

## Простая составная конструкция

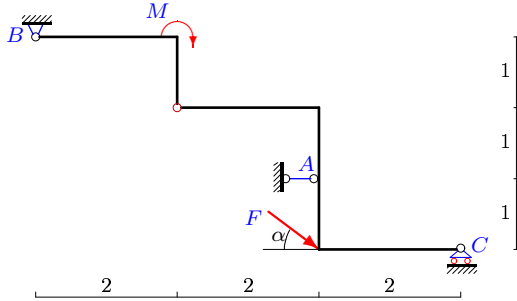
Определить реакции опор конструкции (в кН), состоящей из двух тел.

Кирсанов М.Н. Задачи по теоретической механике с решениями в Maple 11. – М.:

ФИЗМАТЛИТ, 2010. – 264 с. (с.15)

**Задача 24.1.**

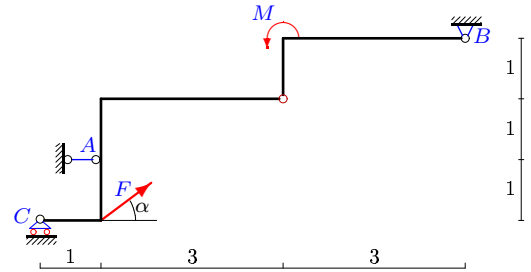
27



$$F = 5 \text{ кН}, M = 2 \text{ кНм}, \cos \alpha = 0,8.$$

**Задача 24.2.**

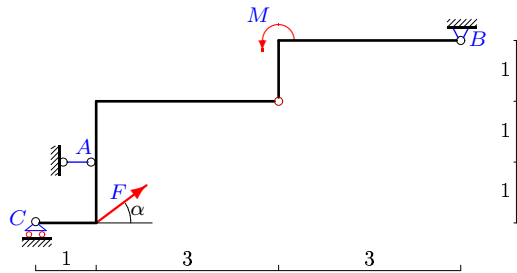
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$$F = 5 \text{ кН}, M = 4 \text{ кНм}, \cos \alpha = 0,8.$$

**Задача 24.3.**

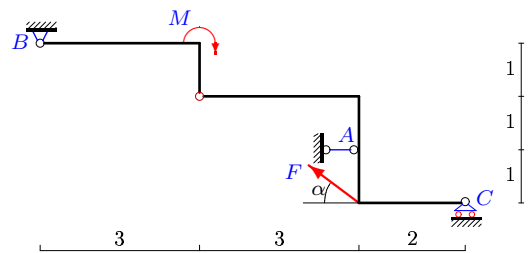
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$$F = 5 \text{ кН}, M = 1 \text{ кНм}, \cos \alpha = 0,8.$$

**Задача 24.4.**

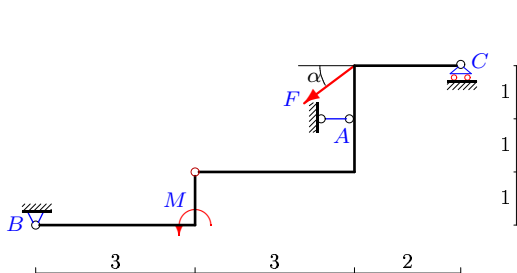
27



$$F = 10 \text{ кН}, M = 6 \text{ кНм}, \cos \alpha = 0,8.$$

**Задача 24.5.**

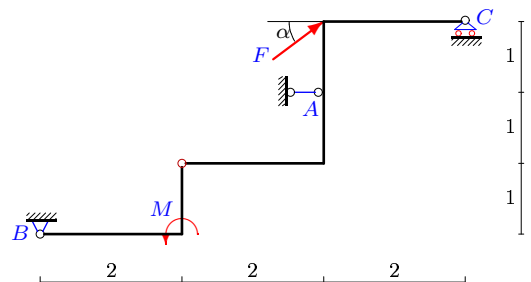
27



$$F = 5 \text{ кН}, M = 4 \text{ кНм}, \cos \alpha = 0,8.$$

**Задача 24.6.**

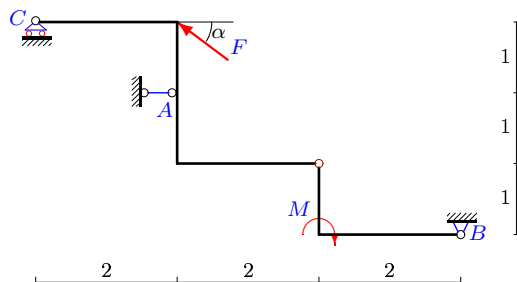
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$$F = 10 \text{ кН}, M = 2 \text{ кНм}, \cos \alpha = 0,8.$$

**Задача 24.7.**

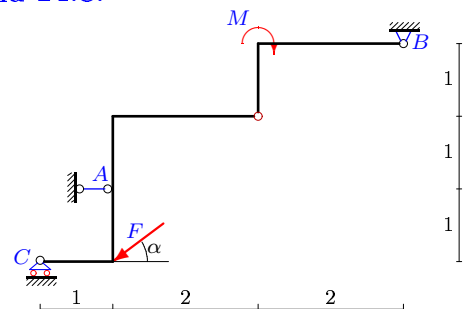
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$$F = 10 \text{ кН}, M = 2 \text{ кНм}, \cos \alpha = 0,8.$$

**Задача 24.8.**

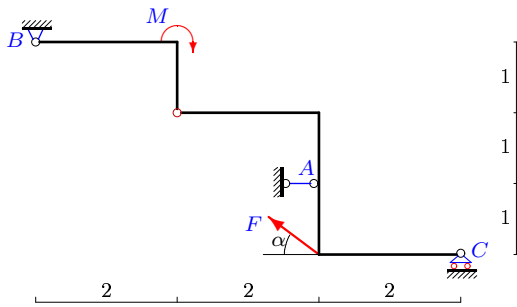
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$$F = 5 \text{ кН}, M = 1 \text{ кНм}, \cos \alpha = 0,8.$$

**Задача 24.9.**

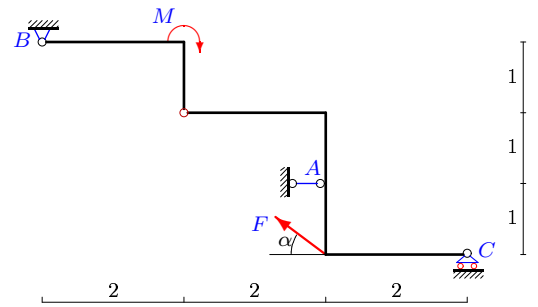
27



$F = 5 \text{ кН}, M = 14 \text{ кНм}, \cos \alpha = 0,8.$

**Задача 24.10.**

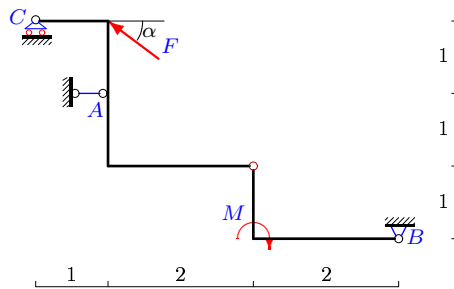
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$F = 5 \text{ кН}, M = 14 \text{ кНм}, \cos \alpha = 0,8.$

**Задача 24.11.**

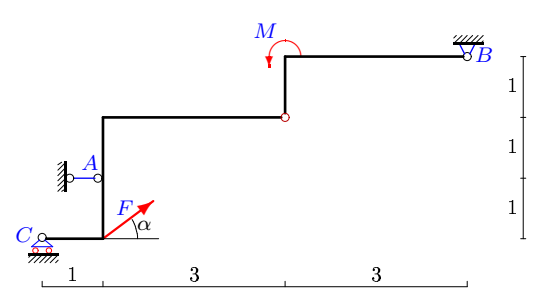
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$F = 5 \text{ кН}, M = 1 \text{ кНм}, \cos \alpha = 0,8.$

**Задача 24.12.**

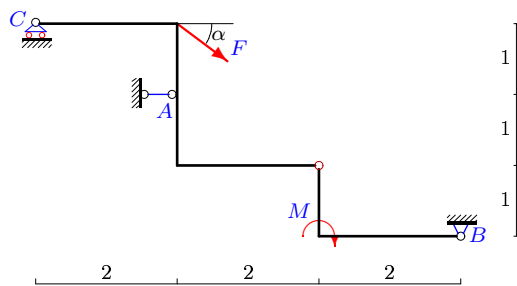
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$F = 5 \text{ кН}, M = 3 \text{ кНм}, \cos \alpha = 0,8.$

**Задача 24.13.**

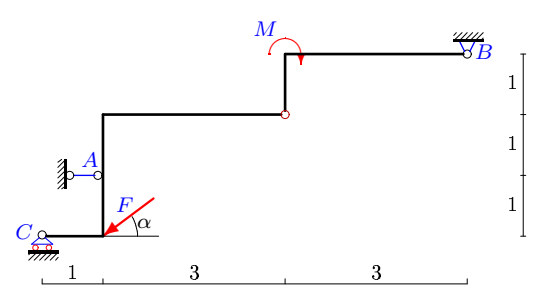
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$F = 10 \text{ кН}, M = 14 \text{ кНм}, \cos \alpha = 0,8.$

**Задача 24.14.**

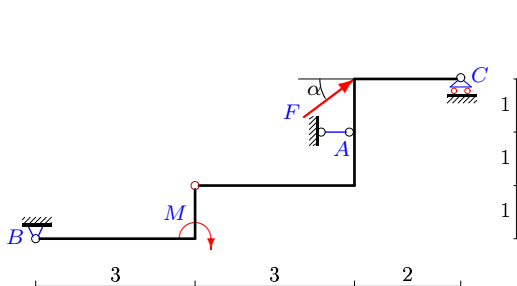
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$F = 10 \text{ кН}, M = 9 \text{ кНм}, \cos \alpha = 0,8.$

**Задача 24.15.**

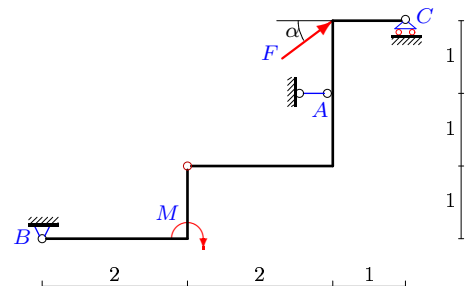
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$F = 5 \text{ кН}, M = 6 \text{ кНм}, \cos \alpha = 0,8.$

**Задача 24.16.**

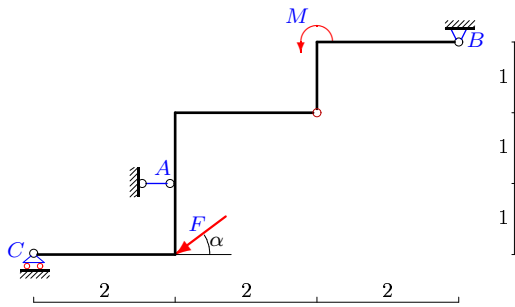
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$F = 5 \text{ кН}, M = 3 \text{ кНм}, \cos \alpha = 0,8.$

Задача 24.17.

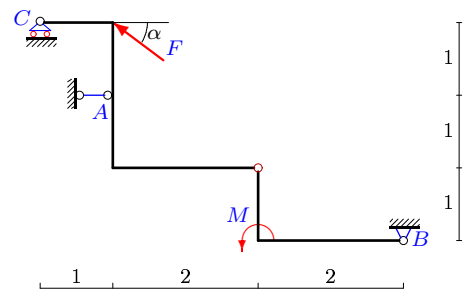
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$F = 5 \text{ кН}, M = 6 \text{ кНм}, \cos \alpha = 0,8.$

Задача 24.18.

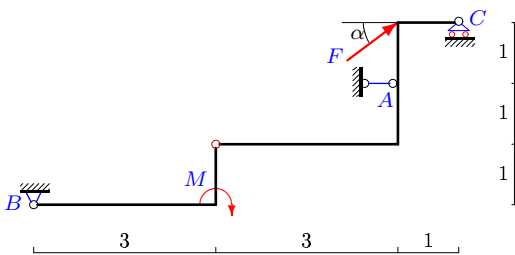
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$F = 10 \text{ кН}, M = 3 \text{ кНм}, \cos \alpha = 0,8.$

Задача 24.19.

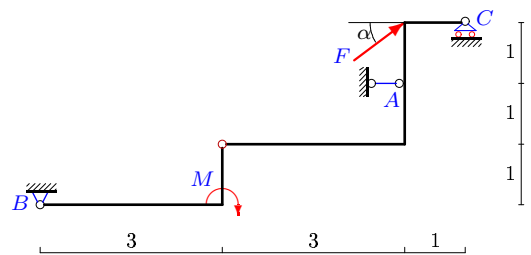
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$F = 5 \text{ кН}, M = 4 \text{ кНм}, \cos \alpha = 0,8.$

Задача 24.20.

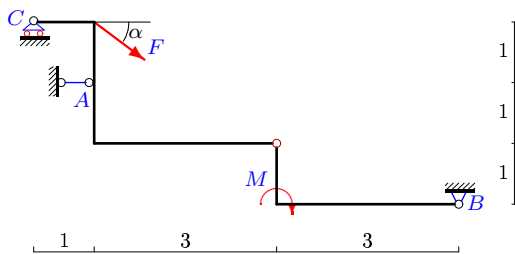
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$F = 5 \text{ кН}, M = 5 \text{ кНм}, \cos \alpha = 0,8.$

Задача 24.21.

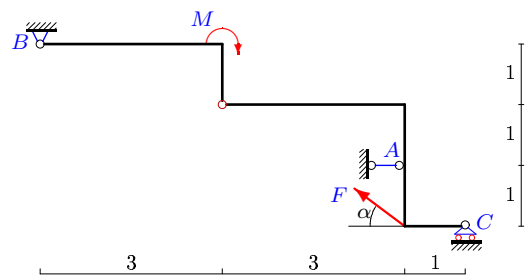
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$F = 5 \text{ кН}, M = 3 \text{ кНм}, \cos \alpha = 0,8.$

Задача 24.22.

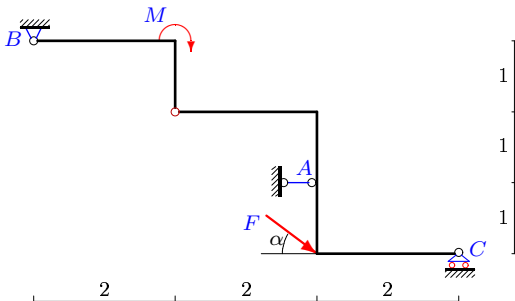
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$F = 10 \text{ кН}, M = 5 \text{ кНм}, \cos \alpha = 0,8.$

Задача 24.23.

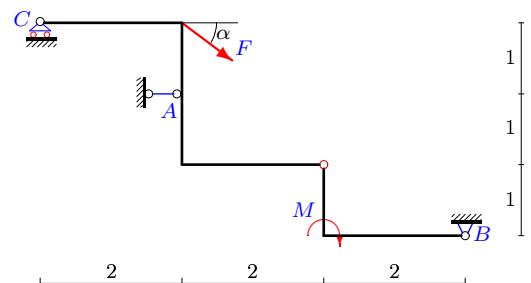
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$F = 5 \text{ кН}, M = 6 \text{ кНм}, \cos \alpha = 0,8.$

Задача 24.24.

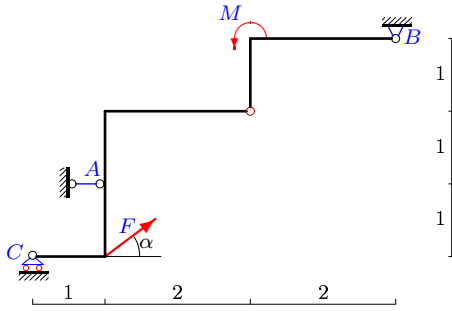
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$F = 5 \text{ кН}, M = 8 \text{ кНм}, \cos \alpha = 0,8.$

Задача 24.25.

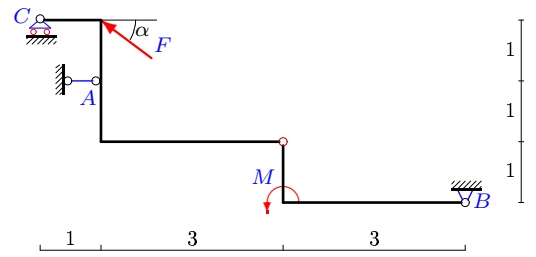
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$F = 5 \text{ кН}, M = 5 \text{ кНм}, \cos \alpha = 0,8.$

Задача 24.26.

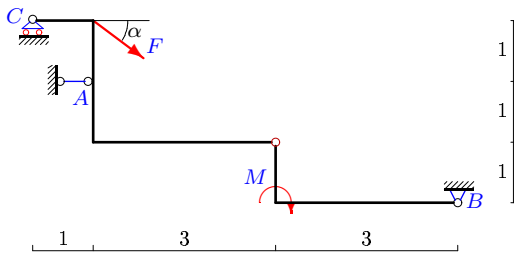
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$F = 5 \text{ кН}, M = 5 \text{ кНм}, \cos \alpha = 0,8.$

Задача 24.27.

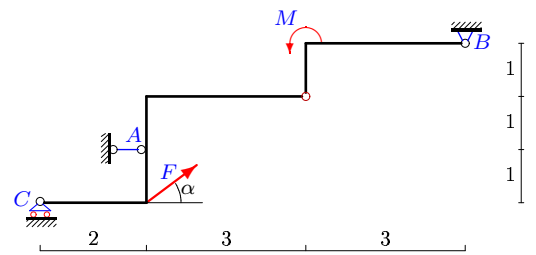
27



$F = 10 \text{ кН}, M = 5 \text{ кНм}, \cos \alpha = 0,8.$

Задача 24.28.

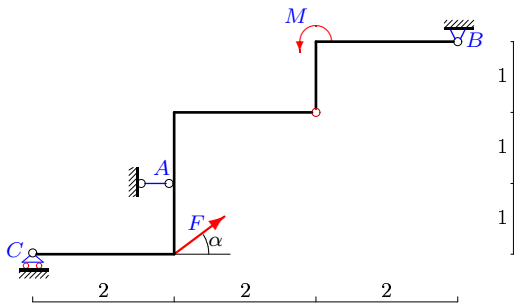
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$F = 5 \text{ кН}, M = 4 \text{ кНм}, \cos \alpha = 0,8.$

Задача 24.29.

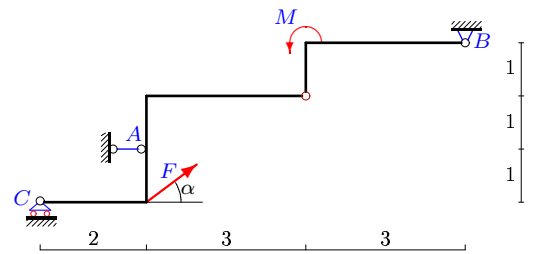
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$F = 10 \text{ кН}, M = 18 \text{ кНм}, \cos \alpha = 0,8.$

Задача 24.30.

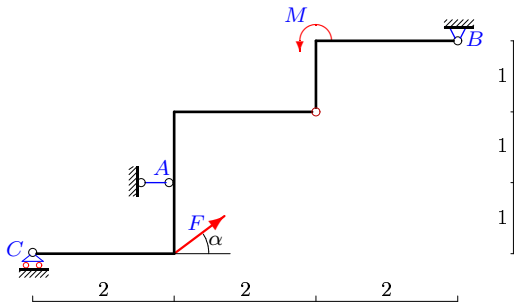
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$F = 5 \text{ кН}, M = 4 \text{ кНм}, \cos \alpha = 0,8.$

Задача 24.31.

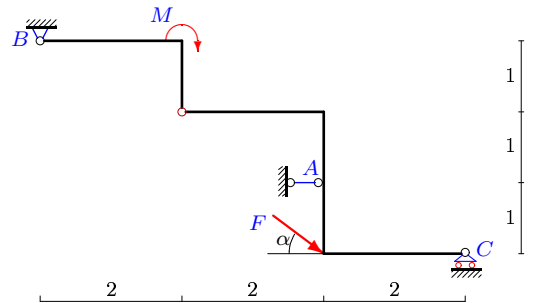
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$F = 5 \text{ кН}, M = 10 \text{ кНм}, \cos \alpha = 0,8.$

Задача 24.32.

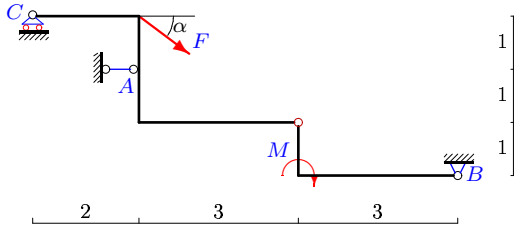
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$F = 5 \text{ кН}, M = 2 \text{ кНм}, \cos \alpha = 0,8.$

Задача 24.33.

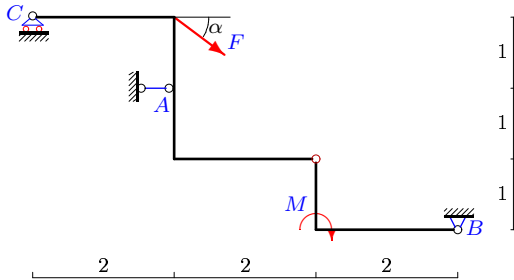
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$F = 10 \text{ кН}, M = 6 \text{ кНм}, \cos \alpha = 0,8.$

Задача 24.35.

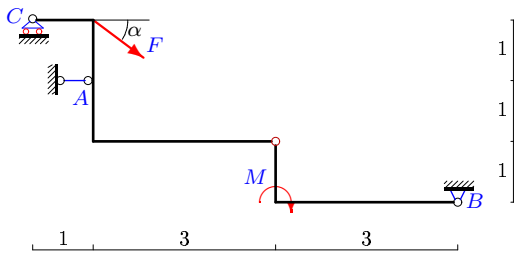
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$F = 10 \text{ кН}, M = 18 \text{ кНм}, \cos \alpha = 0,8.$

Задача 24.37.

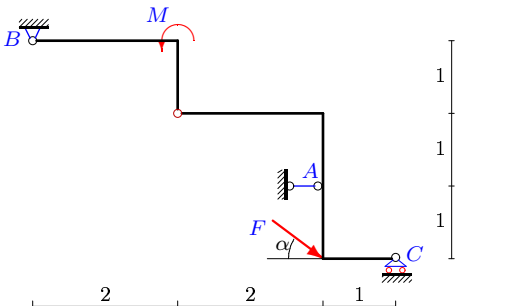
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$F = 10 \text{ кН}, M = 7 \text{ кНм}, \cos \alpha = 0,8.$

Задача 24.39.

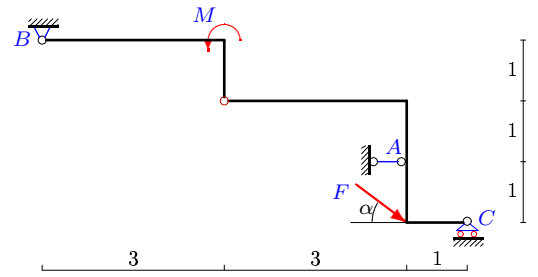
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$F = 10 \text{ кН}, M = 3 \text{ кНм}, \cos \alpha = 0,8.$

Задача 24.34.

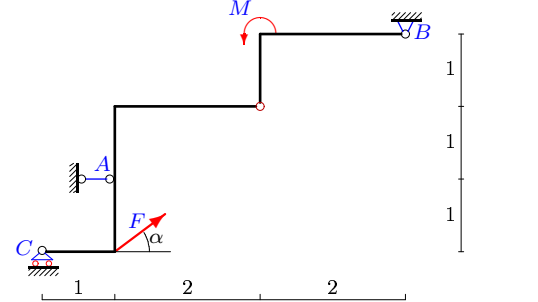
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$F = 5 \text{ кН}, M = 4 \text{ кНм}, \cos \alpha = 0,8.$

Задача 24.36.

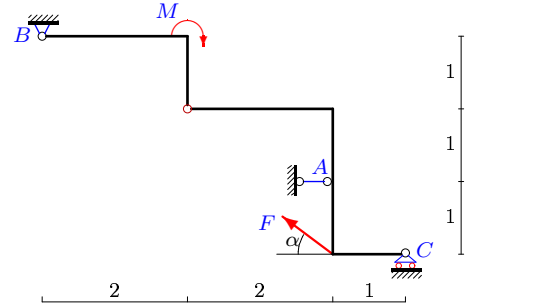
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$F = 5 \text{ кН}, M = 7 \text{ кНм}, \cos \alpha = 0,8.$

Задача 24.38.

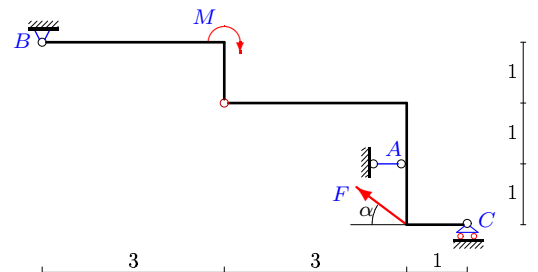
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$F = 5 \text{ кН}, M = 7 \text{ кНм}, \cos \alpha = 0,8.$

Задача 24.40.

27



$F = 10 \text{ кН}, M = 5 \text{ кНм}, \cos \alpha = 0,8.$

S-24

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

27-May-23

№	$X_A$	$Y_A$	$X_B$	$Y_B$	$Y_C$	$M_B$	$Y_D$	$M$
1	10	-	14	-6	-3	-	-	
2	1	-	-5	-3	0	-	-	
3	13	-	-17	-6	3	-	-	
4	-7	-	-15	7	1	-	-	
5	-1	-	5	3	0	-	-	
6	16	-	-24	-11	5	-	-	
7	-16	-	-24	11	5	-	-	
8	-7	-	11	6	-3	-	-	
9	22	-	18	-2	-5	-	-	
10	22	-	18	-2	-5	-	-	
11	-13	-	-17	8	5	-	-	
12	5	-	-9	-4	1	-	-	
13	-16	-	-8	-3	3	-	-	
14	2	-	6	5	1	-	-	
15	-4	-	0	-2	-1	-	-	
16	1	-	-5	-4	1	-	-	
17	-18	-	22	8	-5	-	-	
18	-11	-	-19	11	5	-	-	
19	1	-	-5	-3	0	-	-	
20	-3	-	-1	-2	-1	-	-	
21	5	-	9	-4	-1	-	-	
22	-14	-	-22	9	3	-	-	
23	18	-	22	-8	-5	-	-	
24	-10	-	-6	-1	2	-	-	
25	-5	-	1	-2	-1	-	-	
26	3	-	-1	2	-1	-	-	
27	14	-	22	-9	-3	-	-	
28	1	-	-5	-3	0	-	-	
29	-24	-	16	-1	-5	-	-	
30	1	-	-5	-3	0	-	-	
31	-14	-	10	0	-3	-	-	
32	10	-	14	-6	-3	-	-	
33	7	-	15	-7	-1	-	-	
34	1	-	5	-3	0	-	-	
35	-24	-	-16	-1	5	-	-	
36	-11	-	7	0	-3	-	-	
37	6	-	14	-7	-1	-	-	
38	11	-	7	0	-3	-	-	
39	11	-	19	-11	-5	-	-	
40	-14	-	-22	9	3	-	-	

S-24 файл 24s27WB