

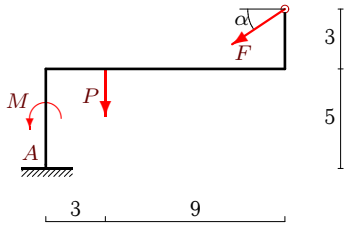
Равновесие рамы

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.

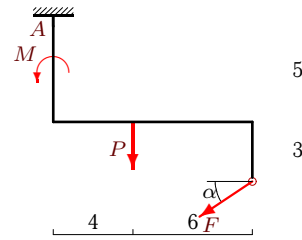
10



$$F = 25 \text{ кН}, P = 3 \text{ кН}, M = 8 \text{ кНм}, \cos \alpha = 0.8.$$

Задача S29.2.

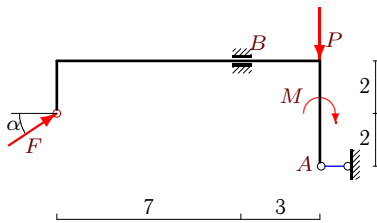
10



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

Задача S29.3.

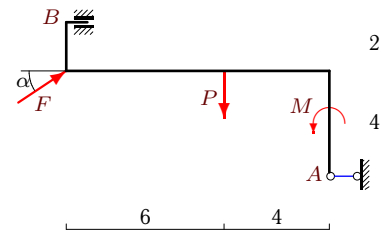
10



$$F = 15 \text{ кН}, P = 12 \text{ кН}, M = 7 \text{ кНм}, \cos \alpha = 0.8.$$

Задача S29.4.

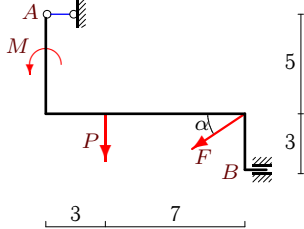
10



$$F = 25 \text{ кН}, P = 3 \text{ кН}, M = 4 \text{ кНм}, \cos \alpha = 0.8.$$

Задача S29.5.

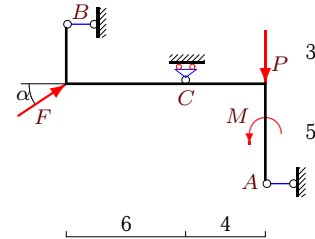
10



$$F = 40 \text{ кН}, P = 3 \text{ кН}, M = 5 \text{ кНм}, \cos \alpha = 0.8.$$

Задача S29.6.

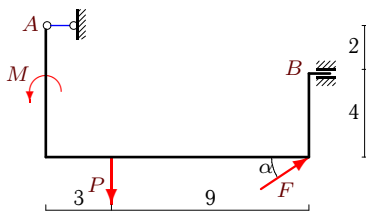
10



$$F = 20 \text{ кН}, P = 1 \text{ кН}, M = 4 \text{ кНм}, \cos \alpha = 0.8.$$

Задача S29.7.

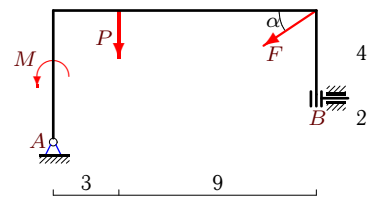
10



$$F = 35 \text{ кН}, P = 11 \text{ кН}, M = 12 \text{ кНм}, \cos \alpha = 0.8.$$

Задача S29.8.

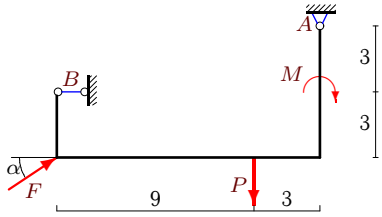
10



$$F = 80 \text{ кН}, P = 1 \text{ кН}, M = 18 \text{ кНм}, \cos \alpha = 0.8.$$

Задача S29.9.

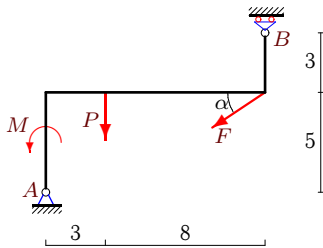
10



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

Задача S29.11.

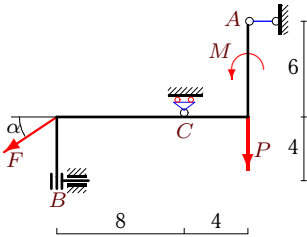
10



$F = 55 \text{ кН}, P = 3 \text{ кН}, M = 9 \text{ кНм}, \cos \alpha = 0.8.$

Задача S29.13.

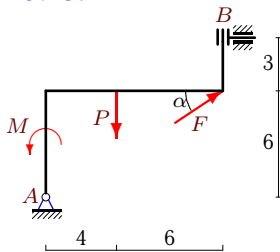
10



$F = 30 \text{ кН}, P = 1 \text{ кН}, M = 12 \text{ кНм}, \cos \alpha = 0.8.$

Задача S29.15.

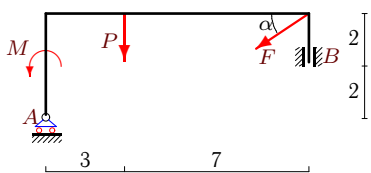
10



$F = 35 \text{ кН}, P = 2 \text{ кН}, M = 8 \text{ кНм}, \cos \alpha = 0.8.$

Задача S29.17.

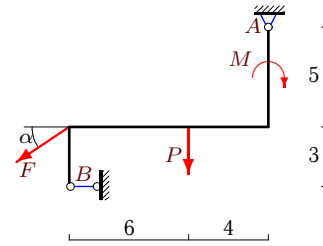
10



$F = 15 \text{ кН}, P = 4 \text{ кН}, M = 3 \text{ кНм}, \cos \alpha = 0.8.$

Задача S29.10.

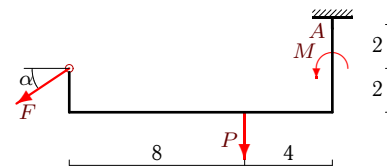
10



$F = 20 \text{ кН}, P = 1 \text{ кН}, M = 4 \text{ кНм}, \cos \alpha = 0.8.$

Задача S29.12.

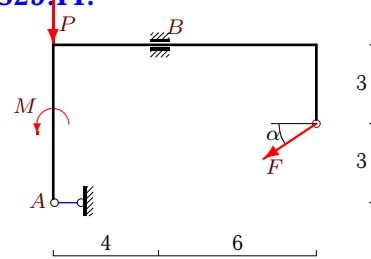
10



$F = 30 \text{ кН}, P = 4 \text{ кН}, M = 7 \text{ кНм}, \cos \alpha = 0.8.$

Задача S29.14.

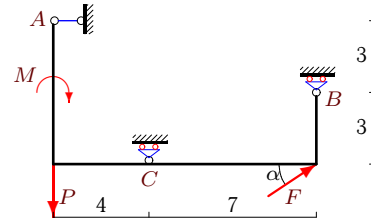
10



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

Задача S29.16.

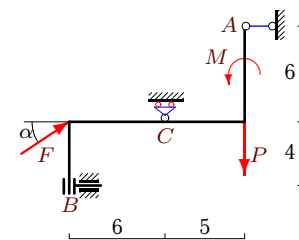
10



$F = 35 \text{ кН}, P = 2 \text{ кН}, M = 8 \text{ кНм}, \cos \alpha = 0.8.$

Задача S29.18.

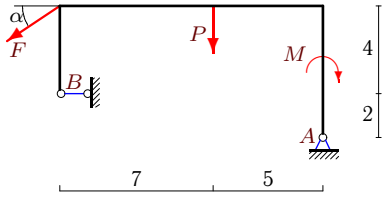
10



$F = 25 \text{ кН}, P = 2 \text{ кН}, M = 17 \text{ кНм}, \cos \alpha = 0.8.$

Задача S29.19.

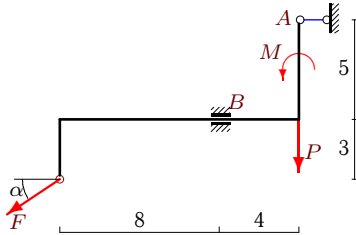
10



$F = 5 \text{ кН}, P = 2 \text{ кН}, M = 10 \text{ кНм}, \cos \alpha = 0.8.$

Задача S29.21.

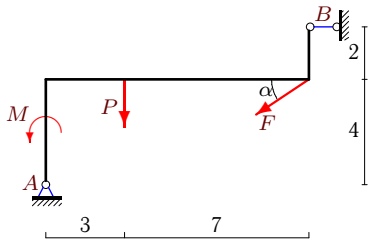
10



$F = 25 \text{ кН}, P = 9 \text{ кН}, M = 7 \text{ кНм}, \cos \alpha = 0.8.$

Задача S29.23.

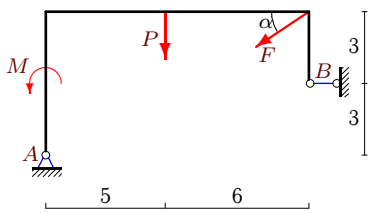
10



$F = 15 \text{ кН}, P = 2 \text{ кН}, M = 6 \text{ кНм}, \cos \alpha = 0.8.$

Задача S29.25.

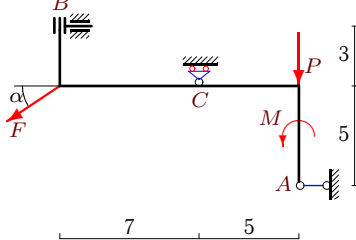
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$F = 15 \text{ кН}, P = 5 \text{ кН}, M = 25 \text{ кНм}, \cos \alpha = 0.8.$

Задача S29.27.

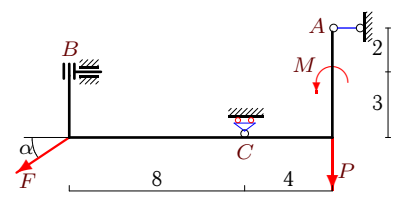
10



$F = 50 \text{ кН}, P = 4 \text{ кН}, M = 23 \text{ кНм}, \cos \alpha = 0.8.$

Задача S29.20.

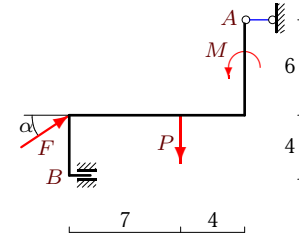
10



$F = 50 \text{ кН}, P = 3 \text{ кН}, M = 23 \text{ кНм}, \cos \alpha = 0.8.$

Задача S29.22.

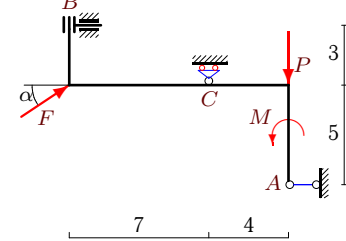
10



$F = 35 \text{ кН}, P = 1 \text{ кН}, M = 9 \text{ кНм}, \cos \alpha = 0.8.$

Задача S29.24.

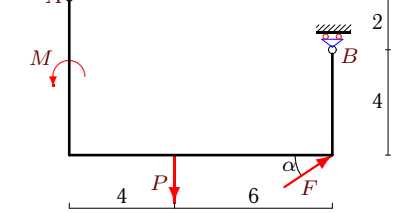
10



$F = 10 \text{ кН}, P = 1 \text{ кН}, M = 8 \text{ кНм}, \cos \alpha = 0.8.$

Задача S29.26.

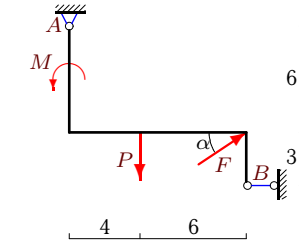
10



$F = 50 \text{ кН}, P = 1 \text{ кН}, M = 4 \text{ кНм}, \cos \alpha = 0.8.$

Задача S29.28.

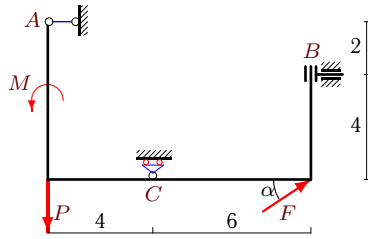
10



$F = 45 \text{ кН}, P = 4 \text{ кН}, M = 16 \text{ кНм}, \cos \alpha = 0.8.$

Задача S29.29.

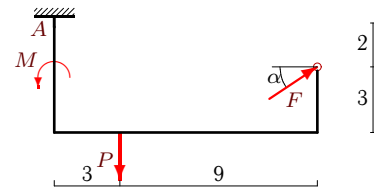
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$F = 25 \text{ кН}, P = 1 \text{ кН}, M = 10 \text{ кНм}, \cos \alpha = 0.8.$

Задача S29.30.

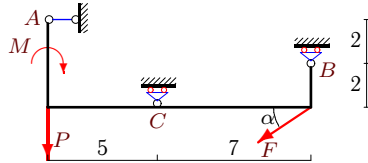
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$F = 15 \text{ кН}, P = 1 \text{ кН}, M = 8 \text{ кНм}, \cos \alpha = 0.8.$

Задача S29.31.

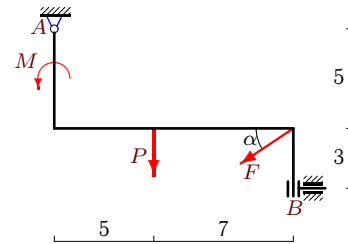
10



$F = 35 \text{ кН}, P = 6 \text{ кН}, M = 30 \text{ кНм}, \cos \alpha = 0.8.$

Задача S29.32.

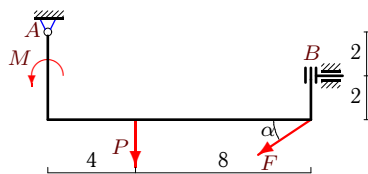
10



$F = 70 \text{ кН}, P = 4 \text{ кН}, M = 17 \text{ кНм}, \cos \alpha = 0.8.$

Задача S29.33.

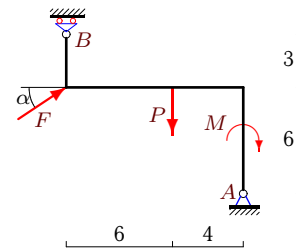
10



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

Задача S29.34.

10



$F = 100 \text{ кН}, P = 3 \text{ кН}, M = 12 \text{ кНм}, \cos \alpha = 0.8.$

S29 Ответы.
Равновесие рамы

03.12.2011

№	X_A	Y_A	M_A	X_B	Y_B	M_B	Y_C
1	20	18	21	—	—	—	—
2	20	19	322	—	—	—	—
3	-12	—	—	—	3	130	—
4	-20	—	—	—	-12	94	—
5	32	—	—	—	27	134	—
6	3	—	—	-19	—	—	-11
7	-28	—	—	—	-10	-279	—
8	64	49	—	—	—	177	—
9	-8	-2	—	4	—	—	—
10	21	13	—	-5	—	—	—
11	44	23	—	—	13	—	—
12	24	22	-191	—	—	—	—
13	24	—	—	—	—	-8	19
14	28	—	—	—	45	-61	—
15	-28	-19	—	—	—	-42	—
16	-28	—	—	—	-45	—	26
17	—	13	—	12	—	75	—
18	-20	—	—	—	—	-37	-13
19	-26	5	—	30	—	—	—
20	40	—	—	—	—	-51	33
21	20	—	—	—	24	69	—
22	-28	—	—	—	-20	-170	—
23	19	11	—	-7	—	—	—
24	-8	—	—	—	—	78	-5
25	21	14	—	-9	—	—	—
26	-40	25	—	—	-54	—	—
27	40	—	—	—	—	-413	34
28	18	-23	—	-54	—	—	—
29	-20	—	—	—	—	-224	-14
30	-12	-8	-137	—	—	—	—
31	28	—	—	—	37	—	-10
32	56	46	—	—	—	787	—
33	12	10	—	—	—	156	—
34	-80	51	—	—	-108	—	—

S29 файл о29s10A