

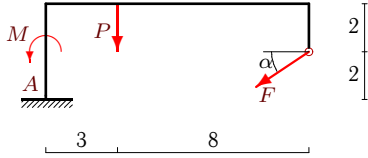
Равновесие рамы

Определить реакции опор рамы.

Кирсанов М.Н. Задачи по теоретической механике с решениями в **Maple 11.** – М.: ФИЗМАТЛИТ, 2010. – 264 с. (с.10)

Задача S29.1.

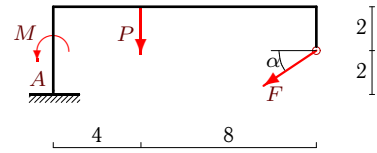
3



$$F = 30 \text{ кН}, P = 3 \text{ кН}, M = 5 \text{ кНм}, \cos \alpha = 0.8.$$

Задача S29.2.

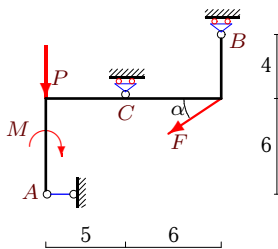
3



$$F = 20 \text{ кН}, P = 5 \text{ кН}, M = 7 \text{ кНм}, \cos \alpha = 0.8.$$

Задача S29.3.

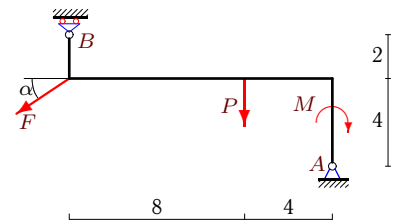
3



$$F = 20 \text{ кН}, P = 1 \text{ кН}, M = 5 \text{ кНм}, \cos \alpha = 0.8.$$

Задача S29.4.

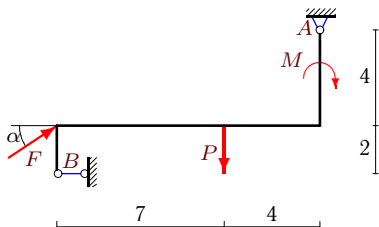
3



$$F = 60 \text{ кН}, P = 3 \text{ кН}, M = 12 \text{ кНм}, \cos \alpha = 0.8.$$

Задача S29.5.

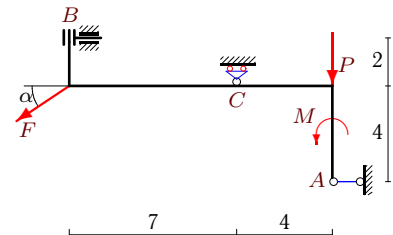
3



$$F = 30 \text{ кН}, P = 2 \text{ кН}, M = 8 \text{ кНм}, \cos \alpha = 0.8.$$

Задача S29.6.

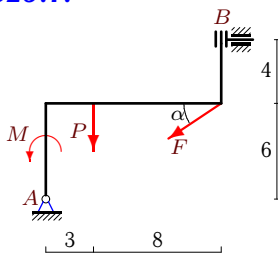
3



$$F = 40 \text{ кН}, P = 4 \text{ кН}, M = 15 \text{ кНм}, \cos \alpha = 0.8.$$

Задача S29.7.

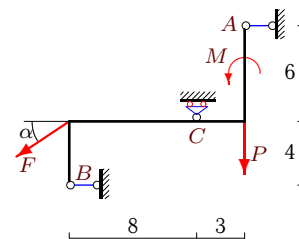
3



$$F = 80 \text{ кН}, P = 1 \text{ кН}, M = 13 \text{ кНм}, \cos \alpha = 0.8.$$

Задача S29.8.

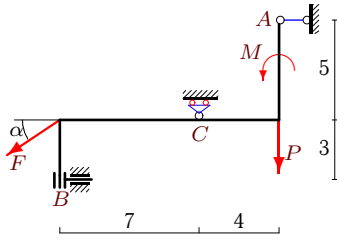
3



$$F = 50 \text{ кН}, P = 11 \text{ кН}, M = 33 \text{ кНм}, \cos \alpha = 0.8.$$

Задача S29.9.

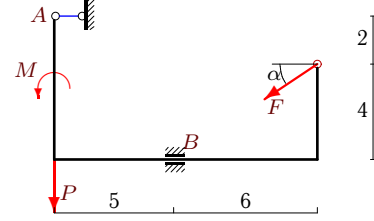
3



$F = 15 \text{ кН}, P = 2 \text{ кН}, M = 8 \text{ кНм}, \cos \alpha = 0.8.$

Задача S29.10.

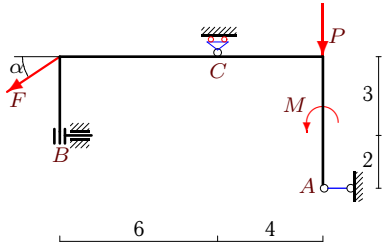
3



$F = 30 \text{ кН}, P = 9 \text{ кН}, M = 7 \text{ кНм}, \cos \alpha = 0.8.$

Задача S29.11.

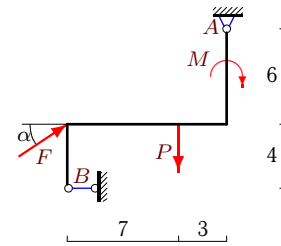
3



$F = 50 \text{ кН}, P = 3 \text{ кН}, M = 9 \text{ кНм}, \cos \alpha = 0.8.$

Задача S29.12.

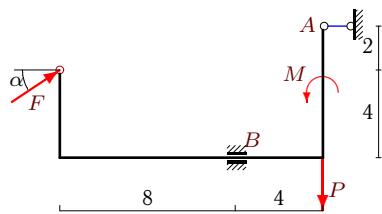
3



$F = 25 \text{ кН}, P = 1 \text{ кН}, M = 3 \text{ кНм}, \cos \alpha = 0.8.$

Задача S29.13.

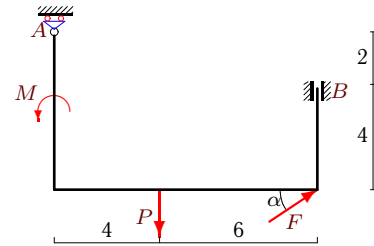
3



$F = 25 \text{ кН}, P = 6 \text{ кН}, M = 21 \text{ кНм}, \cos \alpha = 0.8.$

Задача S29.14.

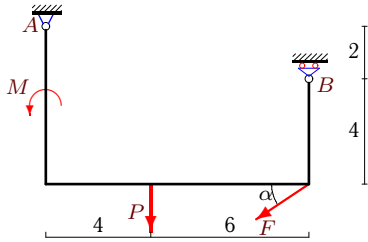
3



$F = 5 \text{ кН}, P = 1 \text{ кН}, M = 5 \text{ кНм}, \cos \alpha = 0.8.$

Задача S29.15.

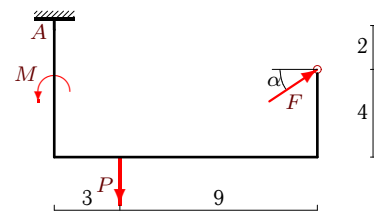
3



$F = 50 \text{ кН}, P = 3 \text{ кН}, M = 12 \text{ кНм}, \cos \alpha = 0.8.$

Задача S29.16.

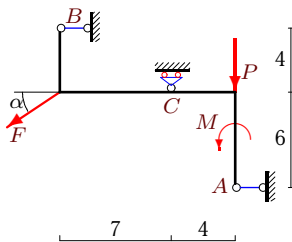
3



$F = 20 \text{ кН}, P = 11 \text{ кН}, M = 9 \text{ кНм}, \cos \alpha = 0.8.$

Задача S29.17.

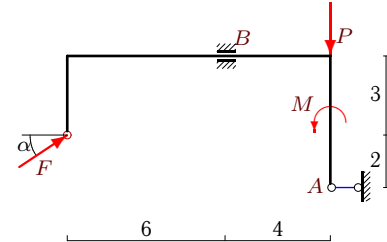
3



$F = 50 \text{ кН}, P = 3 \text{ кН}, M = 12 \text{ кНм}, \cos \alpha = 0.8.$

Задача S29.18.

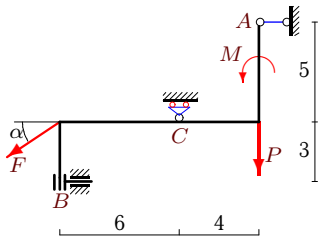
3



$F = 10 \text{ кН}, P = 6 \text{ кН}, M = 5 \text{ кНм}, \cos \alpha = 0.8.$

Задача S29.19.

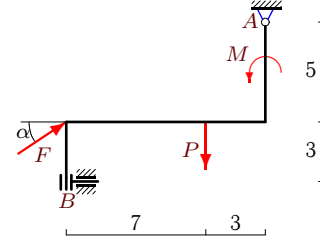
3



$F = 50 \text{ кН}, P = 3 \text{ кН}, M = 9 \text{ кНм}, \cos \alpha = 0.8.$

Задача S29.20.

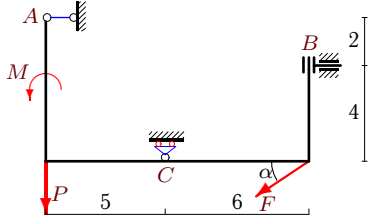
3



$F = 30 \text{ кН}, P = 1 \text{ кН}, M = 7 \text{ кНм}, \cos \alpha = 0.8.$

Задача S29.21.

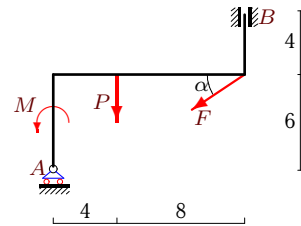
3



$F = 60 \text{ кН}, P = 3 \text{ кН}, M = 17 \text{ кНм}, \cos \alpha = 0.8.$

Задача S29.22.

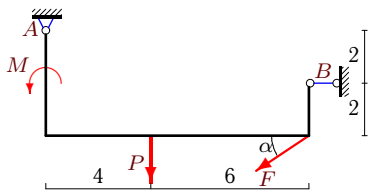
3



$F = 5 \text{ кН}, P = 1 \text{ кН}, M = 3 \text{ кНм}, \cos \alpha = 0.8.$

Задача S29.23.

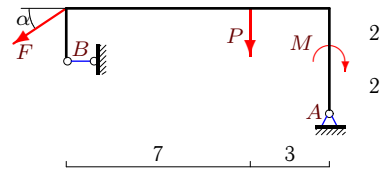
3



$F = 10 \text{ кН}, P = 3 \text{ кН}, M = 12 \text{ кНм}, \cos \alpha = 0.8.$

Задача S29.24.

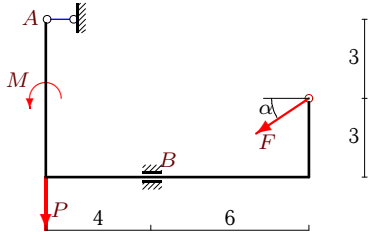
3



$F = 5 \text{ кН}, P = 2 \text{ кН}, M = 6 \text{ кНм}, \cos \alpha = 0.8.$

Задача S29.25.

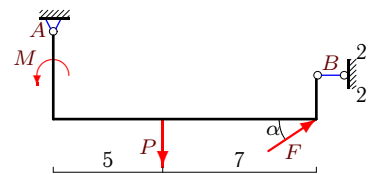
3



$F = 35 \text{ кН}, P = 24 \text{ кН}, M = 7 \text{ кНм}, \cos \alpha = 0.8.$

Задача S29.26.

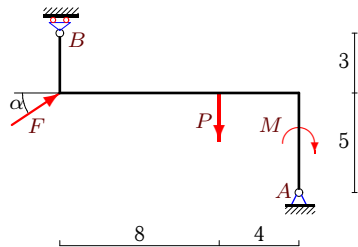
3



$F = 20 \text{ кН}, P = 5 \text{ кН}, M = 25 \text{ кНм}, \cos \alpha = 0.8.$

Задача S29.27.

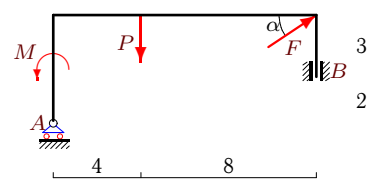
3



$F = 15 \text{ кН}, P = 1 \text{ кН}, M = 4 \text{ кНм}, \cos \alpha = 0.8.$

Задача S29.28.

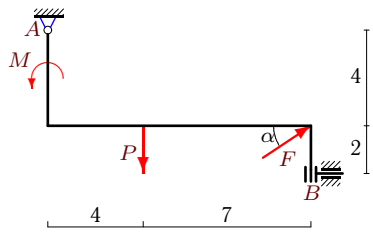
3



$F = 5 \text{ кН}, P = 2 \text{ кН}, M = 8 \text{ кНм}, \cos \alpha = 0.8.$

Задача S29.29.

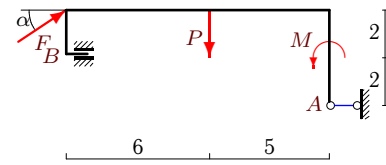
3



$F = 25 \text{ кН}, P = 3 \text{ кН}, M = 11 \text{ кНм}, \cos \alpha = 0.8.$

Задача S29.30.

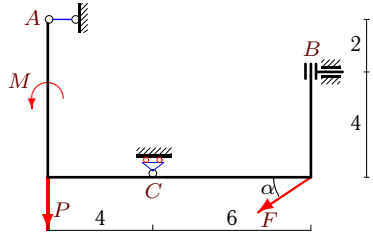
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$F = 25 \text{ кН}, P = 4 \text{ кН}, M = 7 \text{ кНм}, \cos \alpha = 0.8.$

Задача S29.31.

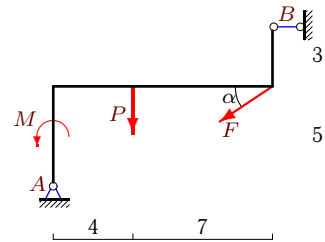
3



$F = 35 \text{ кН}, P = 3 \text{ кН}, M = 10 \text{ кНм}, \cos \alpha = 0.8.$

Задача S29.32.

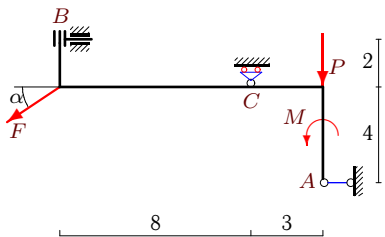
3



$F = 80 \text{ кН}, P = 3 \text{ кН}, M = 12 \text{ кНм}, \cos \alpha = 0.8.$

Задача S29.33.

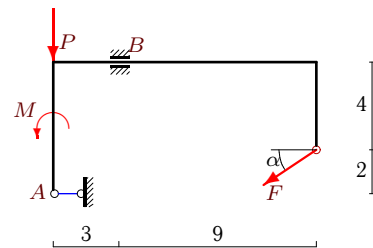
3



$F = 25 \text{ кН}, P = 4 \text{ кН}, M = 15 \text{ кНм}, \cos \alpha = 0.8.$

Задача S29.34.

3



$F = 35 \text{ кН}, P = 12 \text{ кН}, M = 21 \text{ кНм}, \cos \alpha = 0.8.$

S29 Ответы.
Равновесие рамы

03.12.2011

№	X_A	Y_A	M_A	X_B	Y_B	M_B	Y_C
1	24	21	154	—	—	—	—
2	16	17	125	—	—	—	—
3	16	—	—	—	-4	—	17
4	48	-13	—	—	52	—	—
5	-41	-16	—	17	—	—	—
6	32	—	—	—	—	-295	28
7	64	49	—	—	—	134	—
8	40	—	—	0	—	—	41
9	12	—	—	—	—	-3	11
10	24	—	—	—	27	104	—
11	40	—	—	—	—	-377	33
12	-23	-14	—	3	—	—	—
13	-20	—	—	—	-9	83	—
14	—	-2	—	-4	—	-47	—
15	40	-21	—	—	54	—	—
16	-16	-1	-152	—	—	—	—
17	-5	—	—	45	—	—	33
18	-8	—	—	—	0	71	—
19	40	—	—	—	—	23	33
20	-24	-17	—	—	—	50	—
21	48	—	—	—	—	472	39
22	—	4	—	4	—	53	—
23	-38	9	—	46	—	—	—
24	-19	5	—	23	—	—	—
25	28	—	—	—	45	107	—
26	88	-7	—	-104	—	—	—
27	-12	6	—	—	-14	—	—
28	—	-1	—	-4	—	-24	—
29	-20	-12	—	—	—	-244	—
30	-20	—	—	—	-11	97	—
31	28	—	—	—	—	272	24
32	90	51	—	-26	—	—	—
33	20	—	—	—	—	-203	19
34	28	—	—	—	33	76	—

S29 файл о29с3А