

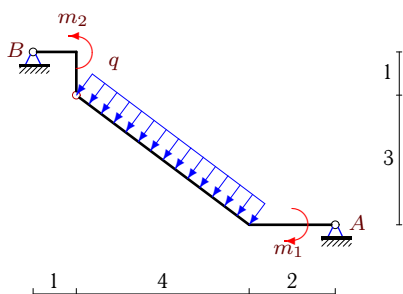
Простая составная рама с распределенной нагрузкой

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.

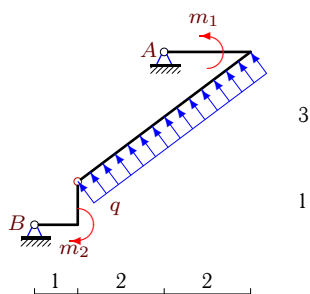
4



$q = 6 \text{ кН/м}$, $m_1 = 3 \text{ кНм}$, $m_2 = 30 \text{ кНм}$.

Задача S33.2.

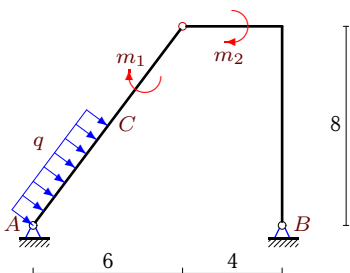
4



$q = 4 \text{ кН/м}$, $m_1 = 3 \text{ кНм}$, $m_2 = 1 \text{ кНм}$.

Задача S33.3.

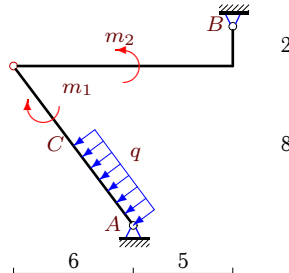
4



$AC = 5 \text{ м}$, $q = 2 \text{ кН/м}$,
 $m_1 = 155 \text{ кНм}$, $m_2 = 40 \text{ кНм}$.

Задача S33.4.

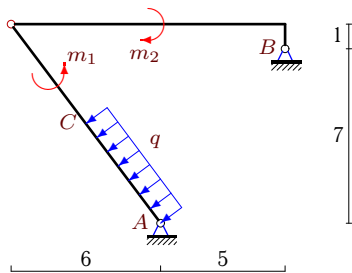
4



$AC = 5 \text{ м}$, $q = 2 \text{ кН/м}$,
 $m_1 = 125 \text{ кНм}$, $m_2 = 150 \text{ кНм}$.

Задача S33.5.

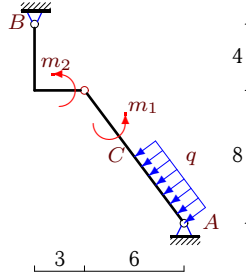
4



$AC = 5 \text{ м}$, $q = 4 \text{ кН/м}$,
 $m_1 = 232 \text{ кНм}$, $m_2 = 312 \text{ кНм}$.

Задача S33.6.

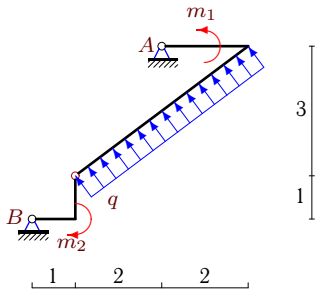
4



$AC = 5 \text{ м}$, $q = 2 \text{ кН/м}$,
 $m_1 = 75 \text{ кНм}$, $m_2 = 50 \text{ кНм}$.

Задача S33.7.

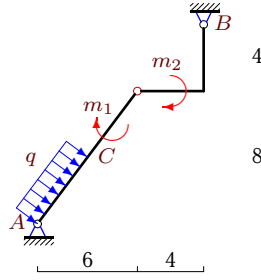
4



$q = 4 \text{ кН/м}$, $m_1 = 3 \text{ кНм}$, $m_2 = 1 \text{ кНм}$.

Задача S33.8.

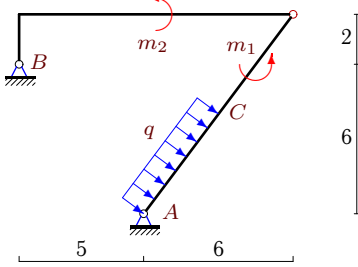
4



$AC = 5 \text{ м}$, $q = 2 \text{ кН/м}$,
 $m_1 = 59 \text{ кНм}$, $m_2 = 40 \text{ кНм}$.

Задача S33.9.

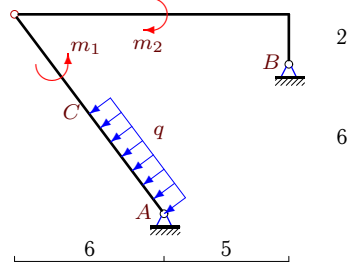
4



$AC = 5 \text{ м}$, $q = 2 \text{ кН/м}$,
 $m_1 = 1 \text{ кНм}$, $m_2 = 120 \text{ кНм}$.

Задача S33.10.

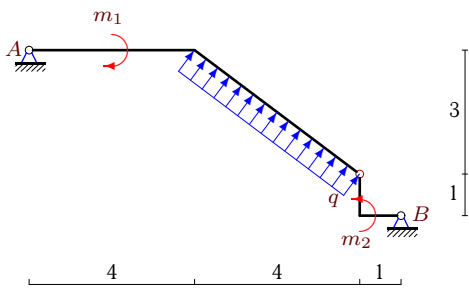
4



$AC = 5 \text{ м}$, $q = 2 \text{ кН/м}$,
 $m_1 = 151 \text{ кНм}$, $m_2 = 158 \text{ кНм}$.

Задача S33.11.

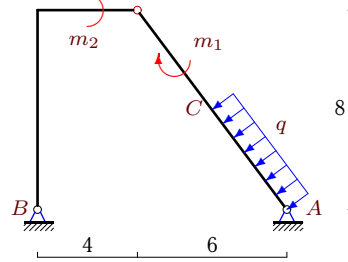
4



$q = 2 \text{ кН/м}$, $m_1 = 7 \text{ кНм}$, $m_2 = 10 \text{ кНм}$.

Задача S33.12.

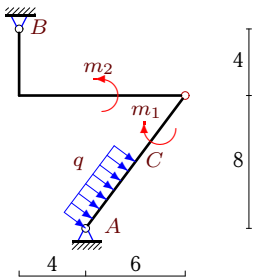
4



$AC = 5 \text{ м}$, $q = 2 \text{ кН/м}$,
 $m_1 = 85 \text{ кНм}$, $m_2 = 120 \text{ кНм}$.

Задача S33.13.

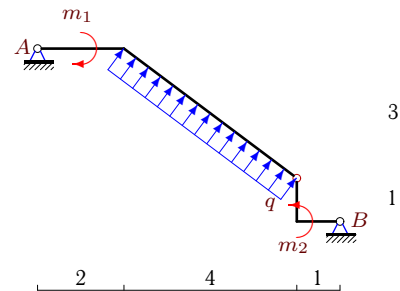
4



$AC = 5 \text{ м}$, $q = 2 \text{ кН/м}$,
 $m_1 = 179 \text{ кНм}$, $m_2 = 80 \text{ кНм}$.

Задача S33.14.

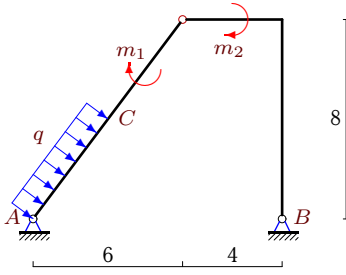
4



$q = 6 \text{ кН/м}$, $m_1 = 3 \text{ кНм}$, $m_2 = 28 \text{ кНм}$.

Задача S33.15.

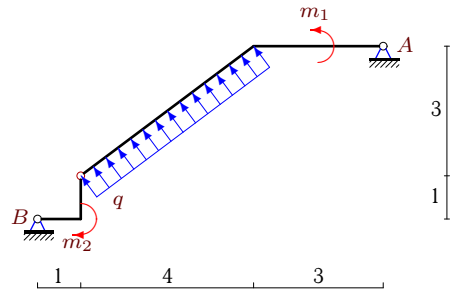
4



$AC = 5 \text{ м}$, $q = 2 \text{ кН/м}$,
 $m_1 = 235 \text{ кНм}$, $m_2 = 120 \text{ кНм}$.

Задача S33.16.

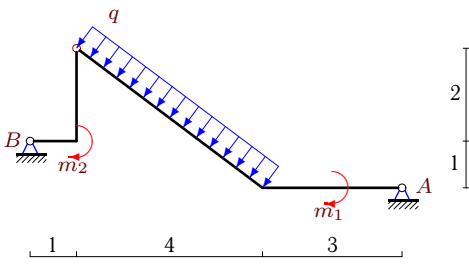
4



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

Задача S33.17.

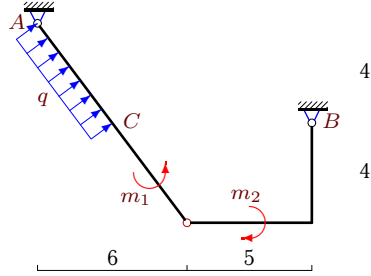
4



$q = 4 \text{ кН/м}$, $m_1 = 3 \text{ кНм}$, $m_2 = 18 \text{ кНм}$.

Задача S33.18.

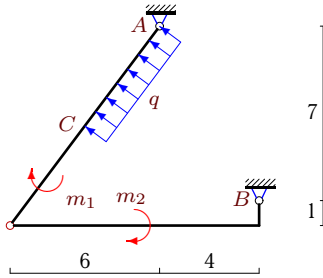
4



$AC = 5 \text{ м}$, $q = 2 \text{ кН/м}$,
 $m_1 = 11 \text{ кНм}$, $m_2 = 130 \text{ кНм}$.

Задача S33.19.

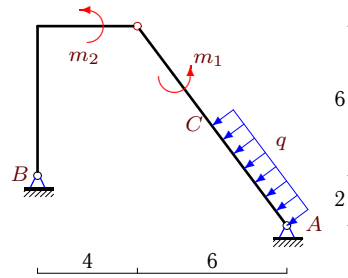
4



$AC = 5 \text{ м}$, $q = 2 \text{ кН/м}$,
 $m_1 = 149 \text{ кНм}$, $m_2 = 6 \text{ кНм}$.

Задача S33.20.

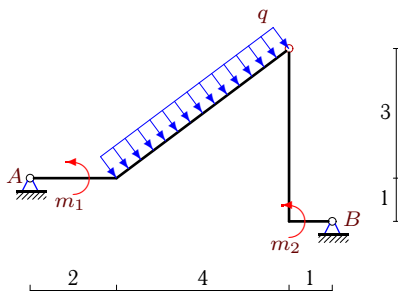
4



$AC = 5 \text{ м}$, $q = 2 \text{ кН/м}$,
 $m_1 = 143 \text{ кНм}$, $m_2 = 44 \text{ кНм}$.

Задача S33.21.

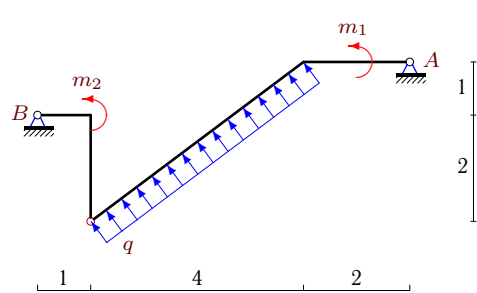
4



$q = 6 \text{ кН/м}$, $m_1 = 3 \text{ кНм}$, $m_2 = 52 \text{ кНм}$.

Задача S33.22.

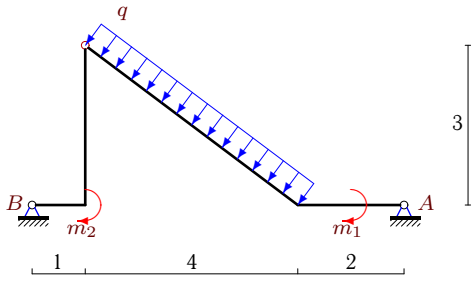
4



$q = 6 \text{ кН/м}$, $m_1 = 6 \text{ кНм}$, $m_2 = 28 \text{ кНм}$.

Задача S33.23.

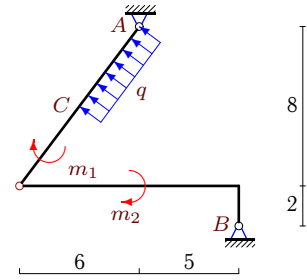
4



$q = 6 \text{ кН/м}$, $m_1 = 3 \text{ кНм}$, $m_2 = 36 \text{ кНм}$.

Задача S33.24.

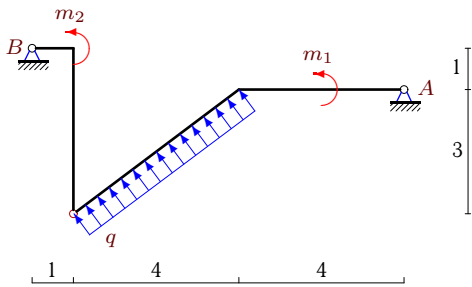
4



$AC = 5 \text{ м}$, $q = 2 \text{ кН/м}$,
 $m_1 = 175 \text{ кНм}$, $m_2 = 50 \text{ кНм}$.

Задача S33.25.

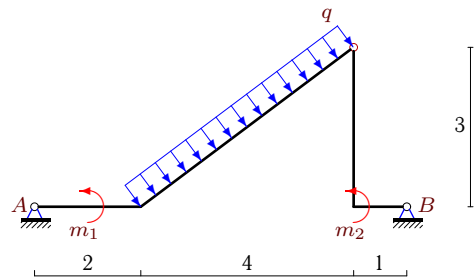
4



$q = 2 \text{ кН/м}$, $m_1 = 5 \text{ кНм}$, $m_2 = 11 \text{ кНм}$.

Задача S33.26.

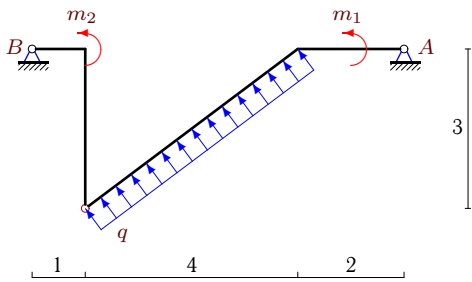
4



$q = 6 \text{ кН/м}$, $m_1 = 3 \text{ кНм}$, $m_2 = 43 \text{ кНм}$.

Задача S33.27.

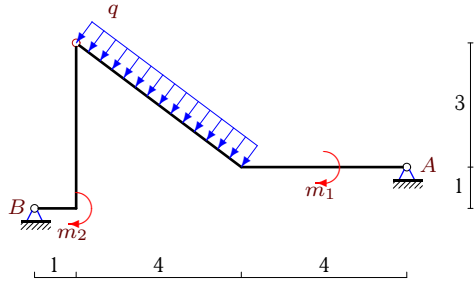
4



$q = 6 \text{ кН/м}$, $m_1 = 6 \text{ кНм}$, $m_2 = 40 \text{ кНм}$.

Задача S33.28.

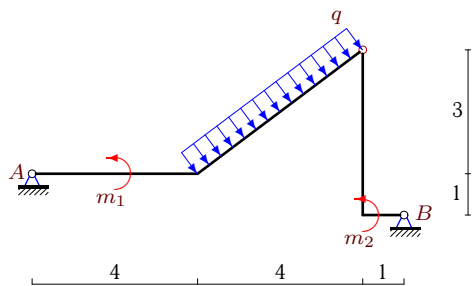
4



$q = 2 \text{ кН/м}$, $m_1 = 5 \text{ кНм}$, $m_2 = 11 \text{ кНм}$.

Задача S33.29.

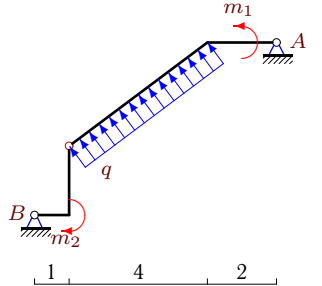
4



$q = 2 \text{ кН/м}$, $m_1 = 5 \text{ кНм}$, $m_2 = 11 \text{ кНм}$.

Задача S33.30.

4



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

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

№	X_A	Y_A	X_B	Y_B
1	-2	14	20	10
2	-1	-28	13	12
3	-2	-16	-6	22
4	10	20	-2	-14
5	1	-15	15	27
6	6	-8	2	14
7	-1	-28	13	12
8	4	8	-12	-2
9	-14	-6	6	12
10	-5	-6	13	12
11	0	-4	-6	-4
12	20	0	-12	6
13	7	-8	-15	14
14	-2	-12	-16	-12
15	-4	-32	-4	38
16	-2	-9	14	-7
17	-1	8	13	8
18	7	-20	-15	14
19	-16	-9	24	3
20	2	-14	6	20
21	-2	12	-16	12
22	-1	-14	19	-10
23	2	12	16	12
24	-17	-6	25	0
25	2	-3	4	-5
26	0	13	-18	11
27	1	-13	17	-11
28	2	3	4	5
29	-2	3	-4	5
30	1	-13	17	-11

S33 файл о33s4A