

Равновесие рамы

Определить реакции опор рамы; $\cos \alpha = 0.8$.

Кирсанов М.Н. **Решбник. Теоретическая механика**/Под ред. А. И. Кириллова.- М.:ФИЗМАТЛИТ, 2008.- 384 с. (с.67.)

Задача 29.1. 7

$F = 60 \text{ кН}, P = 5 \text{ кН}, m = 20 \text{ кНМ}.$

Задача 29.2. 7

$F = 25 \text{ кН}, P = 24 \text{ кН}, m = 7 \text{ кНМ}.$

Задача 29.3. 7

$F = 20 \text{ кН}, P = 3 \text{ кН}, m = 9 \text{ кНМ}.$

Задача 29.4. 7

$F = 20 \text{ кН}, P = 6 \text{ кН}, m = 7 \text{ кНМ}.$

Задача 29.5. 7

$F = 100 \text{ кН}, P = 1 \text{ кН}, m = 3 \text{ кНМ}.$

Задача 29.6. 7

$F = 35 \text{ кН}, P = 3 \text{ кН}, m = 10 \text{ кНМ}.$

Задача 29.7. 7

$F = 15 \text{ кН}, P = 4 \text{ кН}, m = 15 \text{ кНМ}.$

Задача 29.8. 7

$F = 5 \text{ кН}, P = 2 \text{ кН}, m = 5 \text{ кНМ}.$

Задача 29.9. 7

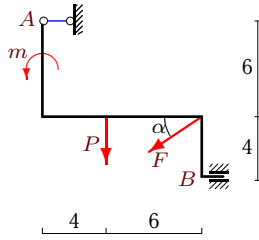
$F = 20 \text{ кН}, P = 4 \text{ кН}, m = 3 \text{ кНМ}.$

Задача 29.10. 7

$F = 10 \text{ кН}, P = 1 \text{ кН}, m = 3 \text{ кНМ}.$

Задача 29.11.

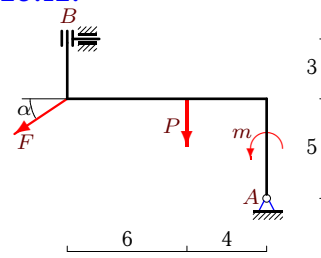
7



$F = 40 \text{ кН}, P = 1 \text{ кН}, m = 3 \text{ кНм}.$

Задача 29.12.

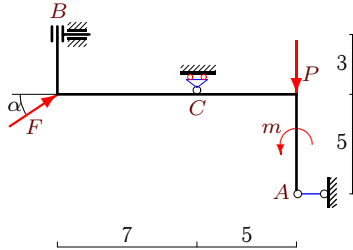
7



$F = 40 \text{ кН}, P = 4 \text{ кН}, m = 7 \text{ кНм}.$

Задача 29.13.

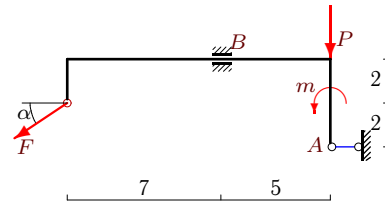
7



$F = 20 \text{ кН}, P = 3 \text{ кН}, m = 23 \text{ кНм}.$

Задача 29.14.

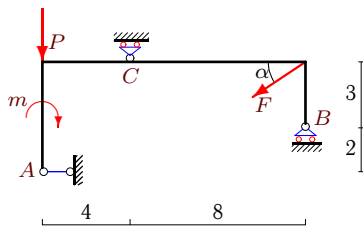
7



$F = 40 \text{ кН}, P = 30 \text{ кН}, m = 7 \text{ кНм}.$

Задача 29.15.

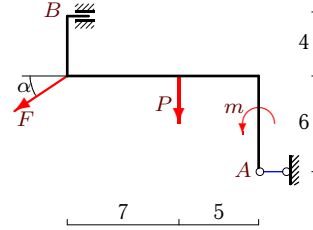
7



$F = 80 \text{ кН}, P = 3 \text{ кН}, m = 12 \text{ кНм}.$

Задача 29.16.

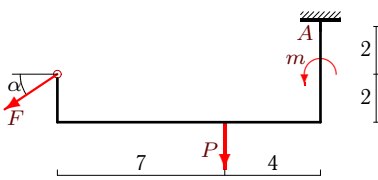
7



$F = 80 \text{ кН}, P = 3 \text{ кН}, m = 12 \text{ кНм}.$

Задача 29.17.

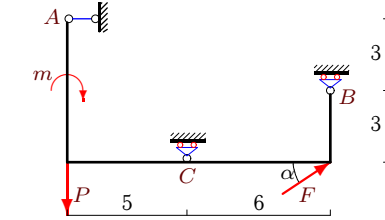
7



$F = 30 \text{ кН}, P = 4 \text{ кН}, m = 5 \text{ кНм}.$

Задача 29.18.

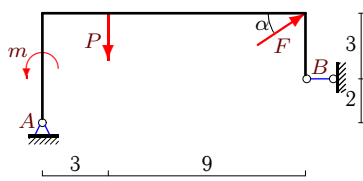
7



$F = 10 \text{ кН}, P = 1 \text{ кН}, m = 5 \text{ кНм}.$

Задача 29.19.

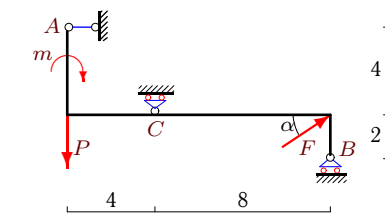
7



$F = 10 \text{ кН}, P = 1 \text{ кН}, m = 3 \text{ кНм}.$

Задача 29.20.

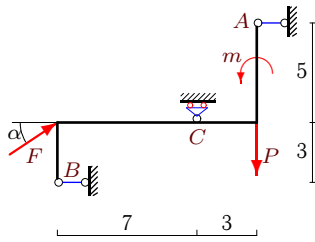
7



$F = 40 \text{ кН}, P = 3 \text{ кН}, m = 12 \text{ кНм}.$

Задача 29.21.

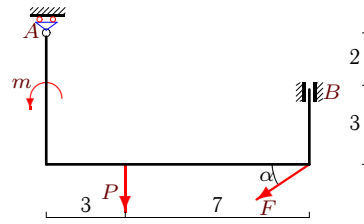
7



$F = 40 \text{ кН}, P = 1 \text{ кН}, m = 3 \text{ кНм}.$

Задача 29.22.

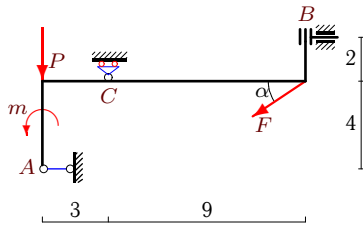
7



$F = 15 \text{ кН}, P = 3 \text{ кН}, m = 4 \text{ кНм}.$

Задача 29.23.

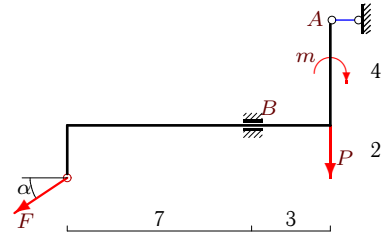
7



$F = 40 \text{ кН}, P = 3 \text{ кН}, m = 22 \text{ кНм}.$

Задача 29.24.

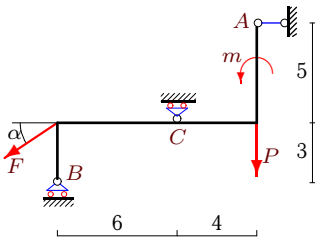
7



$F = 25 \text{ кН}, P = 24 \text{ кН}, m = 7 \text{ кНм}.$

Задача 29.25.

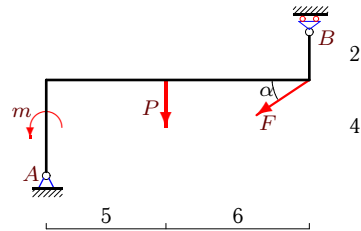
7



$F = 15 \text{ кН}, P = 1 \text{ кН}, m = 4 \text{ кНм}.$

Задача 29.26.

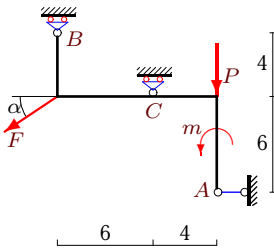
7



$F = 55 \text{ кН}, P = 6 \text{ кН}, m = 30 \text{ кНм}.$

Задача 29.27.

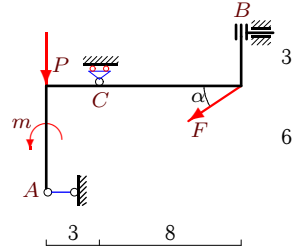
7



$F = 30 \text{ кН}, P = 1 \text{ кН}, m = 4 \text{ кНм}.$

Задача 29.28.

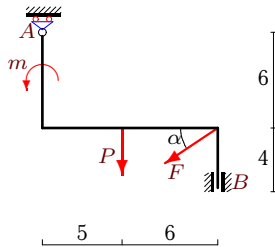
7



$F = 35 \text{ кН}, P = 3 \text{ кН}, m = 17 \text{ кНм}.$

Задача 29.29.

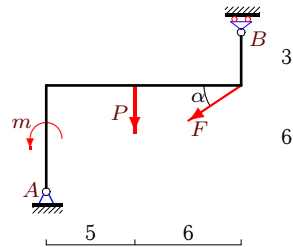
7



$F = 15 \text{ кН}, P = 4 \text{ кН}, m = 7 \text{ кНм}.$

Задача 29.30.

7



$F = 55 \text{ кН}, P = 5 \text{ кН}, m = 25 \text{ кНм}.$

Равновесие рамы

№	X_A	Y_A	M_A	X_B	Y_B	M_B	Y_C
1	-48	21	-	-	-52	-	-
2	20	-	-	-	39	-110	-
3	82	-9	-	-98	-	-	-
4	16	-	-	-	18	207	-
5	98	61	-	-18	-	-	-
6	28	-	-	-	-	44	24
7	-12	-	-	-	-	107	-5
8	-	-1	-	-4	-	-24	-
9	-	16	-	16	-	-107	-
10	9	-	-	-1	-	-	7
11	32	-	-	-	25	183	-
12	32	28	-	-	-	-423	-
13	-16	-	-	-	-	156	-9
14	32	-	-	-	54	-89	-
15	64	-	-	-	8	-	43
16	64	-	-	-	51	-375	-
17	24	22	-171	-	-	-	-
18	-8	-	-	-	-14	-	9
19	-24	-5	-	16	-	-	-
20	-32	-	-	-	-40	-	19
21	-33	-	-	1	-	-	-23
22	-	12	-	12	-	131	-
23	32	-	-	-	-	57	27
24	20	-	-	-	39	94	-
25	12	-	-	-	-1	-	11
26	44	22	-	-	17	-	-
27	24	-	-	-	42	-	-23
28	28	-	-	-	-	-26	24
29	-	13	-	12	-	64	-
30	44	29	-	-	9	-	-