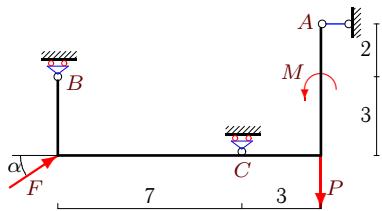


Равновесие рамы

Определить реакции опор рамы.

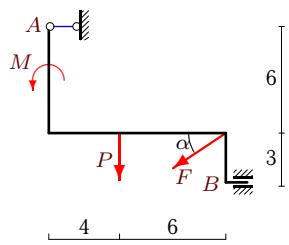
Кирсанов М.Н. Задачи по теоретической механике с решениями в Maple 11. – М.: ФИЗМАТЛИТ, 2010. – 264 с. (с.10)

Задача S29.1.



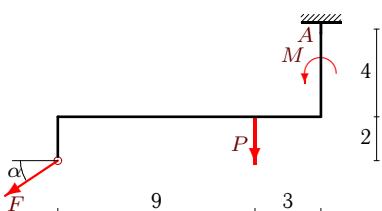
$$F = 35 \text{ кН}, P = 3 \text{ кН}, M = 9 \text{ кНм}, \cos \alpha = 0.8.$$

Задача S29.3.



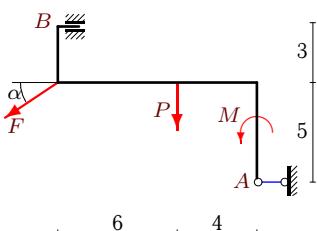
$$F = 45 \text{ кН}, P = 4 \text{ кН}, M = 6 \text{ кНм}, \cos \alpha = 0.8.$$

Задача S29.5.



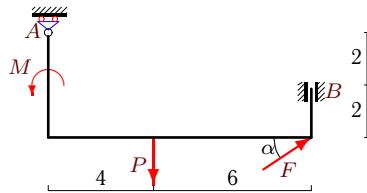
$$F = 20 \text{ кН}, P = 4 \text{ кН}, M = 7 \text{ кНм}, \cos \alpha = 0.8.$$

Задача S29.7.



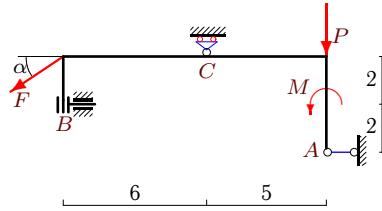
$$F = 70 \text{ кН}, P = 3 \text{ кН}, M = 5 \text{ кНм}, \cos \alpha = 0.8.$$

Задача S29.2.



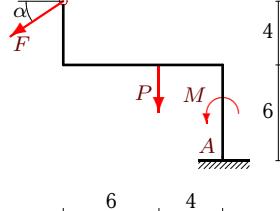
$$F = 5 \text{ кН}, P = 3 \text{ кН}, M = 3 \text{ кНм}, \cos \alpha = 0.8.$$

Задача S29.4.



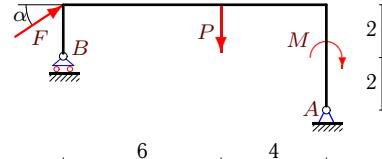
$$F = 25 \text{ кН}, P = 6 \text{ кН}, M = 15 \text{ кНм}, \cos \alpha = 0.8.$$

Задача S29.6.

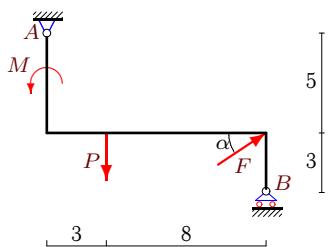


$$F = 50 \text{ кН}, P = 2 \text{ кН}, M = 5 \text{ кНм}, \cos \alpha = 0.8.$$

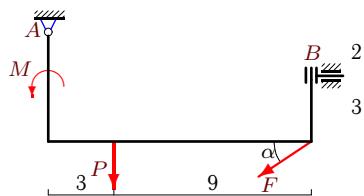
Задача S29.8.



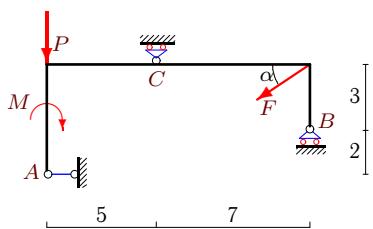
$$F = 25 \text{ кН}, P = 1 \text{ кН}, M = 4 \text{ кНм}, \cos \alpha = 0.8.$$

Задача S29.9.

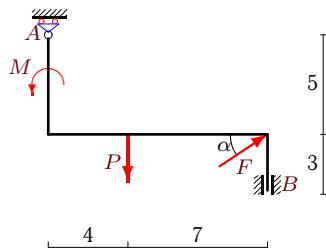
$F = 55 \text{ kH}$, $P = 1 \text{ kH}$, $M = 3 \text{ kHM}$, $\cos \alpha = 0.8$.

Задача S29.10.

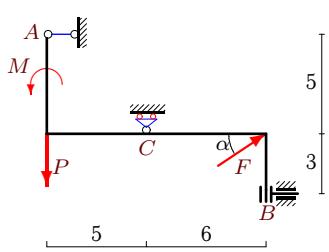
$F = 70 \text{ kH}$, $P = 2 \text{ kH}$, $M = 17 \text{ kHM}$, $\cos \alpha = 0.8$.

Задача S29.11.

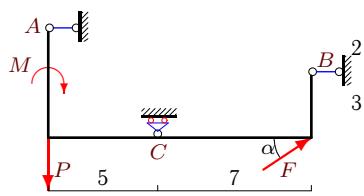
$F = 35 \text{ kH}$, $P = 2 \text{ kH}$, $M = 10 \text{ kHM}$, $\cos \alpha = 0.8$.

Задача S29.12.

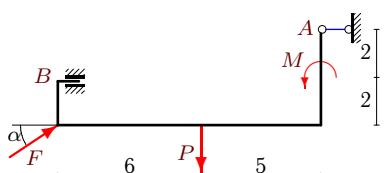
$F = 5 \text{ kH}$, $P = 2 \text{ kH}$, $M = 6 \text{ kHM}$, $\cos \alpha = 0.8$.

Задача S29.13.

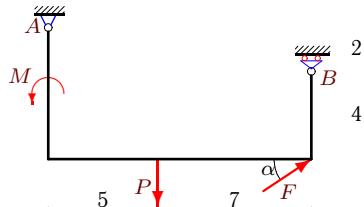
$F = 20 \text{ kH}$, $P = 3 \text{ kH}$, $M = 16 \text{ kHM}$, $\cos \alpha = 0.8$.

Задача S29.14.

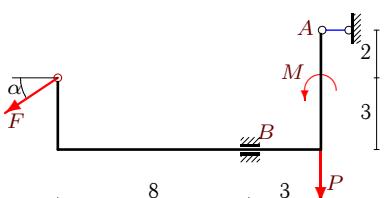
$F = 10 \text{ kH}$, $P = 5 \text{ kH}$, $M = 25 \text{ kHM}$, $\cos \alpha = 0.8$.

Задача S29.15.

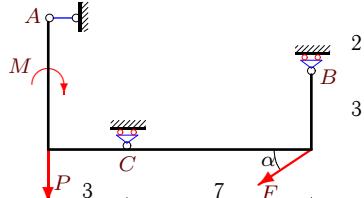
$F = 25 \text{ kH}$, $P = 4 \text{ kH}$, $M = 7 \text{ kHM}$, $\cos \alpha = 0.8$.

Задача S29.16.

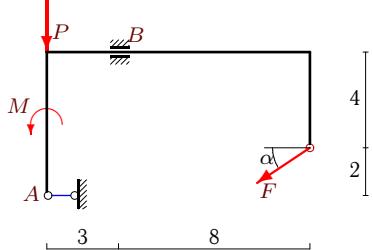
$F = 30 \text{ kH}$, $P = 1 \text{ kH}$, $M = 5 \text{ kHM}$, $\cos \alpha = 0.8$.

Задача S29.17.

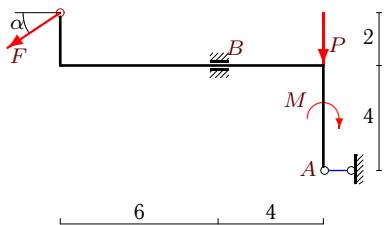
$F = 30 \text{ kH}$, $P = 18 \text{ kH}$, $M = 7 \text{ kHM}$, $\cos \alpha = 0.8$.

Задача S29.18.

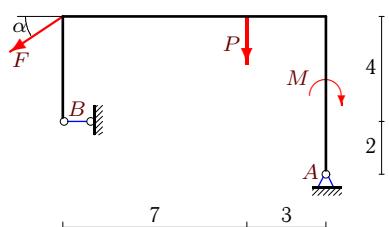
$F = 35 \text{ kH}$, $P = 3 \text{ kH}$, $M = 9 \text{ kHM}$, $\cos \alpha = 0.8$.

Задача S29.19.

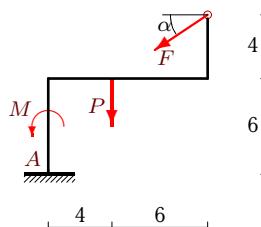
$F = 35 \text{ кН}$, $P = 12 \text{ кН}$, $M = 14 \text{ кНм}$, $\cos \alpha = 0.8$.

Задача S29.20.

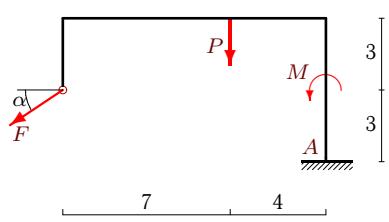
$F = 25 \text{ кН}$, $P = 30 \text{ кН}$, $M = 7 \text{ кНм}$, $\cos \alpha = 0.8$.

Задача S29.21.

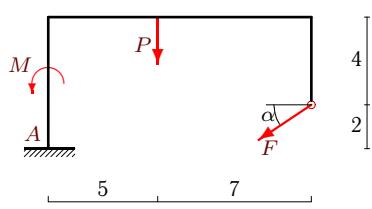
$F = 5 \text{ кН}$, $P = 1 \text{ кН}$, $M = 3 \text{ кНм}$, $\cos \alpha = 0.8$.

Задача S29.22.

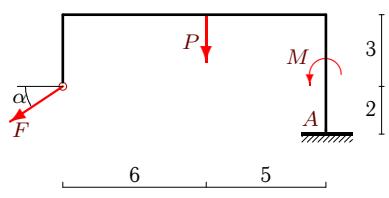
$F = 30 \text{ кН}$, $P = 3 \text{ кН}$, $M = 5 \text{ кНм}$, $\cos \alpha = 0.8$.

Задача S29.23.

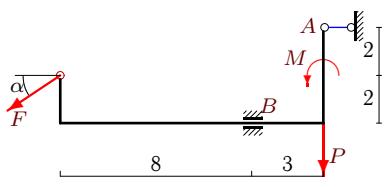
$F = 50 \text{ кН}$, $P = 3 \text{ кН}$, $M = 7 \text{ кНм}$, $\cos \alpha = 0.8$.

Задача S29.24.

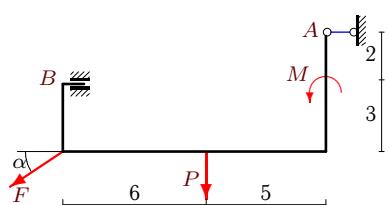
$F = 50 \text{ кН}$, $P = 3 \text{ кН}$, $M = 9 \text{ кНм}$, $\cos \alpha = 0.8$.

Задача S29.25.

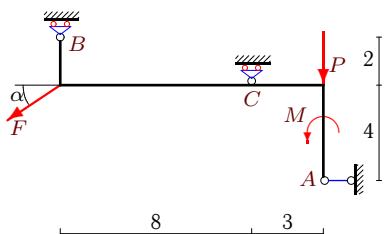
$F = 25 \text{ кН}$, $P = 5 \text{ кН}$, $M = 6 \text{ кНм}$, $\cos \alpha = 0.8$.

Задача S29.26.

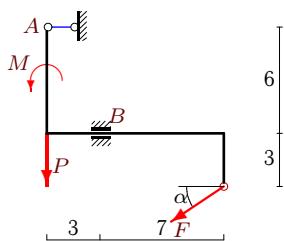
$F = 25 \text{ кН}$, $P = 24 \text{ кН}$, $M = 10 \text{ кНм}$, $\cos \alpha = 0.8$.

Задача S29.27.

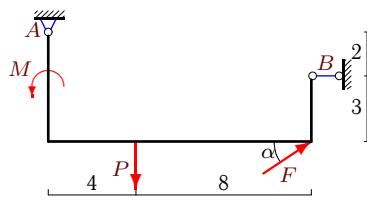
$F = 40 \text{ кН}$, $P = 5 \text{ кН}$, $M = 8 \text{ кНм}$, $\cos \alpha = 0.8$.

Задача S29.28.

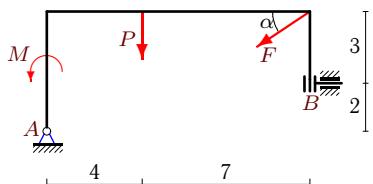
$F = 20 \text{ кН}$, $P = 1 \text{ кН}$, $M = 3 \text{ кНм}$, $\cos \alpha = 0.8$.

Задача S29.29.

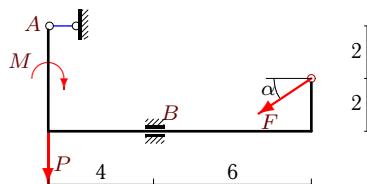
$F = 60 \text{ kH}$, $P = 12 \text{ kH}$, $M = 7 \text{ kHm}$, $\cos \alpha = 0.8$.

Задача S29.30.

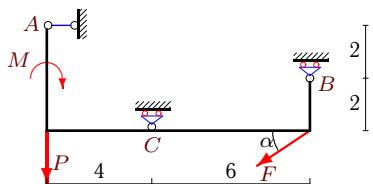
$F = 5 \text{ kH}$, $P = 2 \text{ kH}$, $M = 8 \text{ kHm}$, $\cos \alpha = 0.8$.

Задача S29.31.

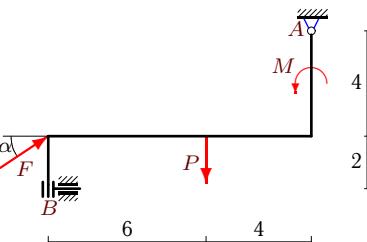
$F = 10 \text{ kH}$, $P = 1 \text{ kH}$, $M = 3 \text{ kHm}$, $\cos \alpha = 0.8$.

Задача S29.32.

$F = 40 \text{ kH}$, $P = 24 \text{ kH}$, $M = 7 \text{ kHm}$, $\cos \alpha = 0.8$.

Задача S29.33.

$F = 30 \text{ kH}$, $P = 5 \text{ kH}$, $M = 20 \text{ kHm}$, $\cos \alpha = 0.8$.

Задача S29.34.

$F = 25 \text{ kH}$, $P = 3 \text{ kH}$, $M = 6 \text{ kHm}$, $\cos \alpha = 0.8$.

**S29 Ответы.
Равновесие рамы**

03.12.2011

№	X_A	Y_A	M_A	X_B	Y_B	M_B	Y_C
1	-28	-	-	-	-1	-	-17
2	-	0	-	-4	-	-29	-
3	36	-	-	-	31	186	-
4	20	-	-	-	-	-155	21
5	16	16	-67	-	-	-	-
6	40	32	-713	-	-	-	-
7	56	-	-	-	45	-267	-
8	-20	9	-	-	-23	-	-
9	-44	21	-	-	-53	-	-
10	56	44	-	-	-	773	-
11	28	-	-	-	1	-	22
12	-	-1	-	-4	-	-19	-
13	-16	-	-	-	-	-183	-9
14	33	-	-	-41	-	-	-1
15	-20	-	-	-	-11	-63	-
16	-24	13	-	-	-30	-	-
17	24	-	-	-	36	-49	-
18	28	-	-	-	41	-	-17
19	28	-	-	-	33	62	-
20	20	-	-	-	45	-83	-
21	-23	4	-	27	-	-	-
22	24	21	-53	-	-	-	-
23	40	33	-469	-	-	-	-
24	40	33	286	-	-	-	-
25	20	20	-236	-	-	-	-
26	20	-	-	-	39	-18	-
27	32	-	-	-	29	182	-
28	16	-	-	-	20	-	-7
29	48	-	-	-	48	641	-
30	24	-1	-	-28	-	-	-
31	8	7	-	-	-	27	-
32	32	-	-	-	48	119	-
33	24	-	-	-	34	-	-11
34	-20	-12	-	-	-	52	-

S29 файл o29s6A