

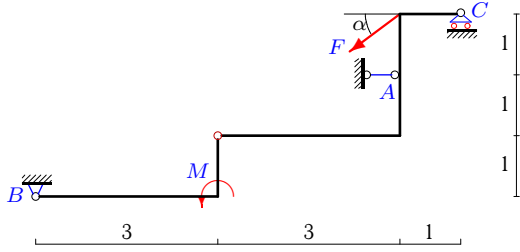
## Простая составная конструкция

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.**

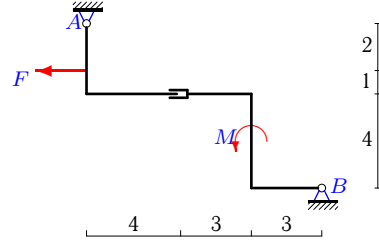
3



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

**Задача S24.2.**

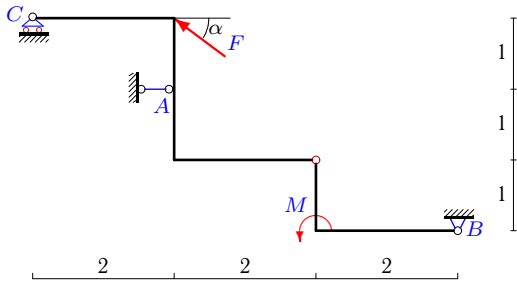
3



$F = 20 \text{ кН}, M = 30 \text{ кНм}.$

**Задача S24.3.**

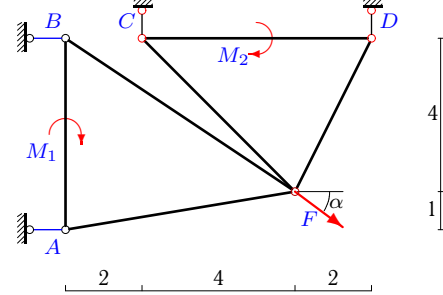
3



$F = 5 \text{ кН}, M = 0 \text{ кНм}, \cos \alpha = 0.8.$

**Задача S24.4.**

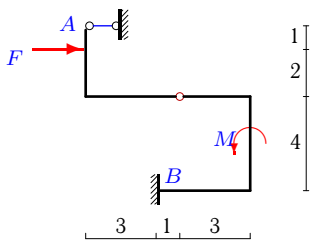
3



$F = 5 \text{ кН}, M_1 = 6 \text{ кНм}, M_2 = 12 \text{ кНм}, \cos \alpha = 0.8.$

**Задача S24.5.**

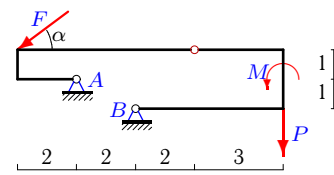
3



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

**Задача S24.6.**

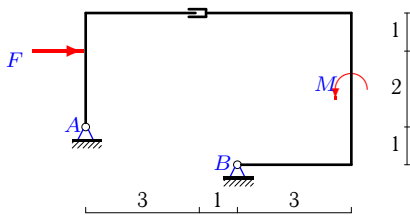
3



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

**Задача S24.7.**

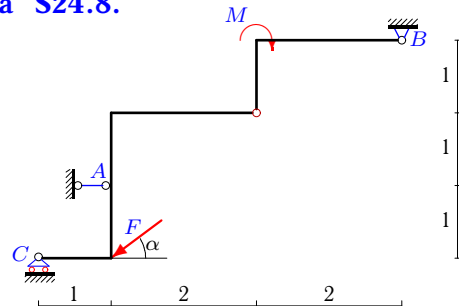
3



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

**Задача S24.8.**

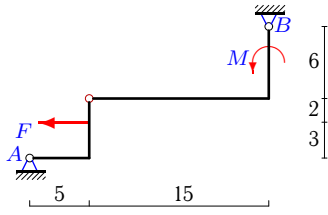
3



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

**Задача S24.9.**

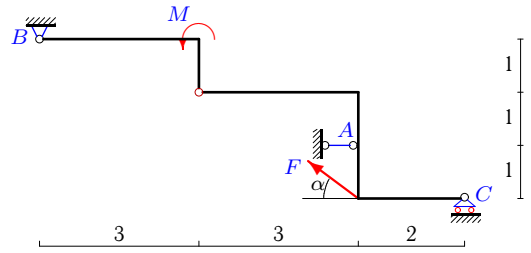
3



$F = 5 \text{ кН}, M = 9 \text{ кНм}.$

**Задача S24.10.**

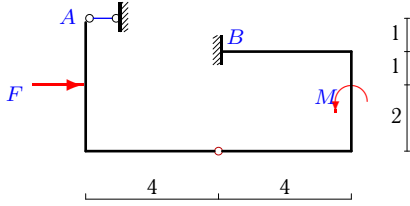
3



$F = 5 \text{ кН}, M = 0 \text{ кНм}, \cos \alpha = 0.8.$

**Задача S24.11.**

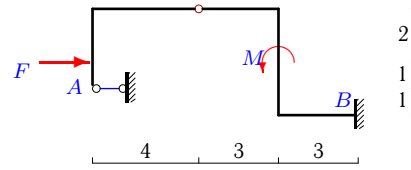
3



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

**Задача S24.12.**

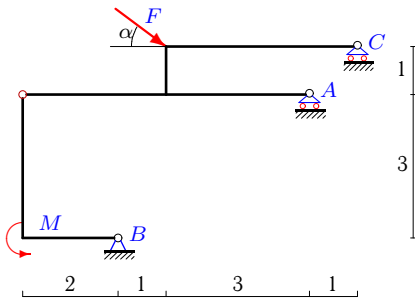
3



$F = 3 \text{ кН}, M = 8 \text{ кНм}.$

**Задача S24.13.**

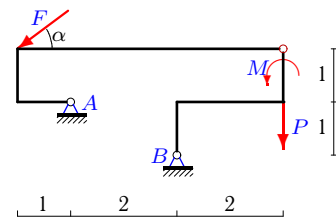
3



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

**Задача S24.14.**

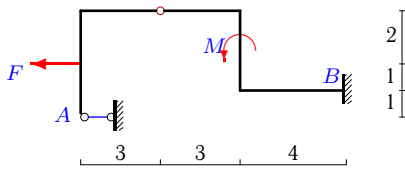
3



$P = 3 \text{ кН}, F = 15 \text{ кН}, M = 6 \text{ кНм}, \cos \alpha = 0.8.$

**Задача S24.15.**

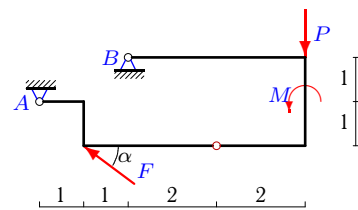
3



$F = 2 \text{ кН}, M = 3 \text{ кНм}.$

**Задача S24.16.**

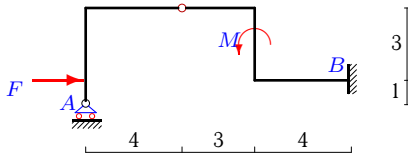
3



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

**Задача S24.17.**

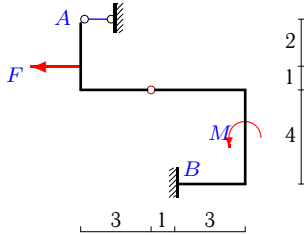
3



$F = 4 \text{ кН}, M = 6 \text{ кНм}.$

**Задача S24.19.**

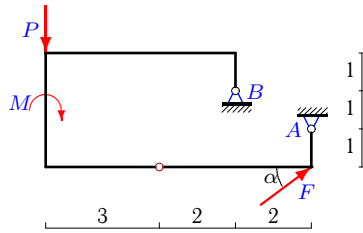
3



$F = 3 \text{ кН}, M = 9 \text{ кНм}.$

**Задача S24.21.**

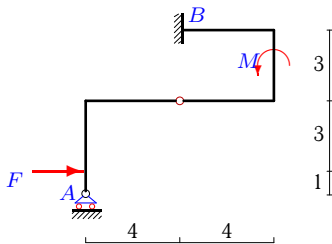
3



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

**Задача S24.23.**

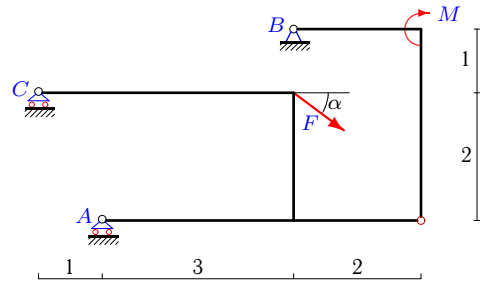
3



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

**Задача S24.18.**

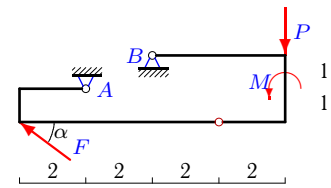
3



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

**Задача S24.20.**

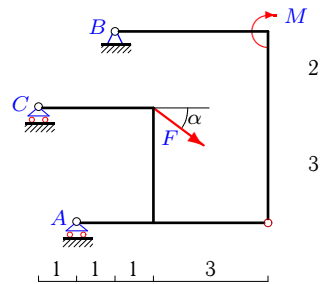
3



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

**Задача S24.22.**

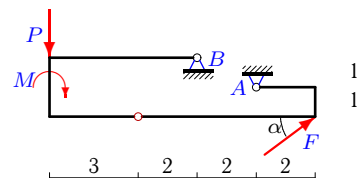
3



$F = 5 \text{ кН}, M = 24 \text{ кНм}, \cos \alpha = 0.8.$

**Задача S24.24.**

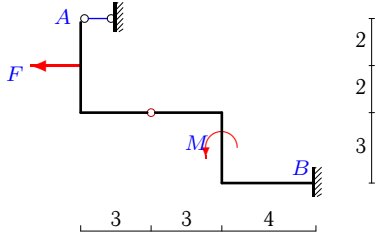
3



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

**Задача S24.25.**

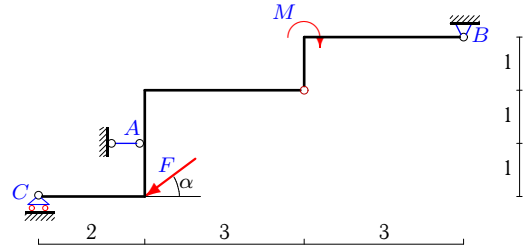
3



$F = 4 \text{ кН}, M = 3 \text{ кНм}.$

**Задача S24.26.**

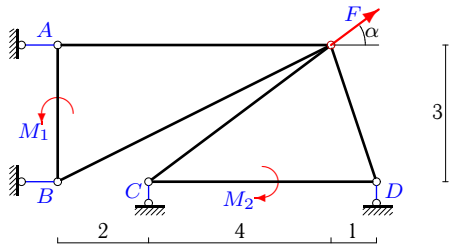
3



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

**Задача S24.27.**

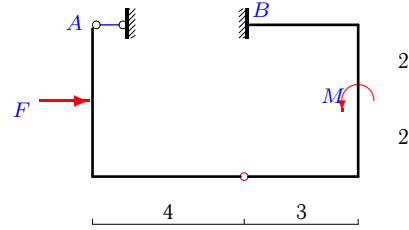
3



$F = 25 \text{ кН}, M_1 = 6 \text{ кНм}, M_2 = 35 \text{ кНм}, \cos \alpha = 0.8.$

**Задача S24.28.**

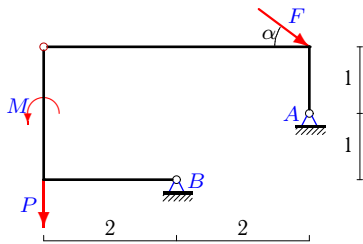
3



$F = 2 \text{ кН}, M = 3 \text{ кНм}.$

**Задача S24.29.**

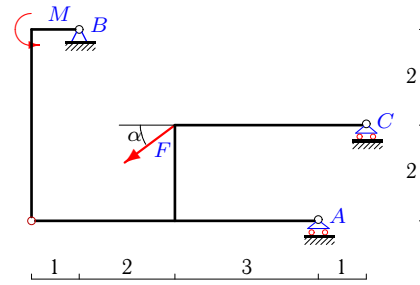
3



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

**Задача S24.30.**

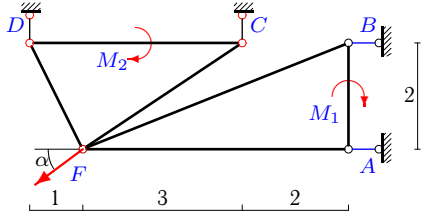
3



$F = 15 \text{ кН}, M = 44 \text{ кНм}, \cos \alpha = 0.8.$

**Задача S24.31.**

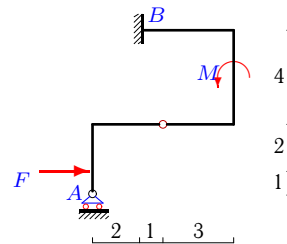
3



$F = 15 \text{ кН}, M_1 = 4 \text{ кНм}, M_2 = 7 \text{ кНм}, \cos \alpha = 0.8.$

**Задача S24.32.**

3



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

**S24 Ответы.**  
**Простая составная конструкция**

15.06.2012

№	$X_A$	$Y_A$	$X_B$	$Y_B$	$Y_C$	$M_B$	$Y_D$
1	-9	-	13	5	-2	-	-
2	20	-1	0	1	-	-	-
3	-6	-	-10	5	2	-	-
4	-2	-	-2	-	-1	-	4
5	-2	-	-1	0	-	-1	-
6	-14	10	26	11	-	-	-
7	-4	-1	0	1	-	-	-
8	-4	-	8	5	-2	-	-
9	1	-1	4	1	-	-	-
10	-11	-	-15	5	2	-	-
11	-2	-	-2	0	-	-13	-
12	-2	-	-1	0	-	-4	-
13	-	36	-4	-4	-29	-	-
14	19	16	-7	-4	-	-	-
15	1	-	1	0	-	-6	-
16	25	-13	-13	10	-	-	-
17	-	3	-4	-3	-	27	-
18	-	14	-4	1	-12	-	-
19	1	-	2	0	-	-17	-
20	10	-7	-6	6	-	-	-
21	-16	-7	12	8	-	-	-
22	-	27	-4	-1	-23	-	-
23	-	3	-4	-3	-	-19	-
24	-34	-22	22	19	-	-	-
25	2	-	2	0	-	-9	-
26	4	-	0	2	1	-	-
27	-18	-	-2	-	-10	-	-5
28	-1	-	-1	0	-	-7	-
29	4	8	-16	13	-	-	-
30	-	32	12	4	-27	-	-
31	14	-	-2	-	4	-	5
32	-	2	-3	-2	-	-19	-

S24 файл о24s3H