

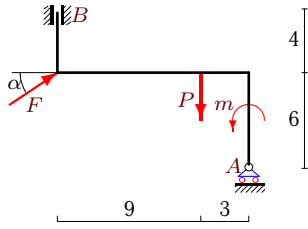
Равновесие рамы

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.

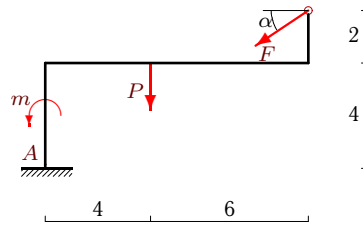
3



$F = 5 \text{ кН}, P = 11 \text{ кН}, m = 9 \text{ кНм}.$

Задача 29.2.

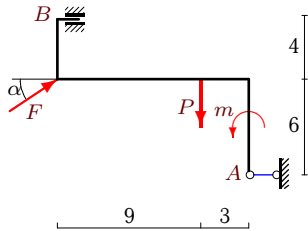
3



$F = 20 \text{ кН}, P = 5 \text{ кН}, m = 3 \text{ кНм}.$

Задача 29.3.

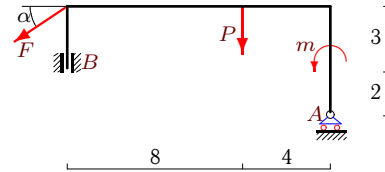
3



$F = 35 \text{ кН}, P = 11 \text{ кН}, m = 12 \text{ кНм}.$

Задача 29.4.

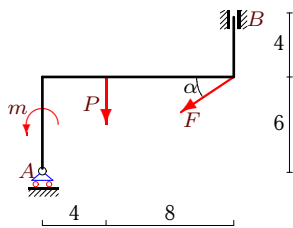
3



$F = 20 \text{ кН}, P = 3 \text{ кН}, m = 8 \text{ кНм}.$

Задача 29.5.

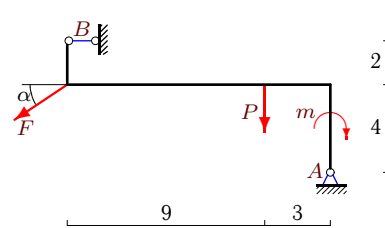
3



$F = 5 \text{ кН}, P = 1 \text{ кН}, m = 3 \text{ кНм}.$

Задача 29.6.

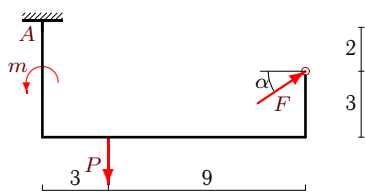
3



$F = 60 \text{ кН}, P = 3 \text{ кН}, m = 9 \text{ кНм}.$

Задача 29.7.

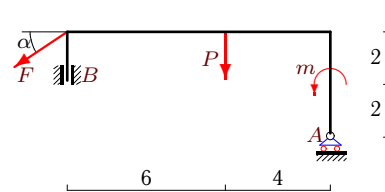
3



$F = 15 \text{ кН}, P = 1 \text{ кН}, m = 8 \text{ кНм}.$

Задача 29.8.

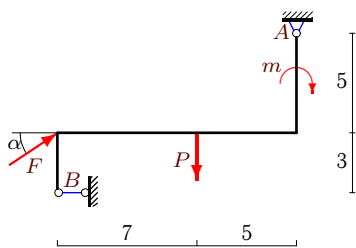
3



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

Задача 29.9.

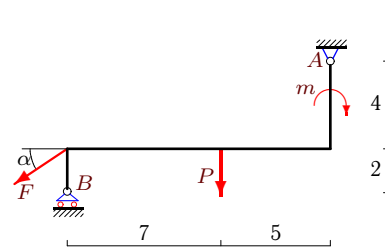
3



$F = 40 \text{ кН}, P = 5 \text{ кН}, m = 25 \text{ кНм}.$

Задача 29.10.

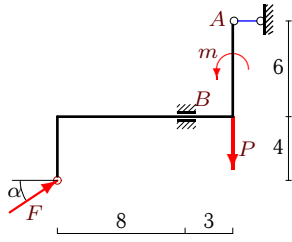
3



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

Задача 29.11.

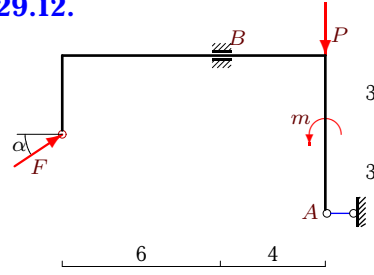
3



$F = 25 \text{ кН}, P = 66 \text{ кН}, m = 14 \text{ кНм}.$

Задача 29.12.

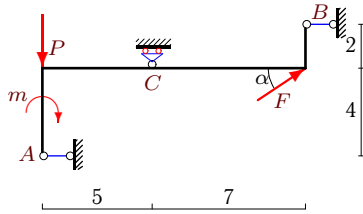
3



$F = 25 \text{ кН}, P = 12 \text{ кН}, m = 7 \text{ кНм}.$

Задача 29.13.

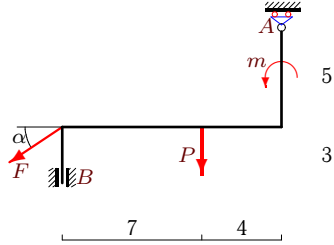
3



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

Задача 29.14.

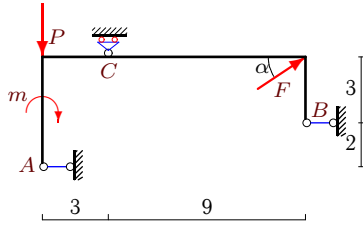
3



$F = 15 \text{ кН}, P = 4 \text{ кН}, m = 6 \text{ кНм}.$

Задача 29.15.

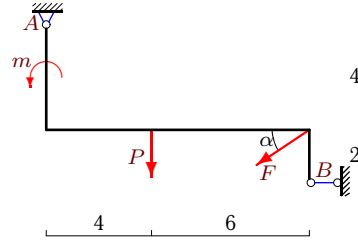
3



$F = 10 \text{ кН}, P = 1 \text{ кН}, m = 3 \text{ кНм}.$

Задача 29.16.

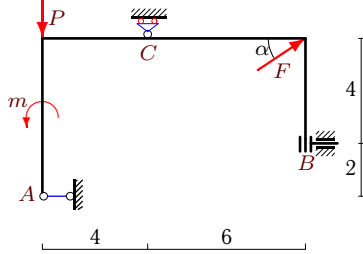
3



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

Задача 29.17.

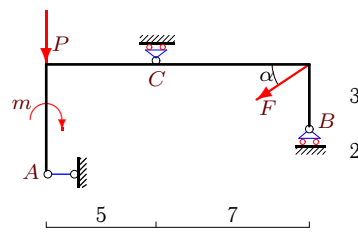
3



$F = 25 \text{ кН}, P = 1 \text{ кН}, m = 10 \text{ кНм}.$

Задача 29.18.

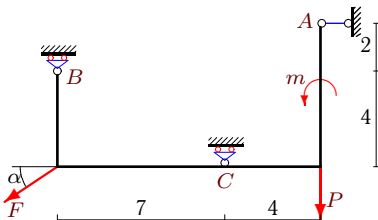
3



$F = 35 \text{ кН}, P = 5 \text{ кН}, m = 25 \text{ кНм}.$

Задача 29.19.

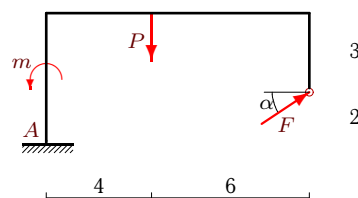
3



$F = 35 \text{ кН}, P = 1 \text{ кН}, m = 4 \text{ кНм}.$

Задача 29.20.

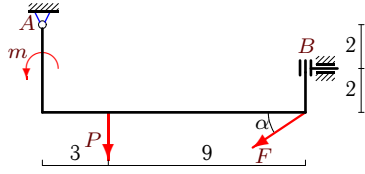
3



$F = 15 \text{ кН}, P = 2 \text{ кН}, m = 4 \text{ кНм}.$

Задача 29.21.

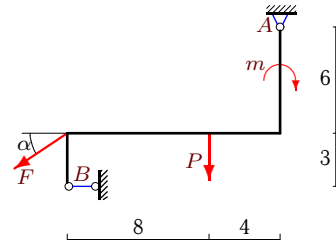
3



$F = 60 \text{ кН}, P = 3 \text{ кН}, m = 16 \text{ кНм.}$

Задача 29.22.

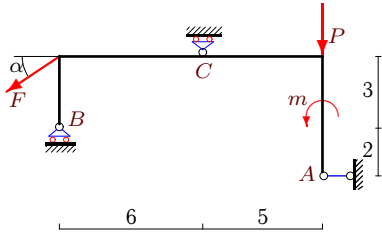
3



$F = 45 \text{ кН}, P = 2 \text{ кН}, m = 8 \text{ кНм.}$

Задача 29.23.

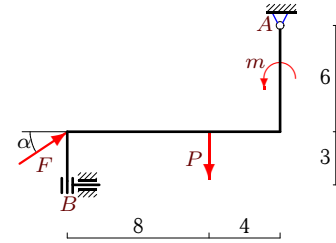
3



$F = 30 \text{ кН}, P = 3 \text{ кН}, m = 15 \text{ кНм.}$

Задача 29.24.

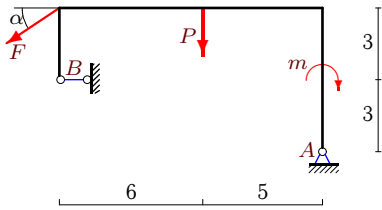
3



$F = 35 \text{ кН}, P = 2 \text{ кН}, m = 18 \text{ кНм.}$

Задача 29.25.

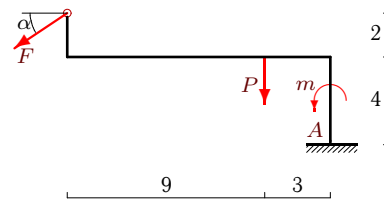
3



$F = 15 \text{ кН}, P = 5 \text{ кН}, m = 25 \text{ кНм.}$

Задача 29.26.

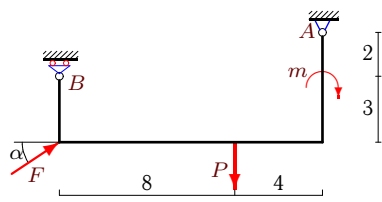
3



$F = 30 \text{ кН}, P = 3 \text{ кН}, m = 7 \text{ кНм.}$

Задача 29.27.

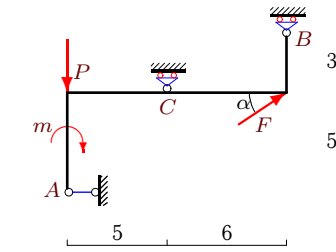
3



$F = 15 \text{ кН}, P = 1 \text{ кН}, m = 4 \text{ кНм.}$

Задача 29.28.

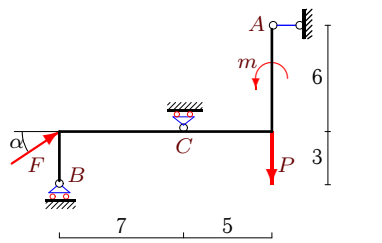
3



$F = 30 \text{ кН}, P = 3 \text{ кН}, m = 15 \text{ кНм.}$

Задача 29.29.

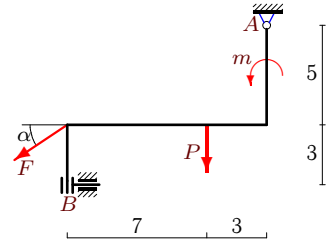
3



$F = 35 \text{ кН}, P = 2 \text{ кН}, m = 10 \text{ кНм.}$

Задача 29.30.

3



$F = 40 \text{ кН}, P = 3 \text{ кН}, m = 7 \text{ кНм.}$

Равновесие рамы

№	X_A	Y_A	M_A	X_B	Y_B	M_B	Y_C
1	—	8	—	-4	—	-22	—
2	16	17	41	—	—	—	—
3	-28	—	—	—	-10	255	—
4	—	15	—	16	—	-212	—
5	—	4	—	4	—	53	—
6	-56	39	—	104	—	—	—
7	-12	-8	-137	—	—	—	—
8	—	14	—	12	—	-137	—
9	-48	-19	—	16	—	—	—
10	12	5	—	—	5	—	—
11	-20	—	—	—	51	104	—
12	-20	—	—	—	-3	191	—
13	-29	—	—	5	—	—	-14
14	—	13	—	12	—	-157	—
15	-15	—	—	7	—	—	-5
16	-22	21	—	46	—	—	—
17	-20	—	—	—	—	16	-14
18	28	—	—	—	1	—	25
19	28	—	—	—	-3	—	25
20	-12	-7	-62	—	—	—	—
21	48	39	—	—	—	617	—
22	48	29	—	-12	—	—	—
23	24	—	—	—	38	—	-17
24	-28	-19	—	—	—	58	—
25	-45	14	—	57	—	—	—
26	24	21	-376	—	—	—	—
27	-12	-4	—	—	-4	—	—
28	-24	—	—	—	2	—	-17
29	-28	—	—	—	3	—	-22
30	32	27	—	—	—	-96	—