

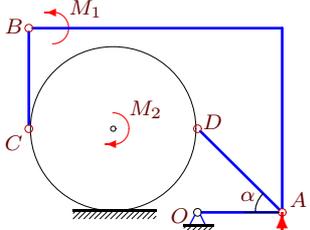
Принцип возможных перемещений (2)

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 .

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

Задача 34.1.

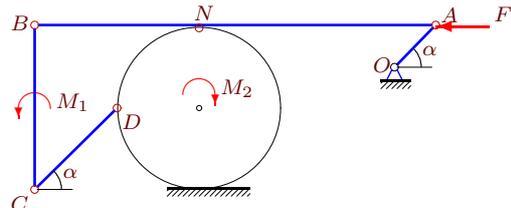
Балашов Дмитрий



$$M_1 = M_2 = 39, R = 5, OA = 5, \\ AD = 5\sqrt{2}, BC = 6, \alpha = 45^\circ.$$

Задача 34.2.

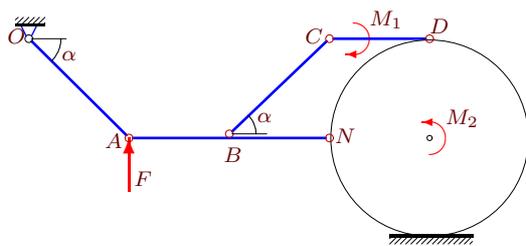
Бежашвили Александр



$$M_1 = 23, M_2 = 720, R = 8, OA = 4\sqrt{2}, \\ CD = 8\sqrt{2}, AN = 23, AB = 39, \alpha = 45^\circ.$$

Задача 34.3.

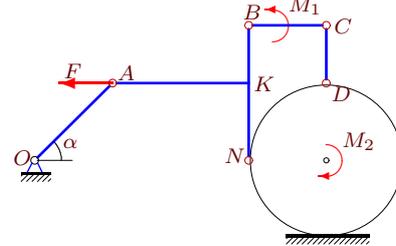
Довгалюк Дмитрий



$$M_1 = 22, M_2 = 42, R = 7, OA = 7\sqrt{2}, \\ AB = 7, BN = 7, BC = 7\sqrt{2}, CD = 7, \alpha = 45^\circ$$

Задача 34.4.

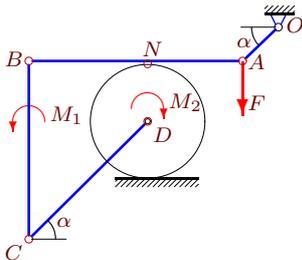
Исмаилов Дмитрий



$$M_1 = M_2 = 111, R = 4, OA = 4\sqrt{2}, \\ AK = 7, BK = 3, KN = 4, CD = 3, \alpha = 45^\circ.$$

Задача 34.5.

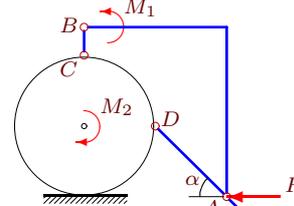
Карлик Дмитрий



$$M_1 = 252, M_2 = 134, R = 5, OA = 3\sqrt{2}, \\ CD = 10\sqrt{2}, AN = 8, AB = 18, \alpha = 45^\circ.$$

Задача 34.6.

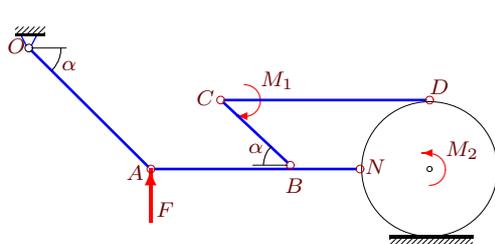
Крюкова Валерия



$$M_1 = 60, M_2 = 123, R = 5, OA = 3\sqrt{2}, \\ AD = 5\sqrt{2}, BC = 2, \alpha = 45^\circ.$$

Задача 34.7.

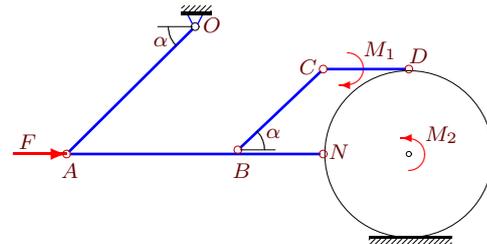
Курындин Илья



$$M_1 = 357, M_2 = 266, R = 4, OA = 7\sqrt{2}, \\ AB = 8, BN = 4, BC = 4\sqrt{2}, CD = 12, \alpha = 45^\circ$$

Задача 34.8.

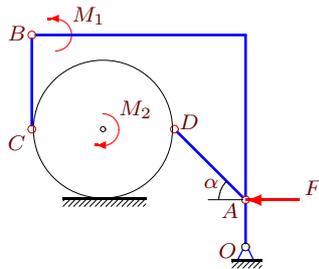
Лопин Александр



$$M_1 = 27, M_2 = 34, R = 4, OA = 6\sqrt{2}, \\ AB = 8, BN = 4, BC = 4\sqrt{2}, CD = 4, \alpha = 45^\circ$$

Задача 34.9.

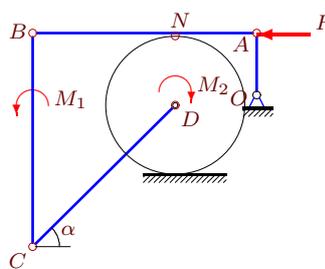
Леонова Анна



$M_1 = 177, M_2 = 179, R = 6, OA = 4,$
 $AD = 6\sqrt{2}, BC = 8, \alpha = 45^\circ.$

Задача 34.10.

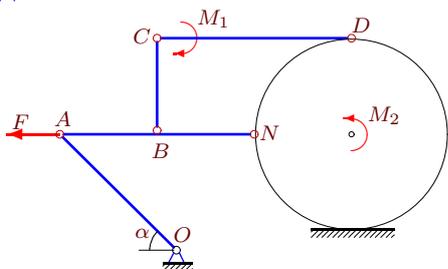
Мазаев Илья



$M_1 = 165, M_2 = 167, R = 7, OA = 6,$
 $CD = 14\sqrt{2}, AN = 8, AB = 22, \alpha = 45^\circ.$

Задача 34.11.

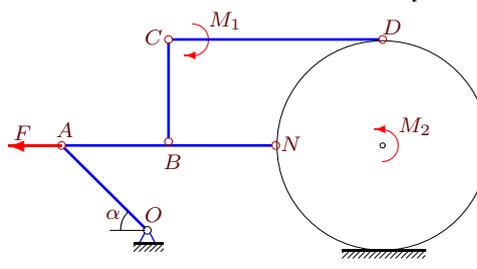
Мазанова Анна



$M_1 = 54, M_2 = 117, R = 5, OA = 6\sqrt{2},$
 $AB = 5, BN = BC = 5, CD = 10, \alpha = 45^\circ$

Задача 34.12.

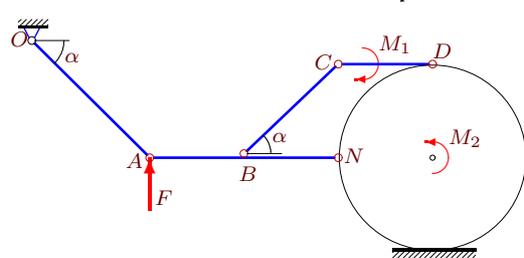
Макаров Александр



$M_1 = 56, M_2 = 78, R = 5, OA = 4\sqrt{2},$
 $AB = 5, BN = BC = 5, CD = 10, \alpha = 45^\circ$

Задача 34.13.

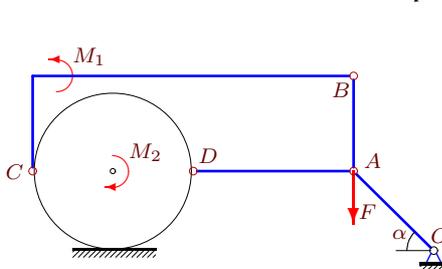
Орлов Алексей



$M_1 = 65, M_2 = 60, R = 4, OA = 5\sqrt{2},$
 $AB = 4, BN = 4, BC = 4\sqrt{2}, CD = 4, \alpha = 45^\circ$

Задача 34.14.

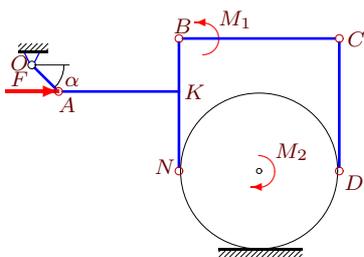
Петраков Павел



$M_1 = 19, M_2 = 20, R = 5, OA = 5\sqrt{2},$
 $AB = 6, AD = 10, \alpha = 45^\circ.$

Задача 34.15.

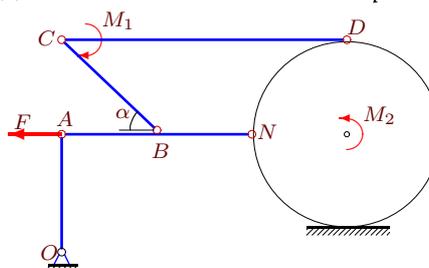
Потемкин Михаил



$M_1 = 13, M_2 = 37, R = 6, OA = 2\sqrt{2},$
 $AK = 9, BK = 4, KN = 6, CD = 10, \alpha = 45^\circ.$

Задача 34.16.

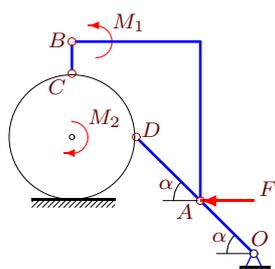
Прохоренков Юрий



$M_1 = 110, M_2 = 115, R = 4, OA = 5,$
 $AB = 4, BN = 4, BC = 4\sqrt{2}, CD = 12, \alpha = 45^\circ$

Задача 34.17.

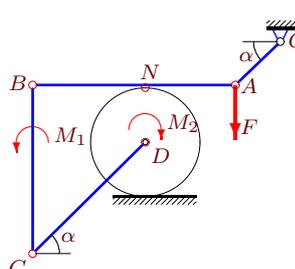
Рубан Сергей



$M_1 = 300, M_2 = 305, R = 6, OA = 5\sqrt{2},$
 $AD = 6\sqrt{2}, BC = 3, \alpha = 45^\circ.$

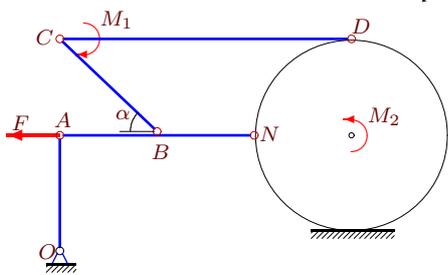
Задача 34.18.

Сабирзянов Дамир



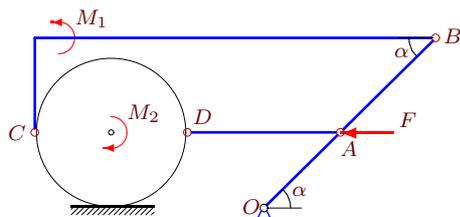
$M_1 = 132, M_2 = 134, R = 5, OA = 4\sqrt{2},$
 $CD = 10\sqrt{2}, AN = 8, AB = 18, \alpha = 45^\circ.$

Задача 34.19. Сафина Эльмира



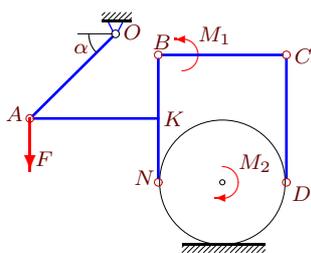
$M_1 = 54, M_2 = 117, R = 5, OA = 6,$
 $AB = 5, BN = 5, BC = 5\sqrt{2}, CD = 15, \alpha = 45^\circ$

Задача 34.21. Староверкин Игорь



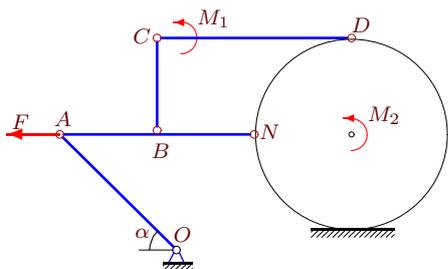
$M_1 = 14, M_2 = 23, R = 4, OA = 4\sqrt{2},$
 $AB = 5\sqrt{2}, AD = 8, \alpha = 45^\circ.$

Задача 34.23. Чех Мария



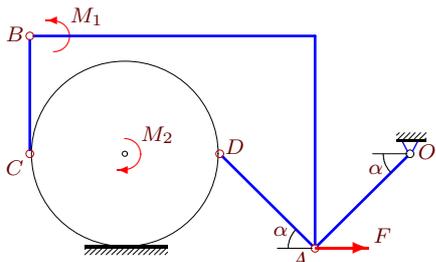
$M_1 = 36, M_2 = 48, R = 3, OA = 4\sqrt{2},$
 $AK = 6, BK = 3, KN = 3, CD = 6, \alpha = 45^\circ.$

Задача 34.25. Цогт Тамир



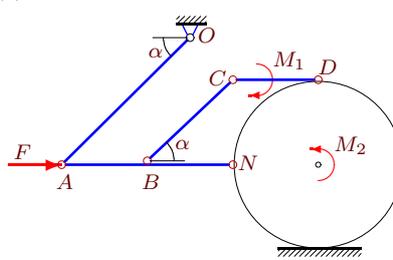
$M_1 = 144, M_2 = 117, R = 5, OA = 6\sqrt{2},$
 $AB = 5, BN = BC = 5, CD = 10, \alpha = 45^\circ$

Задача 34.27.



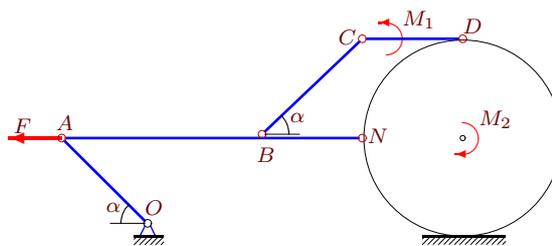
$M_1 = 255, M_2 = 190, R = 4, OA = 4\sqrt{2},$
 $AD = 4\sqrt{2}, BC = 5, \alpha = 45^\circ.$

Задача 34.20. Салаев Михаил



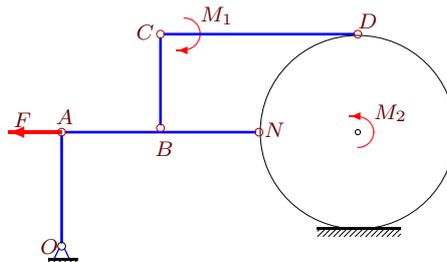
$M_1 = 27, M_2 = 33, R = 4, OA = 6\sqrt{2},$
 $AB = 4, BN = 4, BC = 4\sqrt{2}, CD = 4, \alpha = 45^\circ$

Задача 34.22. Тулушев Алексей



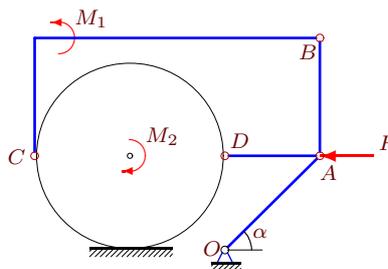
$M_1 = 204, M_2 = 252, R = 7, OA = 6\sqrt{2},$
 $AB = 14, BN = 7, BC = 7\sqrt{2}, CD = 7, \alpha = 45^\circ$

Задача 34.24. Шутов Алексей



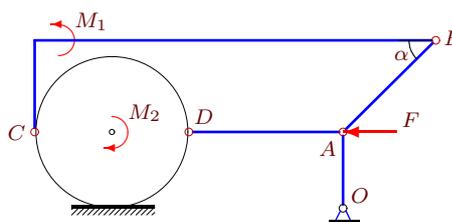
$M_1 = 812, M_2 = 833, R = 6, OA = 7,$
 $AB = 6, BN = BC = 6, CD = 12.$

Задача 34.26. Цогтбаяр Халиунаа



$M_1 = 21, M_2 = 34, R = 4, OA = 4\sqrt{2},$
 $AB = 5, AD = 4, \alpha = 45^\circ.$

Задача 34.28. Циковкин Геннадий



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