

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. 8

$F = 20 \text{ кН}, P = 1 \text{ кН}, m = 4 \text{ кНм.}$

Задача 29.2. 8

$F = 10 \text{ кН}, P = 1 \text{ кН}, m = 4 \text{ кНм.}$

Задача 29.3. 8

$F = 15 \text{ кН}, P = 18 \text{ кН}, m = 7 \text{ кНм.}$

Задача 29.4. 8

$F = 35 \text{ кН}, P = 5 \text{ кН}, m = 16 \text{ кНм.}$

Задача 29.5. 8

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

Задача 29.6. 8

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

Задача 29.7. 8

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

Задача 29.8. 8

$F = 15 \text{ кН}, P = 3 \text{ кН}, m = 4 \text{ кНм.}$

Задача 29.9. 8

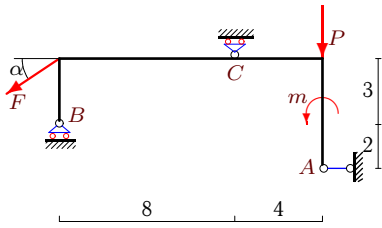
$F = 15 \text{ кН}, P = 4 \text{ кН}, m = 4 \text{ кНм.}$

Задача 29.10. 8

$F = 70 \text{ кН}, P = 2 \text{ кН}, m = 5 \text{ кНм.}$

Задача 29.11.

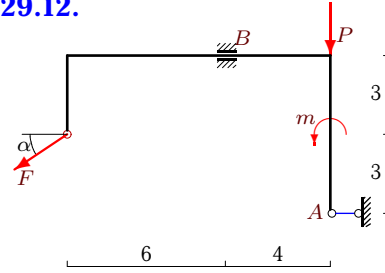
8



$F = 20 \text{ кН}, P = 1 \text{ кН}, m = 4 \text{ кНм}.$

Задача 29.12.

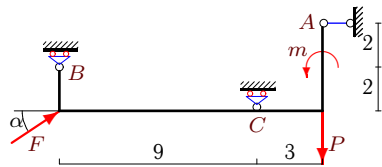
8



$F = 35 \text{ кН}, P = 24 \text{ кН}, m = 7 \text{ кНм}.$

Задача 29.13.

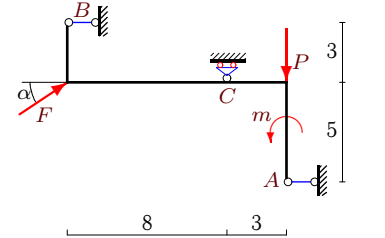
8



$F = 45 \text{ кН}, P = 4 \text{ кН}, m = 12 \text{ кНм}.$

Задача 29.14.

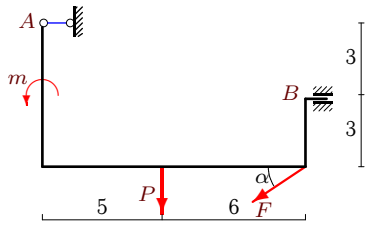
8



$F = 40 \text{ кН}, P = 1 \text{ кН}, m = 3 \text{ кНм}.$

Задача 29.15.

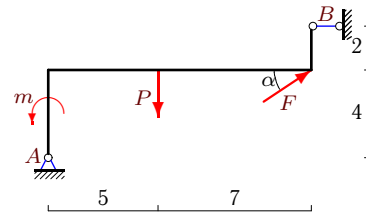
8



$F = 80 \text{ кН}, P = 4 \text{ кН}, m = 9 \text{ кНм}.$

Задача 29.16.

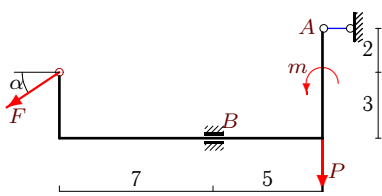
8



$F = 15 \text{ кН}, P = 2 \text{ кН}, m = 10 \text{ кНм}.$

Задача 29.17.

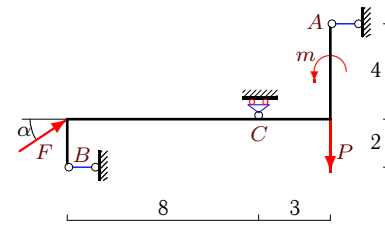
8



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

Задача 29.18.

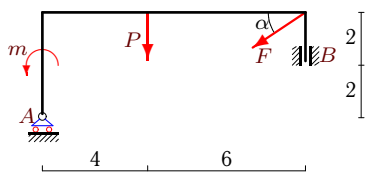
8



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

Задача 29.19.

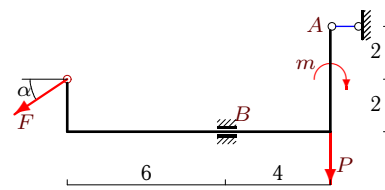
8



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

Задача 29.20.

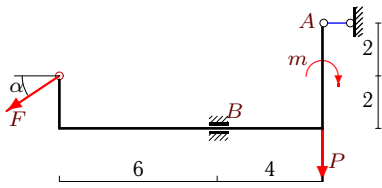
8



$F = 25 \text{ кН}, P = 30 \text{ кН}, m = 7 \text{ кНм}.$

Задача 29.21.

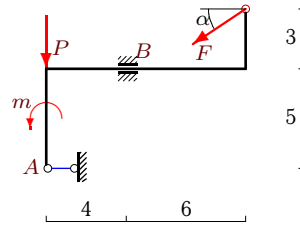
8



$F = 40 \text{ кН}, P = 24 \text{ кН}, m = 7 \text{ кНм}.$

Задача 29.22.

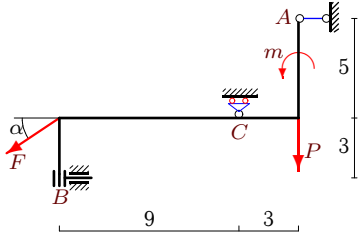
8



$F = 25 \text{ кН}, P = 9 \text{ кН}, m = 5 \text{ кНм}.$

Задача 29.23.

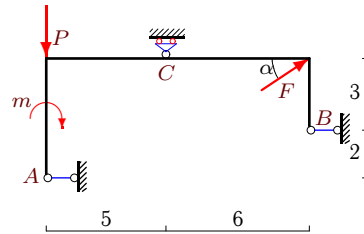
8



$F = 50 \text{ кН}, P = 2 \text{ кН}, m = 23 \text{ кНм}.$

Задача 29.24.

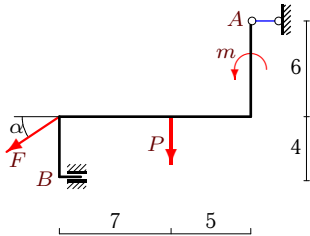
8



$F = 10 \text{ кН}, P = 3 \text{ кН}, m = 15 \text{ кНм}.$

Задача 29.25.

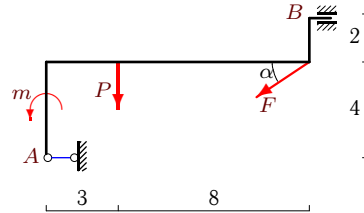
8



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

Задача 29.26.

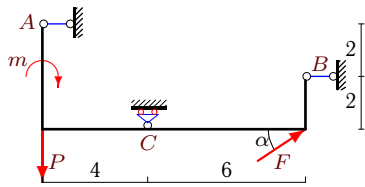
8



$F = 60 \text{ кН}, P = 3 \text{ кН}, m = 7 \text{ кНм}.$

Задача 29.27.

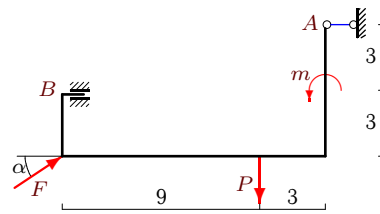
8



$F = 5 \text{ кН}, P = 1 \text{ кН}, m = 4 \text{ кНм}.$

Задача 29.28.

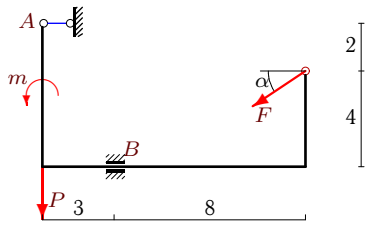
8



$F = 35 \text{ кН}, P = 1 \text{ кН}, m = 12 \text{ кНм}.$

Задача 29.29.

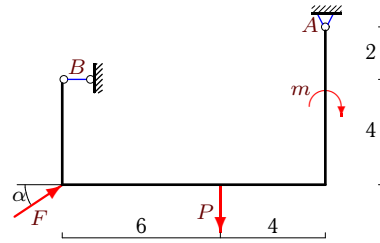
8



$F = 35 \text{ кН}, P = 12 \text{ кН}, m = 14 \text{ кНм}.$

Задача 29.30.

8



$F = 10 \text{ кН}, P = 1 \text{ кН}, m = 4 \text{ кНм}.$

Равновесие рамы

№	X_A	Y_A	M_A	X_B	Y_B	M_B	Y_C
1	16	—	—	—	24	—	-11
2	-37	—	—	45	—	—	7
3	-12	—	—	—	9	-175	—
4	28	26	—	—	—	-176	—
5	—	8	—	-4	—	8	—
6	-28	—	—	—	-1	—	-18
7	24	23	74	—	—	—	—
8	—	12	—	12	—	59	—
9	—	13	—	12	—	-146	—
10	56	—	—	—	44	-299	—
11	16	—	—	—	22	—	-9
12	28	—	—	—	45	-121	—
13	-36	—	—	—	-11	—	-12
14	12	—	—	-44	—	—	-23
15	64	—	—	—	52	351	—
16	-22	-7	—	10	—	—	—
17	12	—	—	—	24	29	—
18	-16	—	—	4	—	—	-7
19	—	14	—	12	—	83	—
20	20	—	—	—	45	77	—
21	32	—	—	—	48	23	—
22	20	—	—	—	24	-111	—
23	40	—	—	—	—	-87	32
24	-6	—	—	-2	—	—	-3
25	64	—	—	—	51	393	—
26	48	—	—	—	39	-223	—
27	13	—	—	-17	—	—	-2
28	-28	—	—	—	-20	-171	—
29	28	—	—	—	33	174	—
30	-14	-5	—	6	—	—	—