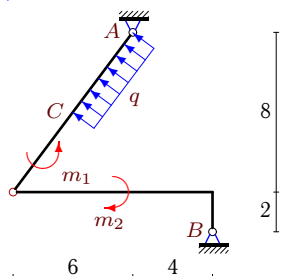


Простая составная рама с распределенной нагрузкой

Конструкция состоит из двух частей, соединенных шарнирно. Определить реакции опор (в кН). Размеры даны в метрах.

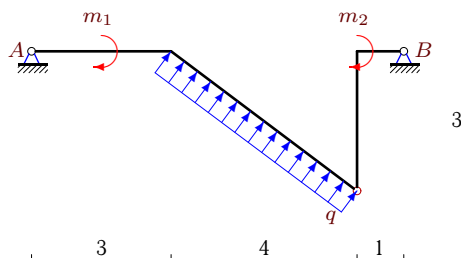
Кирсанов М.Н. Задачи по теоретической механике с решениями в **Maple 11.** – М.: ФИЗМАТЛИТ, 2010. – 264 с. (с.15)

Задача S33.1.



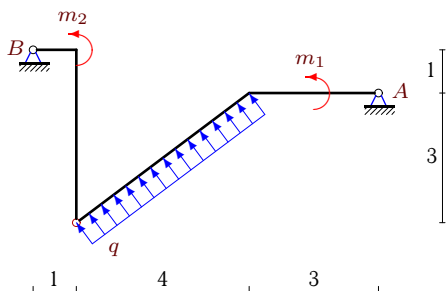
$AC = 5$ м, $q = 2$ кН/м,
 $m_1 = 17$ кНм, $m_2 = 48$ кНм.

Задача S33.2.



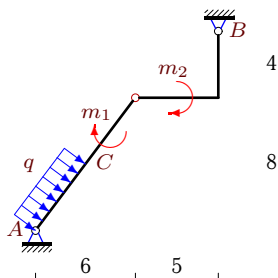
$q = 4$ кН/м, $m_1 = 2$ кНм, $m_2 = 24$ кНм.

Задача S33.3.



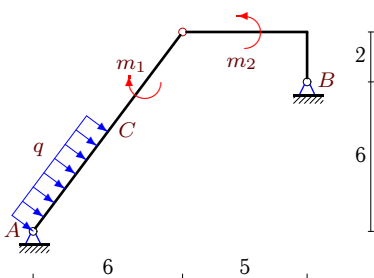
$q = 4$ кН/м, $m_1 = 5$ кНм, $m_2 = 31$ кНм.

Задача S33.4.



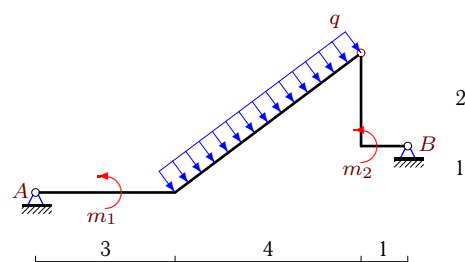
$AC = 5$ м, $q = 2$ кН/м,
 $m_1 = 107$ кНм, $m_2 = 46$ кНм.

Задача S33.5.



$AC = 5$ м, $q = 2$ кН/м,
 $m_1 = 127$ кНм, $m_2 = 38$ кНм.

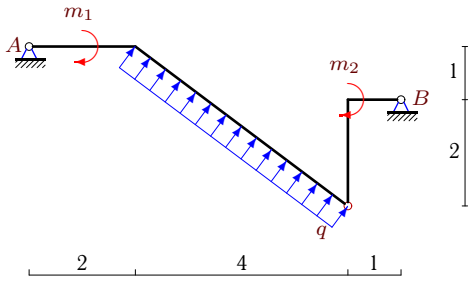
Задача S33.6.



$q = 4$ кН/м, $m_1 = 5$ кНм, $m_2 = 11$ кНм.

Задача S33.7.

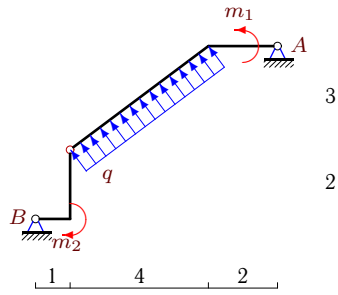
1



$q = 6 \text{ кН/м}$, $m_1 = 3 \text{ кНм}$, $m_2 = 20 \text{ кНм}$.

Задача S33.8.

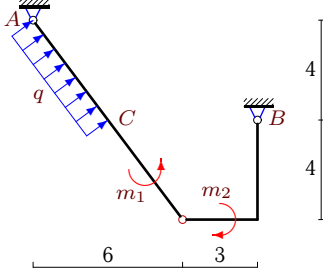
1



$q = 6 \text{ кН/м}$, $m_1 = 6 \text{ кНм}$, $m_2 = 45 \text{ кНм}$.

Задача S33.9.

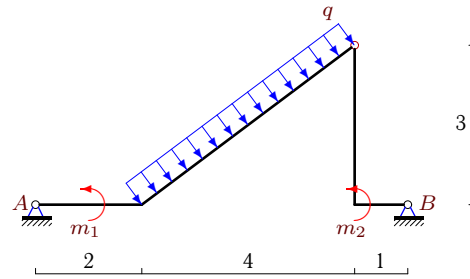
1



$AC = 5 \text{ м}$, $q = 4 \text{ кН/м}$,
 $m_1 = 102 \text{ кНм}$, $m_2 = 124 \text{ кНм}$.

Задача S33.10.

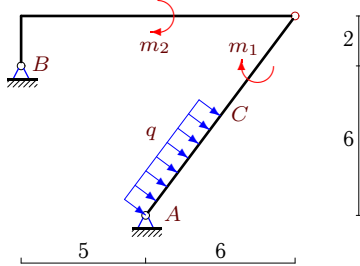
1



$q = 6 \text{ кН/м}$, $m_1 = 6 \text{ кНм}$, $m_2 = 47 \text{ кНм}$.

Задача S33.11.

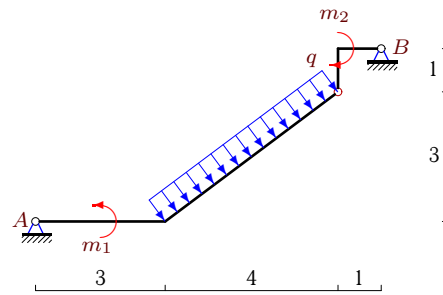
1



$AC = 5 \text{ м}$, $q = 2 \text{ кН/м}$,
 $m_1 = 151 \text{ кНм}$, $m_2 = 70 \text{ кНм}$.

Задача S33.12.

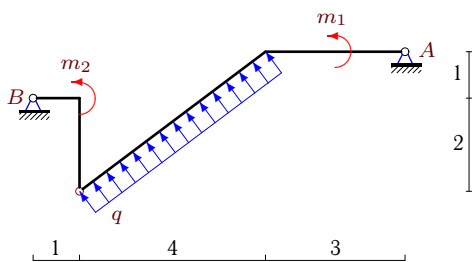
1



$q = 4 \text{ кН/м}$, $m_1 = 7 \text{ кНм}$, $m_2 = 21 \text{ кНм}$.

Задача S33.13.

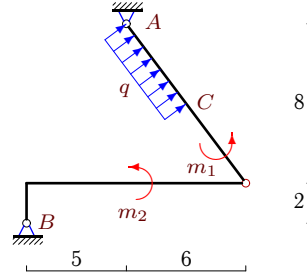
1



$q = 4 \text{ кН/м}$, $m_1 = 2 \text{ кНм}$, $m_2 = 13 \text{ кНм}$.

Задача S33.14.

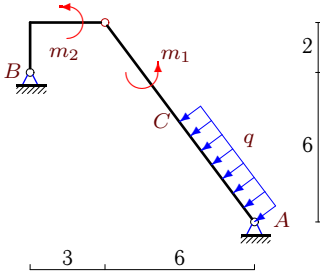
1



$AC = 5 \text{ м}$, $q = 2 \text{ кН/м}$,
 $m_1 = 175 \text{ кНм}$, $m_2 = 150 \text{ кНм}$.

Задача S33.15.

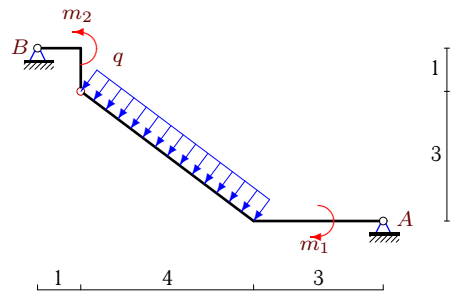
1



$AC = 5 \text{ м}, q = 4 \text{ кН/м},$
 $m_1 = 186 \text{ кНм}, m_2 = 40 \text{ кНм}.$

Задача S33.16.

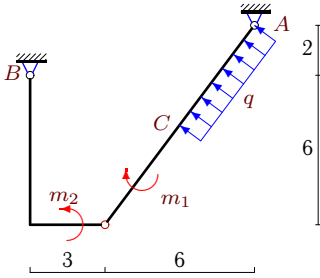
1



$q = 4 \text{ кН/м}, m_1 = 5 \text{ кНм}, m_2 = 19 \text{ кНм}.$

Задача S33.17.

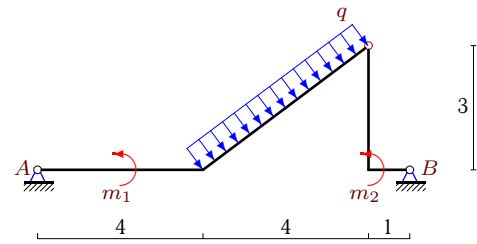
1



$AC = 5 \text{ м}, q = 2 \text{ кН/м},$
 $m_1 = 135 \text{ кНм}, m_2 = 90 \text{ кНм}.$

Задача S33.18.

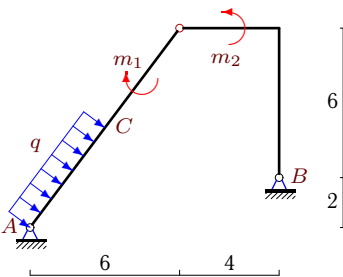
1



$q = 2 \text{ кН/м}, m_1 = 2 \text{ кНм}, m_2 = 10 \text{ кНм}.$

Задача S33.19.

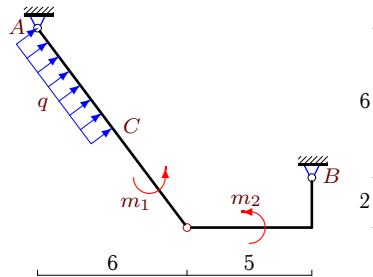
1



$AC = 5 \text{ м}, q = 2 \text{ кН/м},$
 $m_1 = 7 \text{ кНм}, m_2 = 92 \text{ кНм}.$

Задача S33.20.

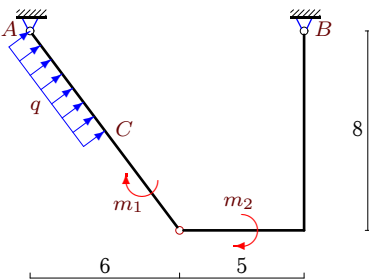
1



$AC = 5 \text{ м}, q = 4 \text{ кН/м},$
 $m_1 = 98 \text{ кНм}, m_2 = 80 \text{ кНм}.$

Задача S33.21.

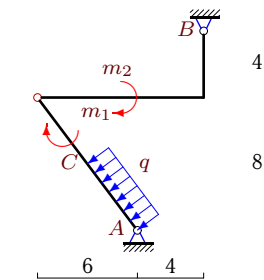
1



$AC = 5 \text{ м}, q = 2 \text{ кН/м},$
 $m_1 = 13 \text{ кНм}, m_2 = 122 \text{ кНм}.$

Задача S33.22.

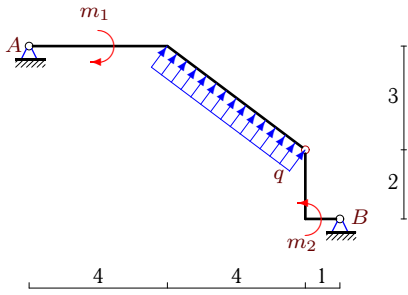
1



$AC = 5 \text{ м}, q = 2 \text{ кН/м},$
 $m_1 = 133 \text{ кНм}, m_2 = 132 \text{ кНм}.$

Задача S33.23.

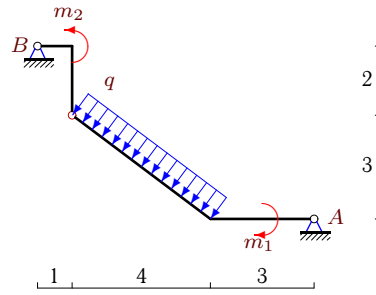
1



$q = 2 \text{ кН/м}, m_1 = 2 \text{ кНм}, m_2 = 15 \text{ кНм}.$

Задача S33.24.

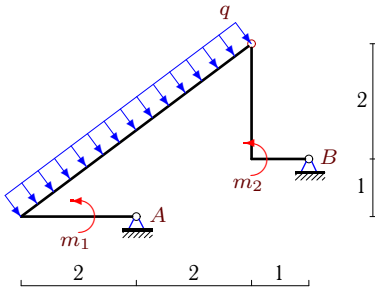
1



$q = 4 \text{ кН/м}, m_1 = 3 \text{ кНм}, m_2 = 34 \text{ кНм}.$

Задача S33.25.

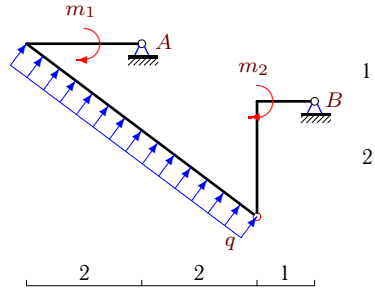
1



$q = 4 \text{ кН/м}, m_1 = 3 \text{ кНм}, m_2 = 31 \text{ кНм}.$

Задача S33.26.

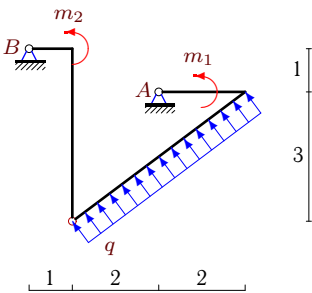
1



$q = 4 \text{ кН/м}, m_1 = 3 \text{ кНм}, m_2 = 38 \text{ кНм}.$

Задача S33.27.

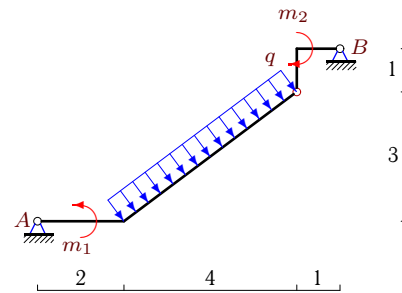
1



$q = 4 \text{ кН/м}, m_1 = 3 \text{ кНм}, m_2 = 53 \text{ кНм}.$

Задача S33.28.

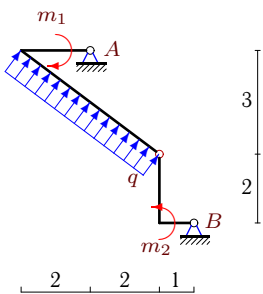
1



$q = 6 \text{ кН/м}, m_1 = 6 \text{ кНм}, m_2 = 29 \text{ кНм}.$

Задача S33.29.

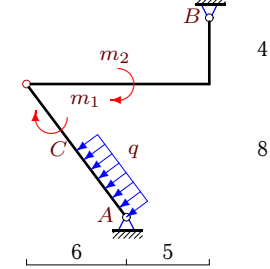
1



$q = 8 \text{ кН/м}, m_1 = 5 \text{ кНм}, m_2 = 27 \text{ кНм}.$

Задача S33.30.

1



$AC = 5 \text{ м}, q = 2 \text{ кН/м},$
 $m_1 = 37 \text{ кНм}, m_2 = 146 \text{ кНм}.$

S33 Ответы.**Простая составная рама с распределенной нагрузкой** 10.06.2011

№	X_A	Y_A	X_B	Y_B
1	4	-10	4	4
2	-1	-7	-11	-9
3	2	-7	10	-9
4	16	16	-24	-10
5	11	6	-19	0
6	-2	7	-10	9
7	-2	-12	-16	-12
8	1	-13	17	-11
9	9	-20	-25	8
10	1	14	-19	10
11	23	18	-31	-12
12	2	9	-14	7
13	1	-7	11	-9
14	23	-14	-31	8
15	3	-10	13	22
16	2	7	10	9
17	-9	-2	17	-4
18	-1	3	-5	5
19	2	14	-10	-8
20	-11	6	-5	-18
21	1	-16	-9	10
22	26	0	-18	6
23	-1	-3	-5	-5
24	-1	8	13	8
25	-1	25	-11	-9
26	1	-28	-13	12
27	1	-25	11	9
28	1	14	-19	10
29	-1	-51	-23	19
30	17	-4	-9	10

S33 файл о33s1A