

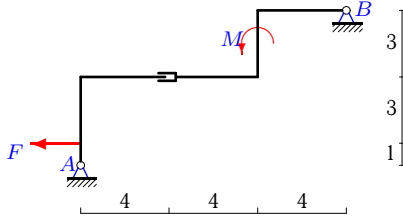
Простая составная конструкция

Определить реакции опор конструкции (в кН), состоящей из двух тел.

Кирсанов М.Н. Задачи по теоретической механике с решениями в **Maple** 11. – М.: ФИЗМАТЛИТ, 2010. – 264 с. (с.15)

Задача S24.1.

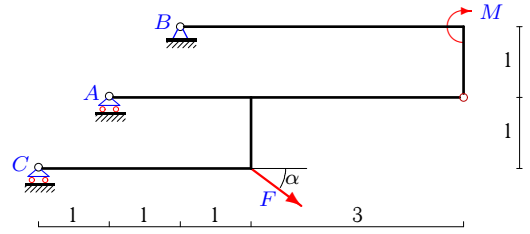
2



$$F = 6 \text{ кН}, M = 6 \text{ кНм.}$$

Задача S24.2.

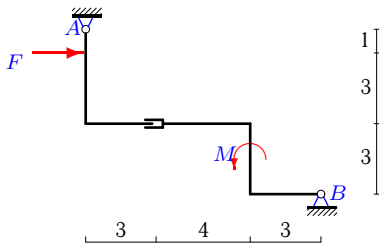
2



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

Задача S24.3.

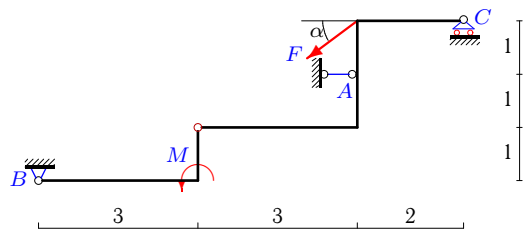
2



$$F = 5 \text{ кН}, M = 15 \text{ кНм.}$$

Задача S24.4.

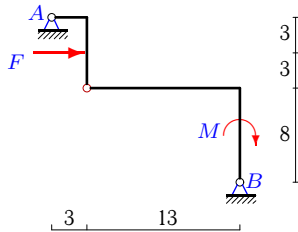
2



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

Задача S24.5.

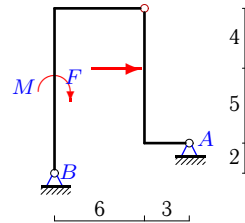
2



$$F = 1 \text{ кН}, M = 5 \text{ кНм.}$$

Задача S24.6.

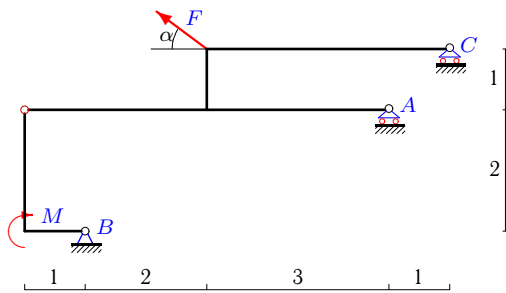
2



$$F = 15 \text{ кН}, M = 5 \text{ кНм.}$$

Задача S24.7.

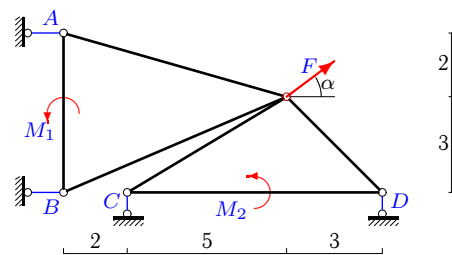
2



$$F = 20 \text{ кН}, M = 29 \text{ кНм}, \cos \alpha = 0.8.$$

Задача S24.8.

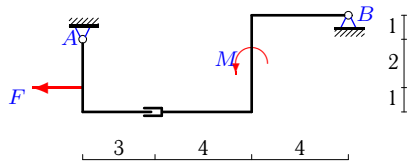
2



$$F = 5 \text{ кН}, M_1 = 2 \text{ кНм}, M_2 = 17 \text{ кНм}, \cos \alpha = 0.8.$$

Задача S24.9.

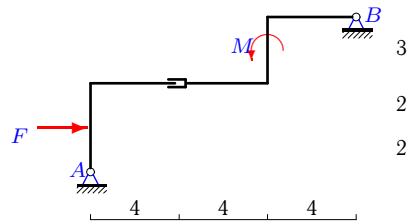
2



$F = 11 \text{ кН}, M = 33 \text{ кНм}.$

Задача S24.10.

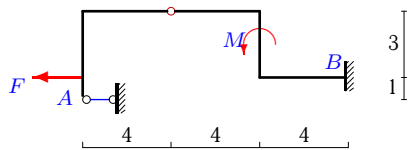
2



$F = 1 \text{ кН}, M = 2 \text{ кНм}.$

Задача S24.11.

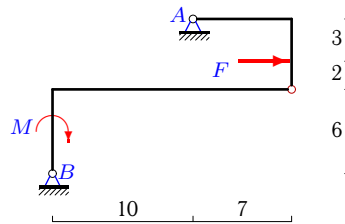
2



$F = 4 \text{ кН}, M = 7 \text{ кНм}.$

Задача S24.12.

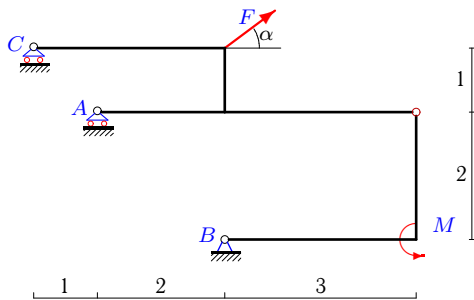
2



$F = 13 \text{ кН}, M = 4 \text{ кНм}.$

Задача S24.13.

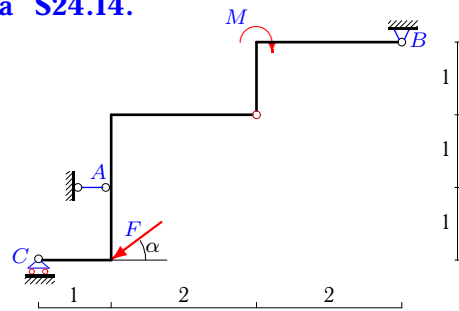
2



$F = 15 \text{ кН}, M = 39 \text{ кНм}, \cos \alpha = 0.8.$

Задача S24.14.

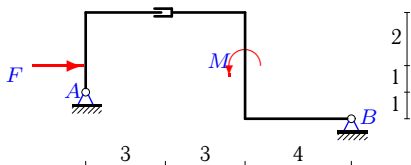
2



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

Задача S24.15.

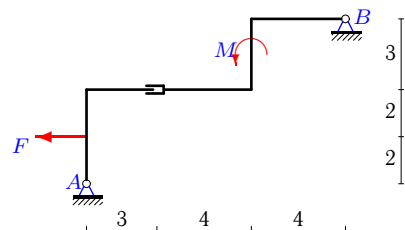
2



$F = 1 \text{ кН}, M = 1 \text{ кНм}.$

Задача S24.16.

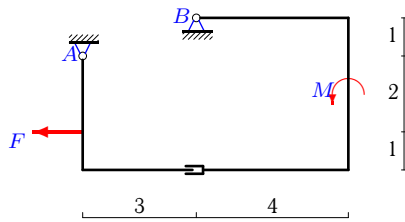
2



$F = 11 \text{ кН}, M = 44 \text{ кНм}.$

Задача S24.17.

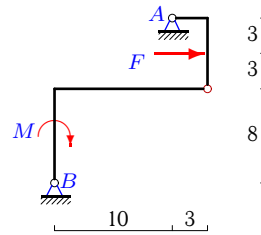
2



$F = 2 \text{ кН}, M = 1 \text{ кНм}.$

Задача S24.18.

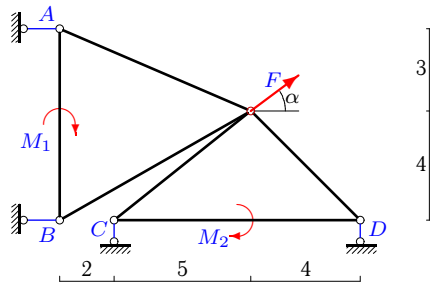
2



$F = 3 \text{ кН}, M = 5 \text{ кНм}.$

Задача S24.19.

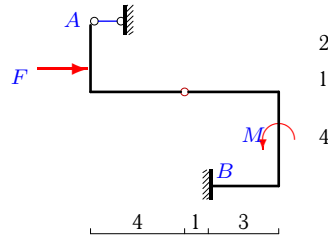
2



$F = 10 \text{ кН}, M_1 = 38 \text{ кНм}, M_2 = 3 \text{ кНм},$
 $\cos \alpha = 0.8.$

Задача S24.20.

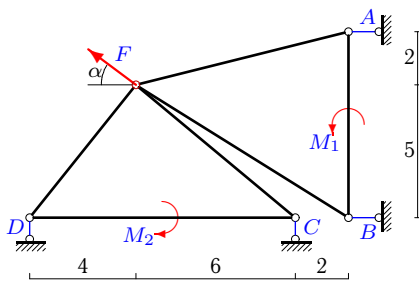
2



$F = 6 \text{ кН}, M = 9 \text{ кНм}.$

Задача S24.21.

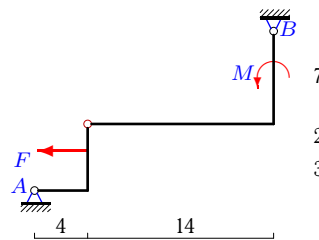
2



$F = 10 \text{ кН}, M_1 = 2 \text{ кНм}, M_2 = 34 \text{ кНм},$
 $\cos \alpha = 0.8.$

Задача S24.22.

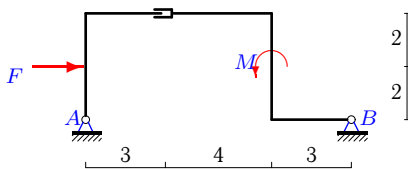
2



$F = 5 \text{ кН}, M = 21 \text{ кНм}.$

Задача S24.23.

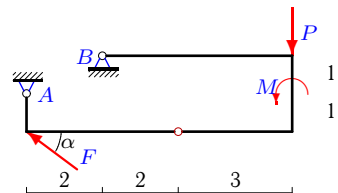
2



$F = 1 \text{ кН}, M = 2 \text{ кНм}.$

Задача S24.24.

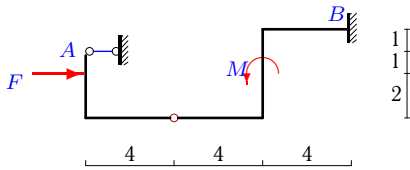
2



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

Задача S24.25.

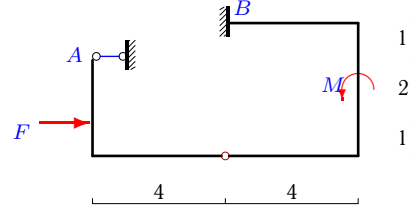
2



$F = 3 \text{ кН}, M = 11 \text{ кНм}.$

Задача S24.26.

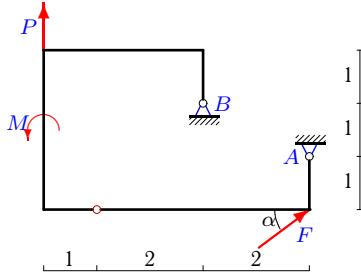
2



$F = 6 \text{ кН}, M = 11 \text{ кНм}.$

Задача S24.27.

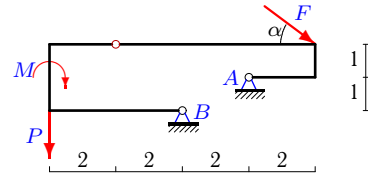
2



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

Задача S24.28.

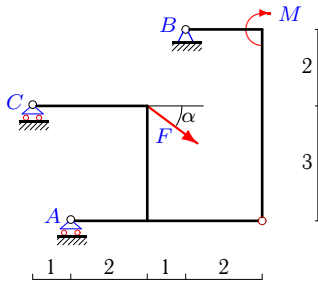
2



$P = 4 \text{ кН}, F = 5 \text{ кН}, M = 2 \text{ кНм},$
 $\cos \alpha = 0.8.$

Задача S24.29.

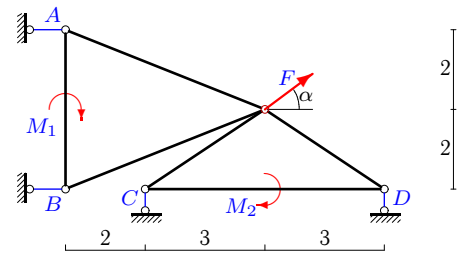
2



$F = 5 \text{ кН}, M = 22 \text{ кНм}, \cos \alpha = 0.8.$

Задача S24.30.

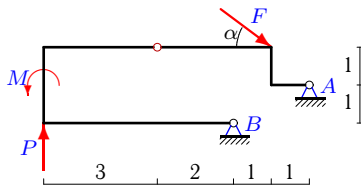
2



$F = 15 \text{ кН}, M_1 = 16 \text{ кНм}, M_2 = 9 \text{ кНм},$
 $\cos \alpha = 0.8.$

Задача S24.31.

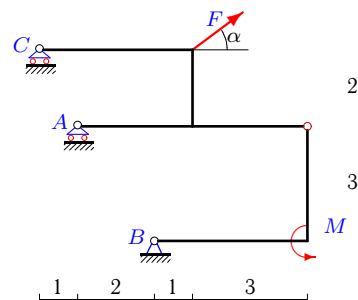
2



$P = 6 \text{ кН}, F = 15 \text{ кН}, M = 12 \text{ кНм},$
 $\cos \alpha = 0.8.$

Задача S24.32.

2



$F = 15 \text{ кН}, M = 20 \text{ кНм}, \cos \alpha = 0.8.$

S24 Ответы.
Простая составная конструкция

15.06.2012

№	X_A	Y_A	X_B	Y_B	Y_C	M_B	Y_D
1	6	1	0	-1	-	-	-
2	-	29	-4	-4	-22	-	-
3	-5	2	0	-2	-	-	-
4	-6	-	10	4	-1	-	-
5	0	-1	-1	1	-	-	-
6	-10	10	-5	-10	-	-	-
7	-	-11	16	-3	2	-	-
8	-2	-	-2	-	1	-	-4
9	11	1	0	-1	-	-	-
10	-1	0	0	0	-	-	-
11	3	-	1	0	-	-10	-
12	-8	2	-5	-2	-	-	-
13	-	-45	-12	5	31	-	-
14	-1	-	5	4	-1	-	-
15	-1	0	0	0	-	-	-
16	11	6	0	-6	-	-	-
17	2	-1	0	1	-	-	-
18	-2	1	-1	-1	-	-	-
19	-10	-	2	-	-3	-	-3
20	-2	-	-4	0	-	7	-
21	6	-	2	-	1	-	-7
22	2	0	3	0	-	-	-
23	-1	0	0	0	-	-	-
24	32	-17	-20	14	-	-	-
25	-2	-	-1	0	-	-15	-
26	-2	-	-4	0	-	-27	-
27	-8	-11	-4	-4	-	-	-
28	2	4	-6	3	-	-	-
29	-	27	-4	-1	-23	-	-
30	-10	-	-2	-	-6	-	-3
31	-25	13	13	-10	-	-	-
32	-	16	-12	-4	-21	-	-

S24 файл о24s2H