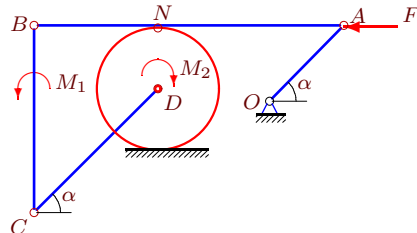
Эверскова Анастасия



$M_1 = 870, M_2 = 880, R = 6, OA = 5\sqrt{2},$
 $AD = 6\sqrt{2}, BC = 8, \alpha = 45^\circ.$

Задача D-24.25.

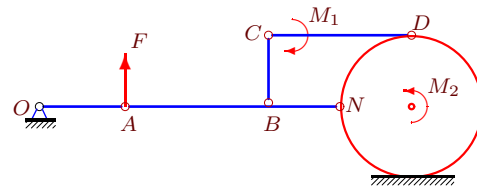
Ермаков В.



$M_1 = 261, M_2 = 263, R = 5, OA = 6\sqrt{2},$
 $CD = 10\sqrt{2}, AN = 15, AB = 25, \alpha = 45^\circ.$

Задача D-24.26.

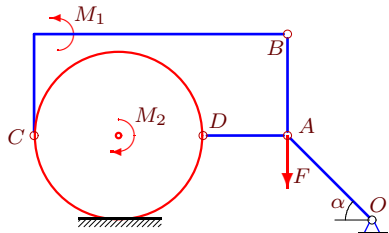
Алимов Шамиль



$M_1 = 150, M_2 = 121, R = 5, OA = 6,$
 $AB = 10, BN = BC = 5, CD = 10.$

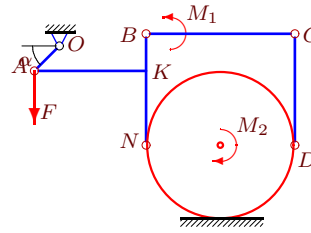
Задача D-24.27.

Зуйков Игорь



$M_1 = 19, M_2 = 20, R = 5, OA = 5\sqrt{2},$
 $AB = 6, AD = 5, \alpha = 45^\circ.$

Задача D-24.28.



$M_1 = 35, M_2 = 41, R = 6, OA = 2\sqrt{2},$
 $AK = 9, BK = 3, KN = 6, CD = 9, \alpha = 45^\circ.$