

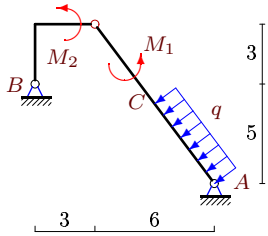
Простая составная рама с распределенной нагрузкой

Конструкция состоит из двух частей, соединенных шарнирно. Определить реакции опор (в кН). Размеры даны в метрах, моменты в кНм, распределенные нагрузки в кН/м.

Кирсанов М.Н. Задачи по теоретической механике с решениями в Maple 11. – М.: ФИЗМАТЛИТ, 2010. — 264 с. (с.15)

Задача S-33.1.

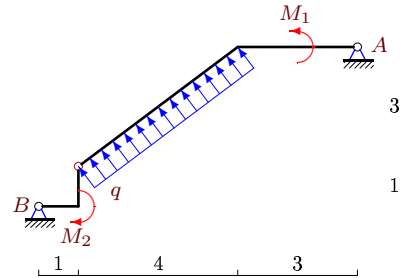
6



$$AC = 5, q = 4, M_1 = 192, M_2 = 72.$$

Задача S-33.2.

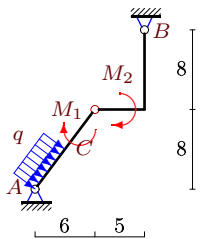
6



$$q = 4, M_1 = 3, M_2 = 21.$$

Задача S-33.3.

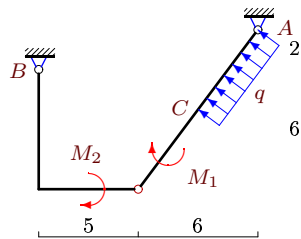
6



$$AC = 5, q = 2, M_1 = 83, M_2 = 90.$$

Задача S-33.4.

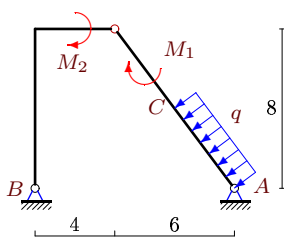
6



$$AC = 5, q = 2, M_1 = 227, M_2 = 58.$$

Задача S-33.5.

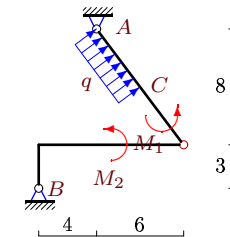
6



$$AC = 5, q = 2, M_1 = 85, M_2 = 200.$$

Задача S-33.6.

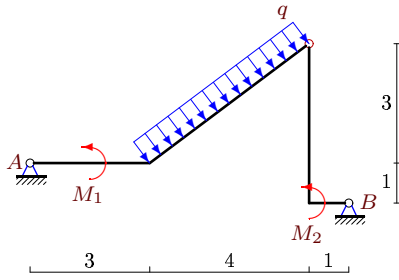
6



$$AC = 5, q = 4, M_1 = 248, M_2 = 26.$$

Задача S-33.7.

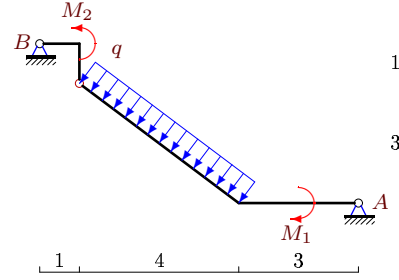
6



$q = 4, M_1 = 3, M_2 = 44.$

Задача S-33.8.

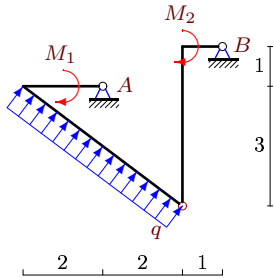
6



$q = 4, M_1 = 3, M_2 = 21.$

Задача S-33.9.

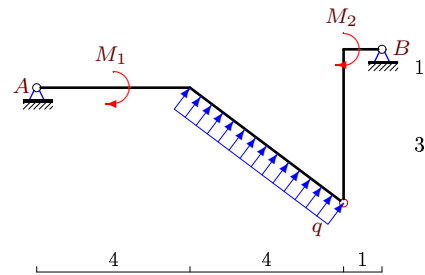
6



$q = 4, M_1 = 3, M_2 = 53.$

Задача S-33.10.

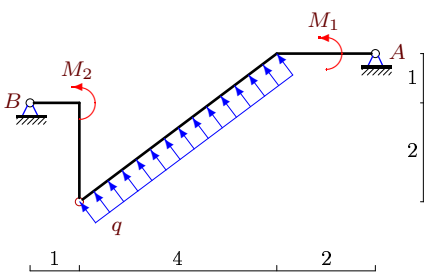
6



$q = 2, M_1 = 2, M_2 = 15.$

Задача S-33.11.

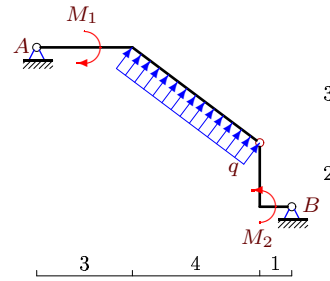
6



$q = 6, M_1 = 3, M_2 = 30.$

Задача S-33.12.

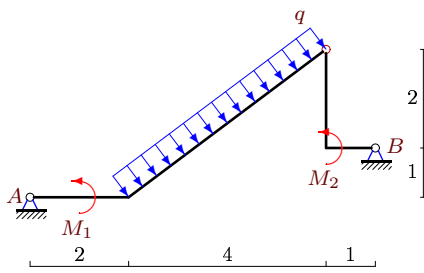
6



$q = 4, M_1 = 2, M_2 = 31.$

Задача S-33.13.

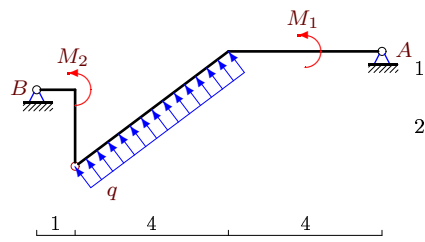
6



$q = 6, M_1 = 3, M_2 = 20.$

Задача S-33.14.

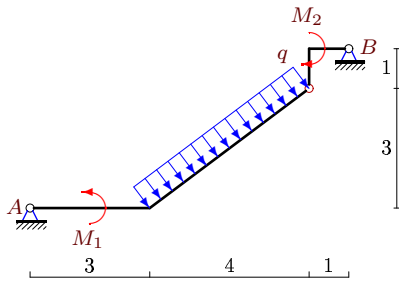
6



$q = 2, M_1 = 7, M_2 = 8.$

Задача S-33.15.

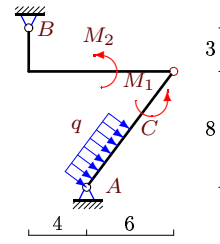
6



$q = 4, M_1 = 7, M_2 = 21.$

Задача S-33.16.

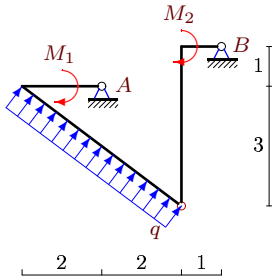
6



$AC = 5, q = 2, M_1 = 23, M_2 = 85.$

Задача S-33.17.

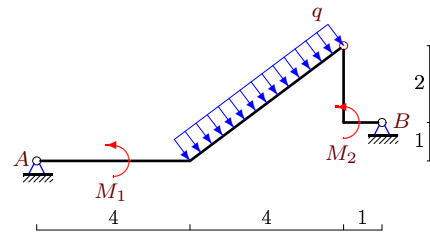
6



$q = 4, M_1 = 3, M_2 = 53.$

Задача S-33.18.

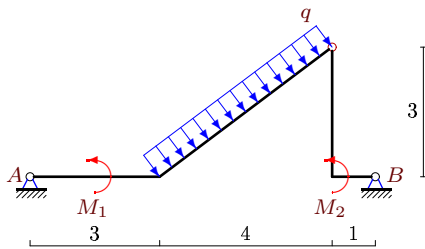
6



$q = 2, M_1 = 4, M_2 = 10.$

Задача S-33.19.

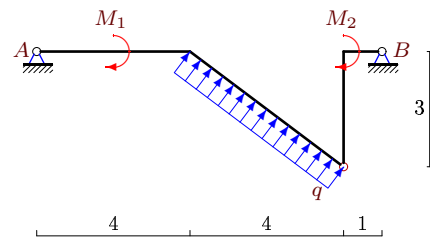
6



$q = 4, M_1 = 7, M_2 = 35.$

Задача S-33.20.

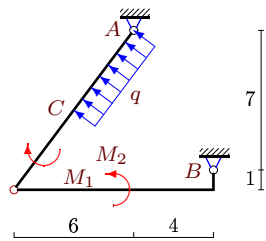
6



$q = 2, M_1 = 4, M_2 = 17.$

Задача S-33.21.

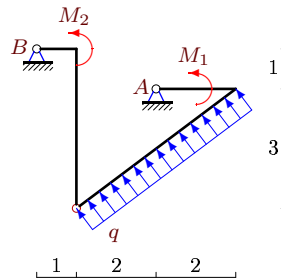
6



$AC = 5, q = 4, M_1 = 76, M_2 = 62.$

Задача S-33.22.

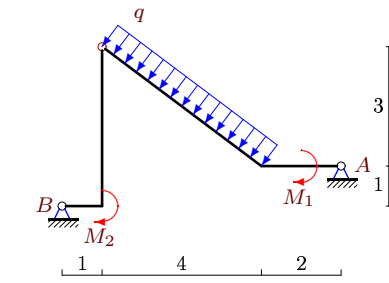
6



$q = 4, M_1 = 3, M_2 = 53.$

Задача S-33.23.

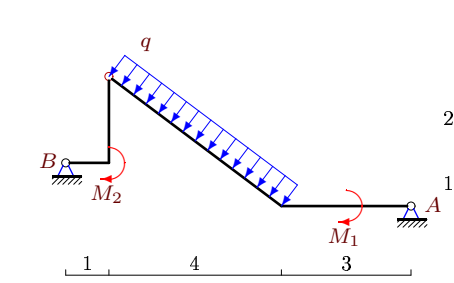
6



$q = 6, M_1 = 6, M_2 = 57.$

Задача S-33.24.

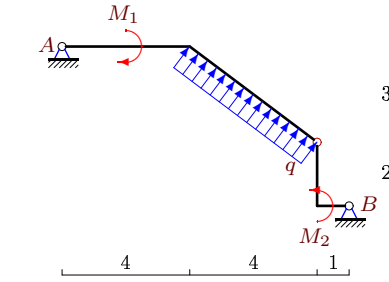
6



$q = 4, M_1 = 2, M_2 = 13.$

Задача S-33.25.

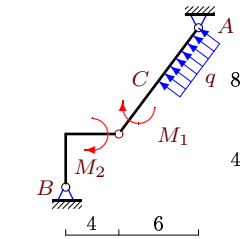
6



$q = 2, M_1 = 5, M_2 = 13.$

Задача S-33.26.

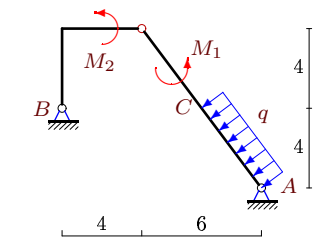
6



$AC = 5, q = 2, M_1 = 71, M_2 = 60.$

Задача S-33.27.

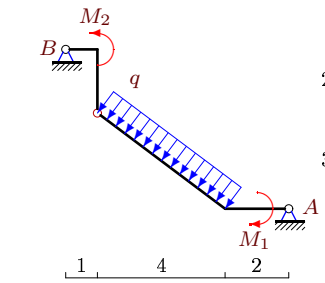
6



$AC = 5, q = 2, M_1 = 19, M_2 = 20.$

Задача S-33.28.

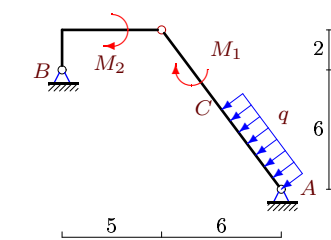
6



$q = 6, M_1 = 3, M_2 = 47.$

Задача S-33.29.

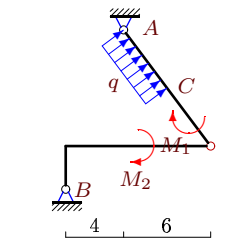
6



$AC = 5, q = 2, M_1 = 29, M_2 = 90.$

Задача S-33.30.

6



$AC = 5, q = 2, M_1 = 23, M_2 = 134.$

S-33

Ответы.

Простая составная рама с распределенной нагрузкой 12.02.2015

№	X_A	Y_A	X_B	Y_B
1	9	-19	7	31
2	-1	-8	13	-8
3	-8	-12	0	18
4	-4	20	12	-26
5	-4	32	12	-26
6	16	-5	-32	-7
7	1	8	-13	8
8	-1	8	13	8
9	-1	-25	-11	9
10	-1	-3	-5	-5
11	-2	-14	20	-10
12	-1	-7	-11	-9
13	-2	12	-16	12
14	0	-4	6	-4
15	2	9	-14	7
16	-13	-1	5	7
17	-1	-25	-11	9
18	1	4	-7	4
19	2	9	-14	7
20	1	-4	-7	-4
21	4	-7	12	-5
22	1	-25	11	9
23	1	13	17	11
24	1	7	11	9
25	-2	-3	-4	-5
26	5	6	3	-12
27	7	0	1	6
28	0	13	18	11
29	-2	20	10	-14
30	-16	5	8	-11

S-33 файл о33s6A