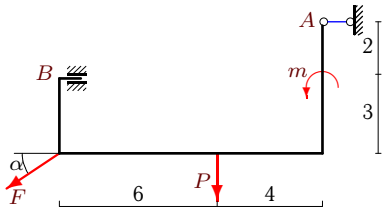


Равновесие рамы

Определить реакции опор рамы; $\cos \alpha = 0.8$.

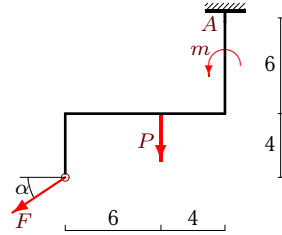
Кирсанов М.Н. **Решебник. Теоретическая механика**/Под ред. А. И. Кириллова.- М.:ФИЗМАТЛИТ, 2008.- 384 с. (с.67.)

Задача 29.1.



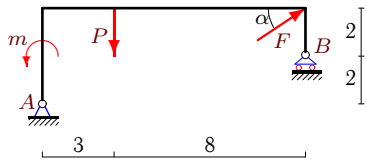
$F = 40 \text{ кН}, P = 4 \text{ кН}, m = 5 \text{ кНм}.$

Задача 29.2.



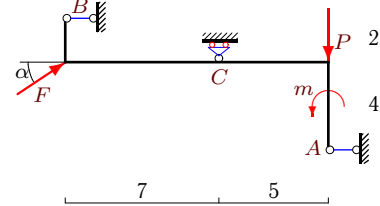
$F = 30 \text{ кН}, P = 3 \text{ кН}, m = 5 \text{ кНм}.$

Задача 29.3.



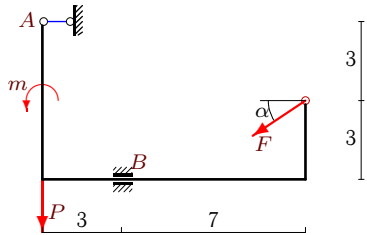
$F = 55 \text{ кН}, P = 2 \text{ кН}, m = 6 \text{ кНм}.$

Задача 29.4.



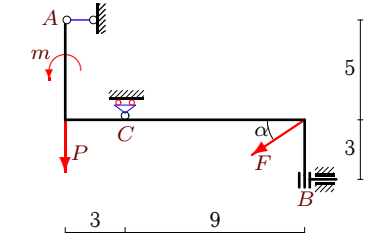
$F = 30 \text{ кН}, P = 4 \text{ кН}, m = 20 \text{ кНм}.$

Задача 29.5.



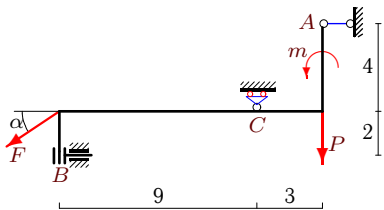
$F = 60 \text{ кН}, P = 12 \text{ кН}, m = 7 \text{ кНм}.$

Задача 29.6.



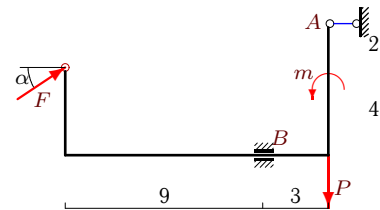
$F = 30 \text{ кН}, P = 3 \text{ кН}, m = 23 \text{ кНм}.$

Задача 29.7.



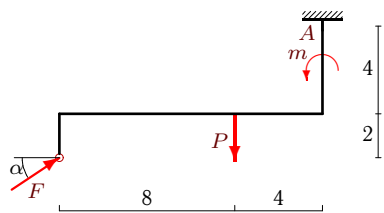
$F = 25 \text{ кН}, P = 4 \text{ кН}, m = 22 \text{ кНм}.$

Задача 29.8.



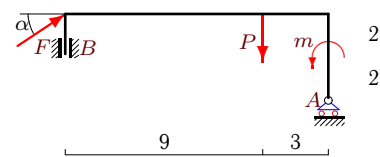
$F = 25 \text{ кН}, P = 66 \text{ кН}, m = 21 \text{ кНм}.$

Задача 29.9.



$F = 10 \text{ кН}, P = 3 \text{ кН}, m = 7 \text{ кНм}.$

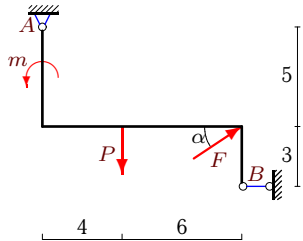
Задача 29.10.



$F = 5 \text{ кН}, P = 2 \text{ кН}, m = 7 \text{ кНм}.$

Задача 29.11.

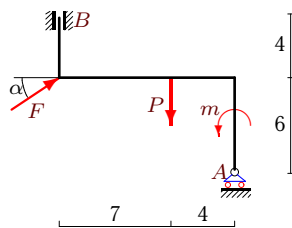
5



$F = 80 \text{ кН}, P = 3 \text{ кН}, m = 12 \text{ кНм}.$

Задача 29.12.

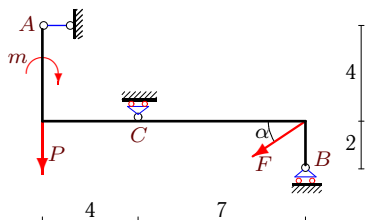
5



$F = 5 \text{ кН}, P = 1 \text{ кН}, m = 7 \text{ кНм}.$

Задача 29.13.

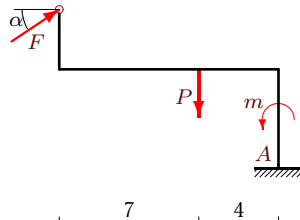
5



$F = 35 \text{ кН}, P = 2 \text{ кН}, m = 8 \text{ кНм}.$

Задача 29.14.

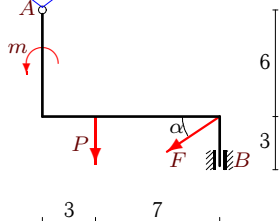
5



$F = 15 \text{ кН}, P = 2 \text{ кН}, m = 6 \text{ кНм}.$

Задача 29.15.

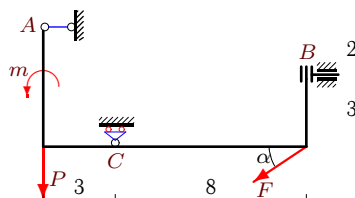
5



$F = 15 \text{ кН}, P = 3 \text{ кН}, m = 5 \text{ кНм}.$

Задача 29.16.

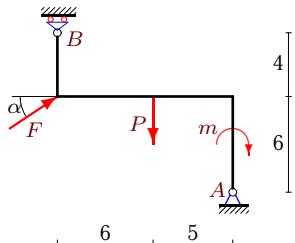
5



$F = 25 \text{ кН}, P = 1 \text{ кН}, m = 8 \text{ кНм}.$

Задача 29.17.

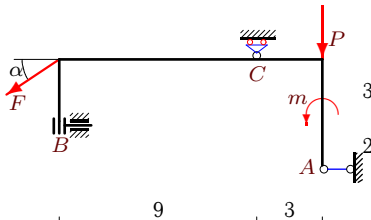
5



$F = 110 \text{ кН}, P = 3 \text{ кН}, m = 15 \text{ кНм}.$

Задача 29.18.

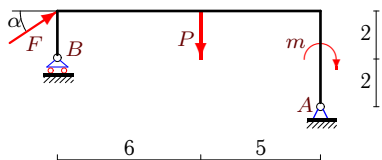
5



$F = 30 \text{ кН}, P = 3 \text{ кН}, m = 23 \text{ кНм}.$

Задача 29.19.

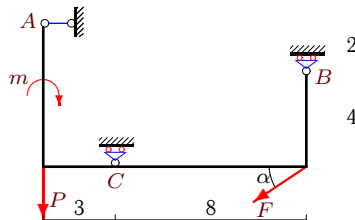
5



$F = 55 \text{ кН}, P = 6 \text{ кН}, m = 30 \text{ кНм}.$

Задача 29.20.

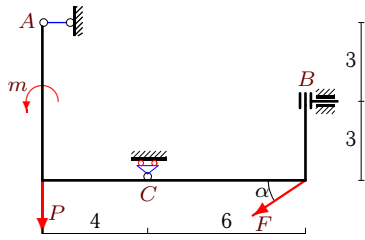
5



$F = 80 \text{ кН}, P = 1 \text{ кН}, m = 3 \text{ кНм}.$

Задача 29.21.

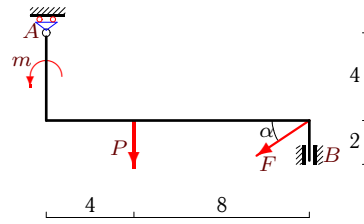
5



$F = 35 \text{ кН}, P = 4 \text{ кН}, m = 10 \text{ кНм}.$

Задача 29.22.

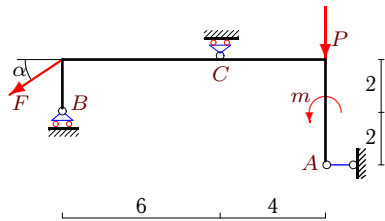
5



$F = 15 \text{ кН}, P = 5 \text{ кН}, m = 7 \text{ кНм}.$

Задача 29.23.

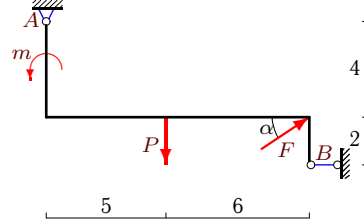
5



$F = 30 \text{ кН}, P = 3 \text{ кН}, m = 12 \text{ кНм}.$

Задача 29.24.

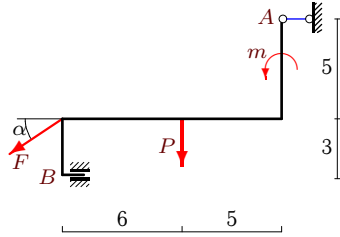
5



$F = 60 \text{ кН}, P = 5 \text{ кН}, m = 25 \text{ кНм}.$

Задача 29.25.

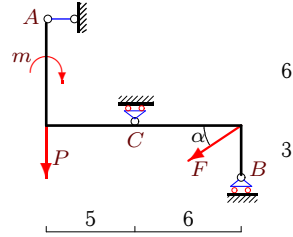
5



$F = 35 \text{ кН}, P = 2 \text{ кН}, m = 4 \text{ кНм}.$

Задача 29.26.

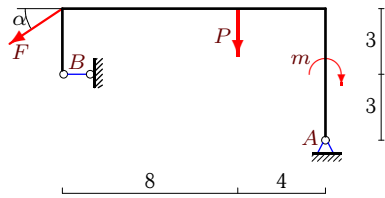
5



$F = 15 \text{ кН}, P = 1 \text{ кН}, m = 5 \text{ кНм}.$

Задача 29.27.

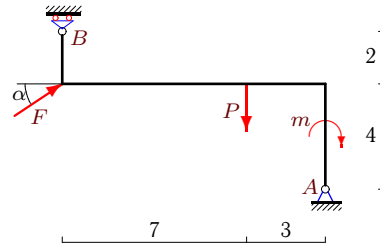
5



$F = 15 \text{ кН}, P = 4 \text{ кН}, m = 16 \text{ кНм}.$

Задача 29.28.

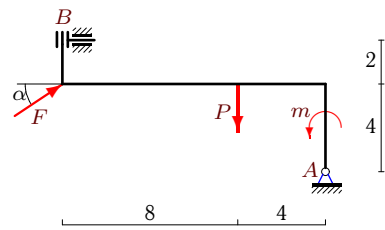
5



$F = 25 \text{ кН}, P = 2 \text{ кН}, m = 6 \text{ кНм}.$

Задача 29.29.

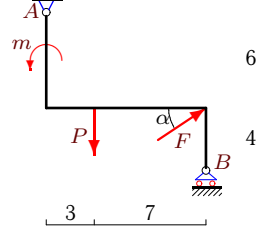
5



$F = 25 \text{ кН}, P = 3 \text{ кН}, m = 16 \text{ кНм}.$

Задача 29.30.

5



$F = 50 \text{ кН}, P = 11 \text{ кН}, m = 33 \text{ кНм}.$

Равновесие рамы

№	X_A	Y_A	M_A	X_B	Y_B	M_B	Y_C
1	32	—	—	—	28	179	—
2	24	21	43	—	—	—	—
3	-44	-14	—	—	-17	—	—
4	13	—	—	-37	—	—	-14
5	48	—	—	—	48	353	—
6	24	—	—	—	—	250	21
7	20	—	—	—	—	-65	19
8	-20	—	—	—	51	272	—
9	-8	-3	5	—	—	—	—
10	—	-1	—	-4	—	31	—
11	36	-45	—	-100	—	—	—
12	—	-2	—	-4	—	6	—
13	28	—	—	—	37	—	-14
14	-12	-7	181	—	—	—	—
15	—	12	—	12	—	58	—
16	20	—	—	—	—	209	16
17	-88	51	—	—	-114	—	—
18	24	—	—	—	—	-296	21
19	-44	22	—	—	-49	—	—
20	64	—	—	—	96	—	-47
21	28	—	—	—	—	268	25
22	—	14	—	12	—	97	—
23	24	—	—	—	34	—	-13
24	50	-31	—	-98	—	—	—
25	28	—	—	—	23	148	—
26	12	—	—	—	21	—	-11
27	-48	13	—	60	—	—	—
28	-20	10	—	—	-23	—	—
29	-20	-12	—	—	—	232	—
30	-40	35	—	—	-54	—	—