

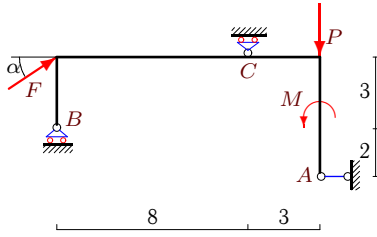
Равновесие рамы

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.

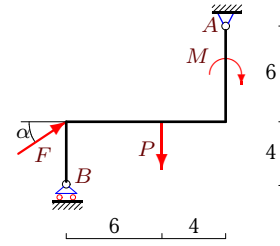
7



$$F = 40 \text{ кН}, P = 3 \text{ кН}, M = 9 \text{ кНм}, \cos \alpha = 0.8.$$

Задача S29.2.

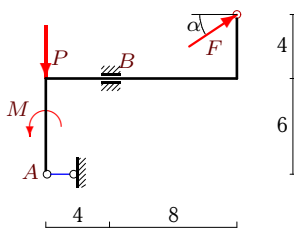
7



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

Задача S29.3.

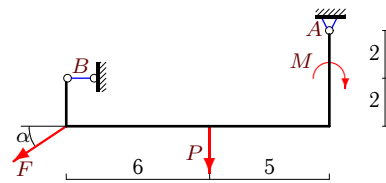
7



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

Задача S29.4.

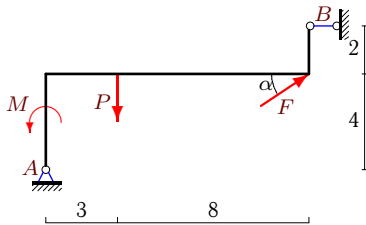
7



$$F = 10 \text{ кН}, P = 4 \text{ кН}, M = 20 \text{ кНм}, \cos \alpha = 0.8.$$

Задача S29.5.

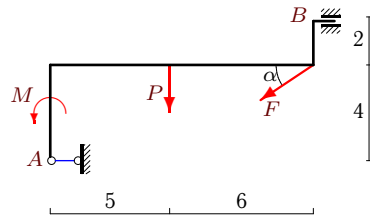
7



$$F = 30 \text{ кН}, P = 2 \text{ кН}, M = 6 \text{ кНм}, \cos \alpha = 0.8.$$

Задача S29.6.

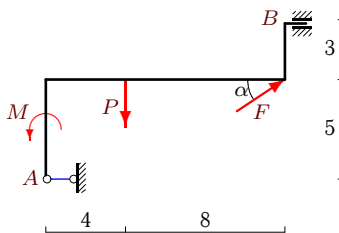
7



$$F = 35 \text{ кН}, P = 6 \text{ кН}, M = 7 \text{ кНм}, \cos \alpha = 0.8.$$

Задача S29.7.

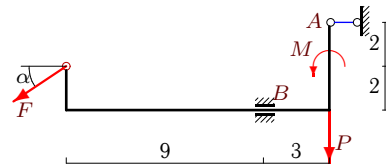
7



$$F = 30 \text{ кН}, P = 2 \text{ кН}, M = 11 \text{ кНм}, \cos \alpha = 0.8.$$

Задача S29.8.

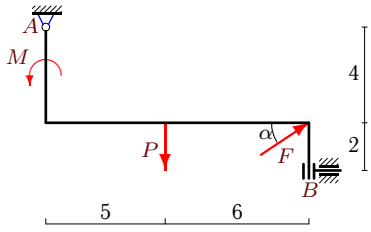
7



$$F = 25 \text{ кН}, P = 24 \text{ кН}, M = 7 \text{ кНм}, \cos \alpha = 0.8.$$

Задача S29.9.

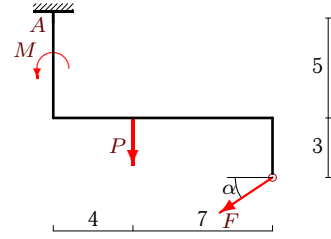
7



$F = 25 \text{ кН}, P = 4 \text{ кН}, M = 11 \text{ кНм}, \cos \alpha = 0.8.$

Задача S29.10.

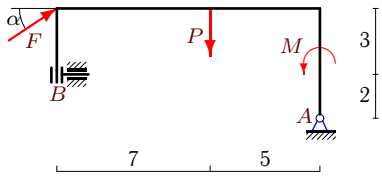
7



$F = 25 \text{ кН}, P = 4 \text{ кН}, M = 6 \text{ кНм}, \cos \alpha = 0.8.$

Задача S29.11.

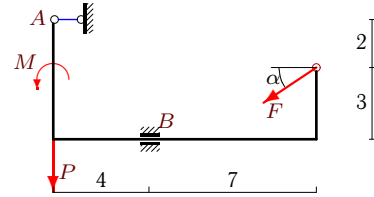
7



$F = 30 \text{ кН}, P = 3 \text{ кН}, M = 17 \text{ кНм}, \cos \alpha = 0.8.$

Задача S29.12.

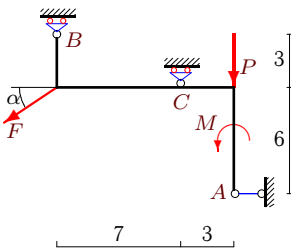
7



$F = 30 \text{ кН}, P = 24 \text{ кН}, M = 7 \text{ кНм}, \cos \alpha = 0.8.$

Задача S29.13.

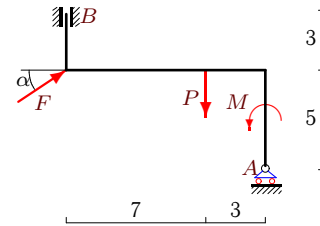
7



$F = 35 \text{ кН}, P = 1 \text{ кН}, M = 3 \text{ кНм}, \cos \alpha = 0.8.$

Задача S29.14.

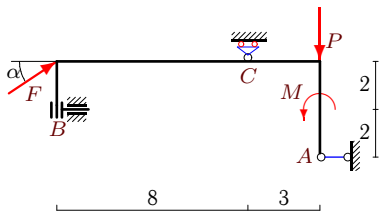
7



$F = 5 \text{ кН}, P = 1 \text{ кН}, M = 4 \text{ кНм}, \cos \alpha = 0.8.$

Задача S29.15.

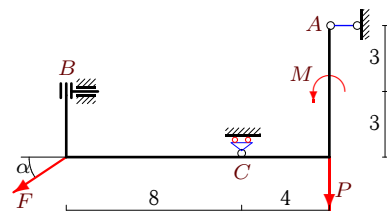
7



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

Задача S29.16.

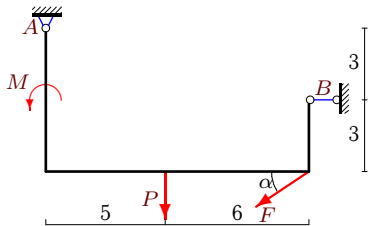
7



$F = 20 \text{ кН}, P = 1 \text{ кН}, M = 8 \text{ кНм}, \cos \alpha = 0.8.$

Задача S29.17.

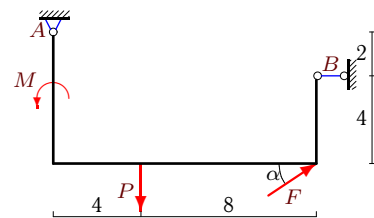
7



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

Задача S29.18.

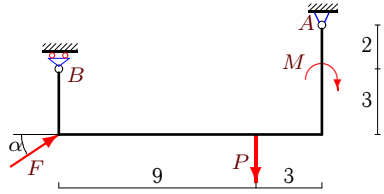
7



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

Задача S29.19.

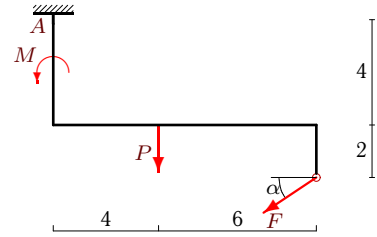
7



$F = 60 \text{ кН}, P = 3 \text{ кН}, M = 9 \text{ кНм}, \cos \alpha = 0.8.$

Задача S29.20.

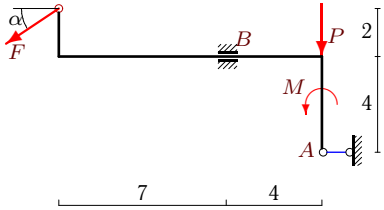
7



$F = 20 \text{ кН}, P = 5 \text{ кН}, M = 3 \text{ кНм}, \cos \alpha = 0.8.$

Задача S29.21.

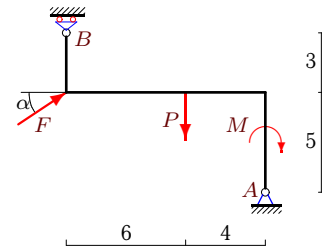
7



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

Задача S29.22.

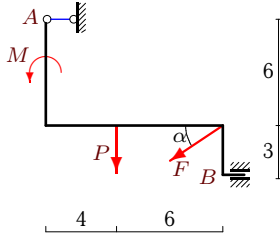
7



$F = 25 \text{ кН}, P = 2 \text{ кН}, M = 8 \text{ кНм}, \cos \alpha = 0.8.$

Задача S29.23.

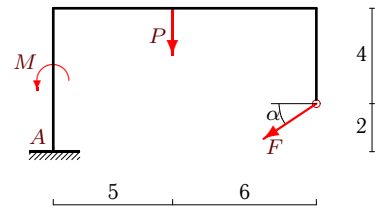
7



$F = 45 \text{ кН}, P = 4 \text{ кН}, M = 6 \text{ кНм}, \cos \alpha = 0.8.$

Задача S29.24.

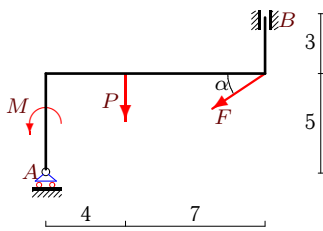
7



$F = 50 \text{ кН}, P = 3 \text{ кН}, M = 7 \text{ кНм}, \cos \alpha = 0.8.$

Задача S29.25.

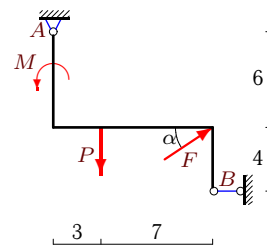
7



$F = 15 \text{ кН}, P = 4 \text{ кН}, M = 6 \text{ кНм}, \cos \alpha = 0.8.$

Задача S29.26.

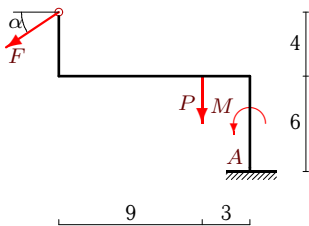
7



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

Задача S29.27.

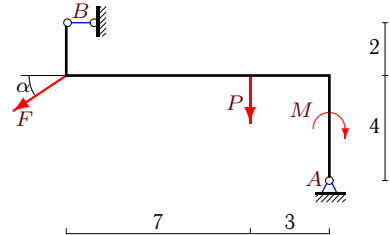
7



$F = 30 \text{ кН}, P = 2 \text{ кН}, M = 9 \text{ кНм}, \cos \alpha = 0.8.$

Задача S29.28.

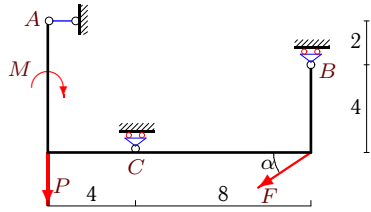
7



$F = 60 \text{ кН}, P = 3 \text{ кН}, M = 9 \text{ кНм}, \cos \alpha = 0.8.$

Задача S29.29.

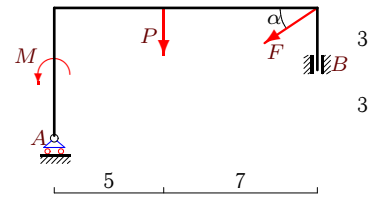
7



$F = 40 \text{ кН}, P = 1 \text{ кН}, M = 4 \text{ кНм}, \cos \alpha = 0.8.$

Задача S29.30.

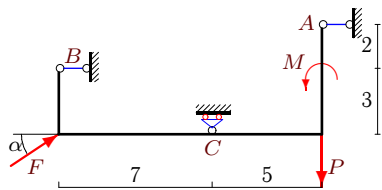
7



$F = 20 \text{ кН}, P = 4 \text{ кН}, M = 9 \text{ кНм}, \cos \alpha = 0.8.$

Задача S29.31.

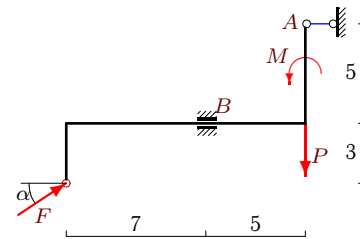
7



$F = 10 \text{ кН}, P = 5 \text{ кН}, M = 25 \text{ кНм}, \cos \alpha = 0.8.$

Задача S29.32.

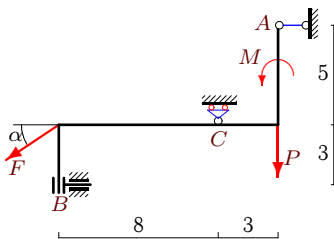
7



$F = 10 \text{ кН}, P = 9 \text{ кН}, M = 7 \text{ кНм}, \cos \alpha = 0.8.$

Задача S29.33.

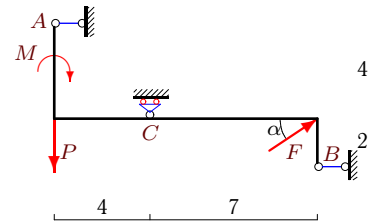
7



$F = 25 \text{ кН}, P = 1 \text{ кН}, M = 8 \text{ кНм}, \cos \alpha = 0.8.$

Задача S29.34.

7



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

S29 Ответы.
Равновесие рамы

03.12.2011

№	X_A	Y_A	M_A	X_B	Y_B	M_B	Y_C
1	-32	-	-	-	-44	-	23
2	-40	-23	-	-	-6	-	-
3	-20	-	-	-	-9	35	-
4	25	10	-	-17	-	-	-
5	-41	-16	-	17	-	-	-
6	28	-	-	-	27	-155	-
7	-24	-	-	-	-16	93	-
8	20	-	-	-	39	-30	-
9	-20	-11	-	-	-	-236	-
10	20	19	335	-	-	-	-
11	-24	-15	-	-	-	304	-
12	24	-	-	-	42	71	-
13	28	-	-	-	45	-	-23
14	-	-2	-	-4	-	11	-
15	-12	-	-	-	-	111	-7
16	16	-	-	-	-	-4	13
17	-15	4	-	19	-	-	-
18	52	-3	-	-60	-	-	-
19	-48	-17	-	-	-16	-	-
20	16	17	233	-	-	-	-
21	4	-	-	-	9	-23	-
22	-20	12	-	-	-25	-	-
23	36	-	-	-	31	186	-
24	40	33	258	-	-	-	-
25	-	13	-	12	-	145	-
26	7	-14	-	-27	-	-	-
27	24	20	-471	-	-	-	-
28	-44	39	-	92	-	-	-
29	32	-	-	-	48	-	-23
30	-	16	-	16	-	107	-
31	-9	-	-	1	-	-	-1
32	-8	-	-	-	3	16	-
33	20	-	-	-	-	-25	16
34	13	-	-	-37	-	-	-16

S29 файл о29s7A