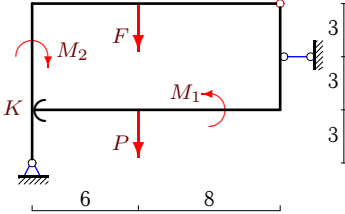


Система с односторонней связью

Рама, состоящая из двух частей, содержит одностороннюю связь (гладкая опора в точке K). Размеры на рисунке даны в метрах. Для каких значений силы F система находится в положении равновесия?

Задача S-37.1.

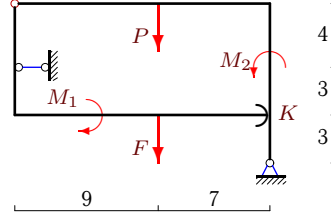
4



$$P = 6 \text{ кН}, M_1 = 5 \text{ кНм}, M_2 = 15 \text{ кНм}.$$

Задача S-37.2.

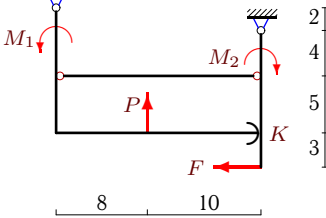
4



$$P = 13 \text{ кН}, M_1 = 10 \text{ кНм}, M_2 = 25 \text{ кНм}.$$

Задача S-37.3.

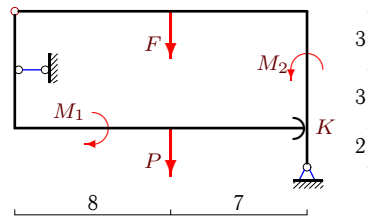
4



$$P = 18 \text{ кН}, M_1 = 9 \text{ кНм}, M_2 = 6 \text{ кНм}.$$

Задача S-37.4.

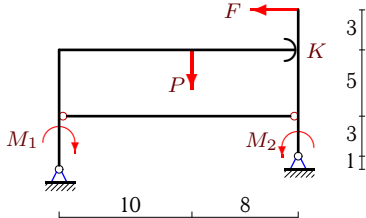
4



$$P = 21 \text{ кН}, M_1 = 15 \text{ кНм}, M_2 = 40 \text{ кНм}.$$

Задача S-37.5.

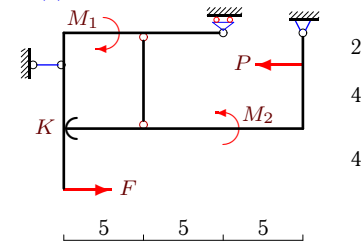
4



$$P = 44 \text{ кН}, M_1 = 28 \text{ кНм}, M_2 = 21 \text{ кНм}.$$

Задача S-37.6.

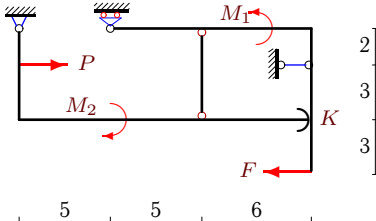
4



$$P = 8 \text{ кН}, M_1 = 3 \text{ кНм}, M_2 = 6 \text{ кНм}.$$

Задача S-37.7.

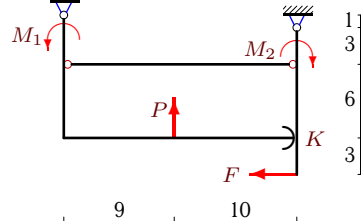
4



$$P = 6 \text{ кН}, M_1 = 2 \text{ кНм}, M_2 = 4 \text{ кНм}.$$

Задача S-37.8.

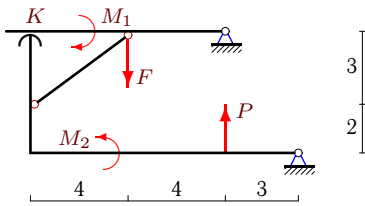
4



$$P = 48 \text{ кН}, M_1 = 20 \text{ кНм}, M_2 = 15 \text{ кНм}.$$

Задача S-37.9.

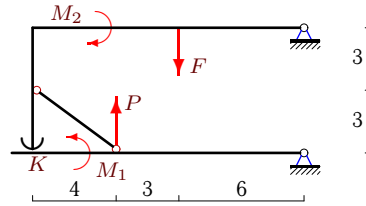
4



$P = 82 \text{ кН}, M_1 = 12 \text{ кНм}, M_2 = 41 \text{ кНм}.$

Задача S-37.10.

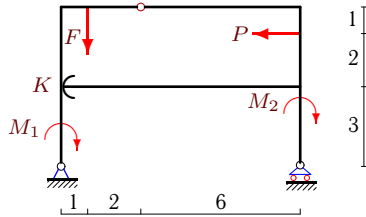
4



$P = 6 \text{ кН}, M_1 = 9 \text{ кНм}, M_2 = 17 \text{ кНм}.$

Задача S-37.11.

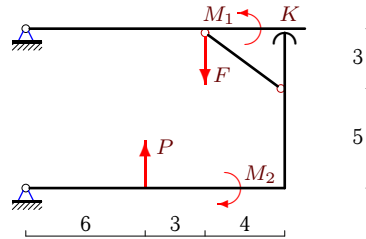
4



$P = 2 \text{ кН}, M_1 = 3 \text{ кНм}, M_2 = 6 \text{ кНм}.$

Задача S-37.12.

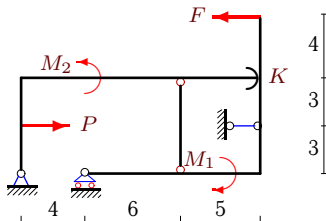
4



$P = 59 \text{ кН}, M_1 = 54 \text{ кНм}, M_2 = 118 \text{ кНм}.$

Задача S-37.13.

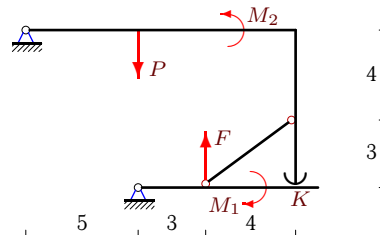
4



$P = 35 \text{ кН}, M_1 = 12 \text{ кНм}, M_2 = 20 \text{ кНм}.$

Задача S-37.14.

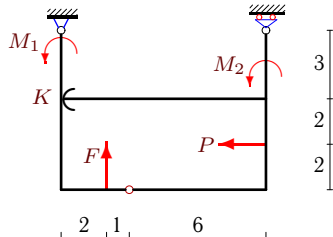
4



$P = 52 \text{ кН}, M_1 = 9 \text{ кНм}, M_2 = 52 \text{ кНм}.$

Задача S-37.15.

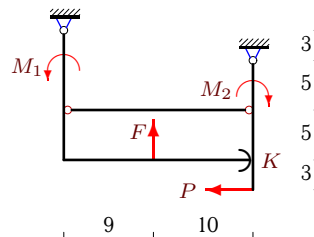
4



$P = 2 \text{ кН}, M_1 = 3 \text{ кНм}, M_2 = 6 \text{ кНм}.$

Задача S-37.16.

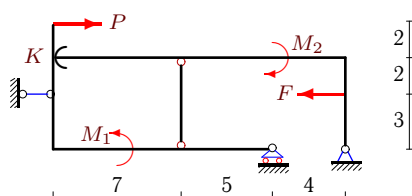
4



$P = 45 \text{ кН}, M_1 = 32 \text{ кНм}, M_2 = 20 \text{ кНм}.$

Задача S-37.17.

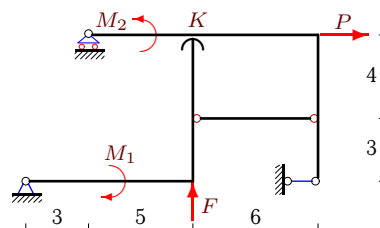
4



$P = 15 \text{ кН}, M_1 = 25 \text{ кНм}, M_2 = 45 \text{ кНм}.$

Задача S-37.18.

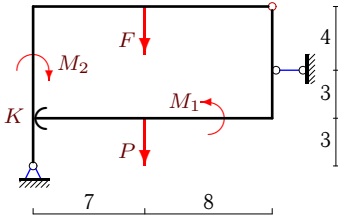
4



$P = 8 \text{ кН}, M_1 = M_2 = 18 \text{ кНм}.$

Задача S-37.19.

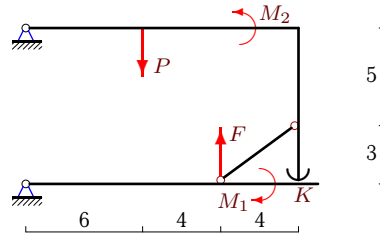
4



$P = 7 \text{ кН}, M_1 = 2 \text{ кНм}, M_2 = 5 \text{ кНм}.$

Задача S-37.20.

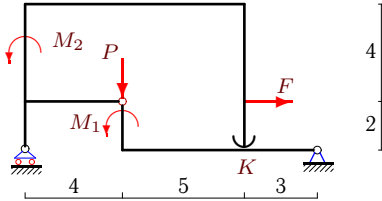
4



$P = 31 \text{ кН}, M_1 = 30 \text{ кНм}, M_2 = 62 \text{ кНм}.$

Задача S-37.21.

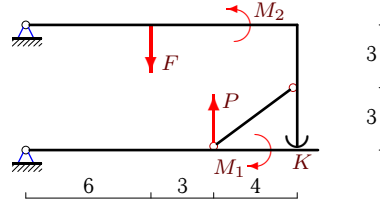
4



$P = 4 \text{ кН}, M_1 = 18 \text{ кНм}, M_2 = 9 \text{ кНм}.$

Задача S-37.22.

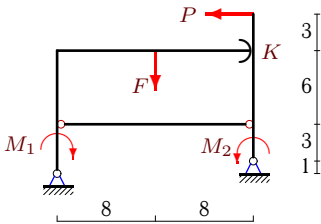
4



$P = 6 \text{ кН}, M_1 = 9 \text{ кНм}, M_2 = 17 \text{ кНм}.$

Задача S-37.23.

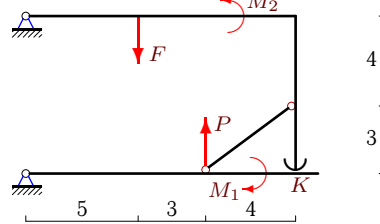
4



$P = 24 \text{ кН}, M_1 = 4 \text{ кНм}, M_2 = 3 \text{ кНм}.$

Задача S-37.24.

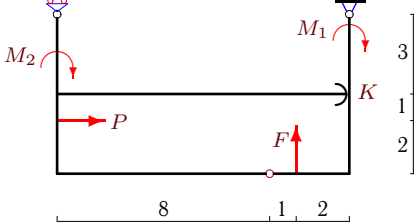
4



$P = 15 \text{ кН}, M_1 = 24 \text{ кНм}, M_2 = 52 \text{ кНм}.$

Задача S-37.25.

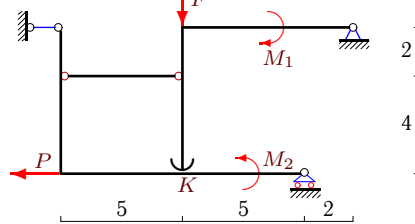
4



$P = 8 \text{ кН}, M_1 = 9 \text{ кНм}, M_2 = 24 \text{ кНм}.$

Задача S-37.26.

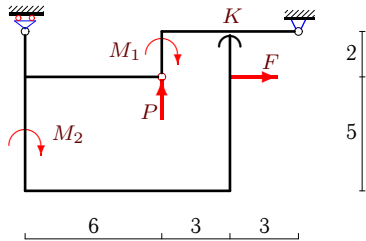
4



$P = 7 \text{ кН}, M_1 = M_2 = 22 \text{ кНм}.$

Задача S-37.27.

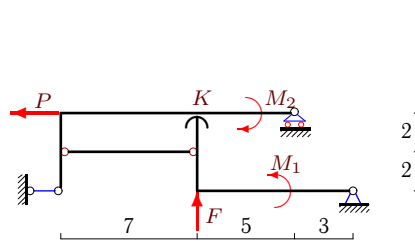
4



$P = 12 \text{ кН}, M_1 = 27 \text{ кНм}, M_2 = 27 \text{ кНм}.$

Задача S-37.28.

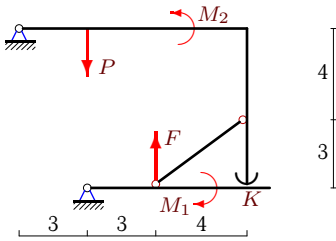
4



$P = 8 \text{ кН}, M_1 = M_2 = 21 \text{ кНм}.$

Задача S-37.29.

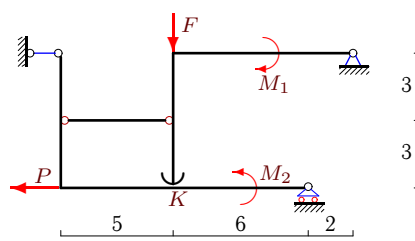
4



$P = 46 \text{ кН}, M_1 = 9 \text{ кНм}, M_2 = 46 \text{ кНм}.$

Задача S-37.30.

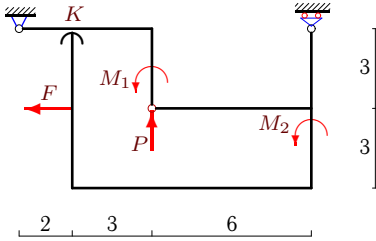
4



$P = 4 \text{ кН}, M_1 = M_2 = 8 \text{ кНм}.$

Задача S-37.31.

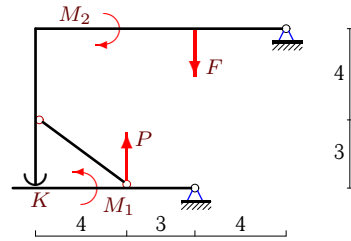
4



$P = 5 \text{ кН}, M_1 = 10 \text{ кНм}, M_2 = 12 \text{ кНм}.$

Задача S-37.32.

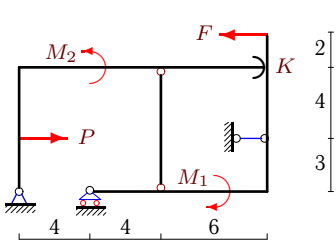
4



$P = 12 \text{ кН}, M_1 = 9 \text{ кНм}, M_2 = 49 \text{ кНм}.$

Задача S-37.33.

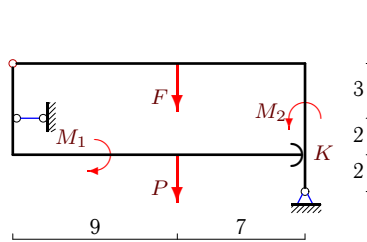
4



$P = 12 \text{ кН}, M_1 = 5 \text{ кНм}, M_2 = 10 \text{ кНм}.$

Задача S-37.34.

4



$P = 7 \text{ кН}, M_1 = 3 \text{ кНм}, M_2 = 7 \text{ кНм}.$

S-37

Ответы.

Система с односторонней связью

13.03.2014

№	F
1	$F > 10$ кН
2	$F < 14$ кН
3	$F > 8$ кН
4	$F > 19$ кН
5	$F > 30$ кН
6	$F > 1$ кН
7	$F > 1$ кН
8	$F > 27$ кН
9	$F > 18$ кН
10	$F < 17$ кН
11	$F < 13$ кН
12	$F > 18$ кН
13	$F > 9$ кН
14	$F > 15$ кН
15	$F < 8$ кН
16	$F < 104$ кН
17	$F < 36$ кН
18	$F > 7$ кН
19	$F > 5$ кН
20	$F > 9$ кН
21	$F < 1$ кН
22	$F < 17$ кН
23	$F < 48$ кН
24	$F < 52$ кН
25	$F < 27$ кН
26	$F > 6$ кН
27	$F < 4$ кН
28	$F > 4$ кН
29	$F > 9$ кН
30	$F > 3$ кН
31	$F < 3$ кН
32	$F < 49$ кН
33	$F > 3$ кН
34	$F > 5$ кН

S-37 файл о37s4A