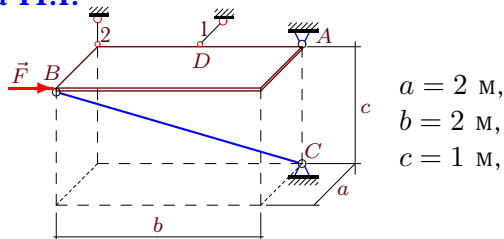


Равновесие полки

Горизонтальная однородная прямоугольная полка весом G имеет в точке A сферическую опору и поддерживается двумя невесомыми, шарнирно закрепленными по концам стержнями (горизонтальным 1 и вертикальным 2) и подпоркой BC . К полке приложена сила F , направленная вдоль одного из ее ребер. Определить реакции опор (в кН).

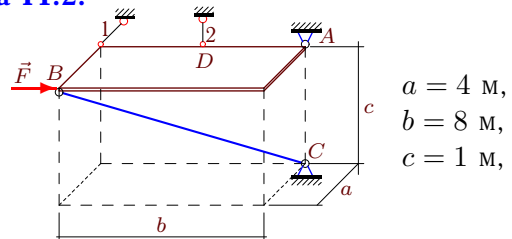
Кирсанов М.Н. **Решebник. Теоретическая механика**/Под ред. А. И. Кириллова.– М.:ФИЗМАТЛИТ, 2008.– 384 с. (с.106.)

Задача 14.1.



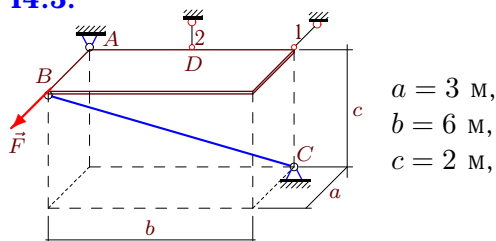
$AD = 1 \text{ м}, G=2 \text{ кН}, F=1 \text{ кН}.$

Задача 14.2.



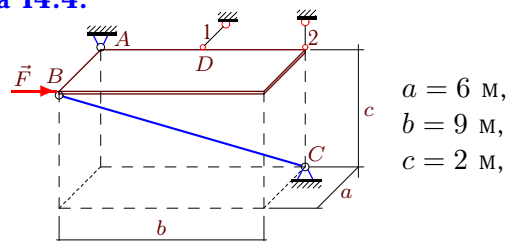
$AD = 4 \text{ м}, G=2 \text{ кН}, F=8 \text{ кН}.$

Задача 14.3.



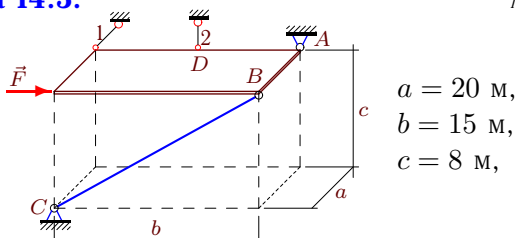
$AD = 3 \text{ м}, G=12 \text{ кН}, F=4 \text{ кН}.$

Задача 14.4.



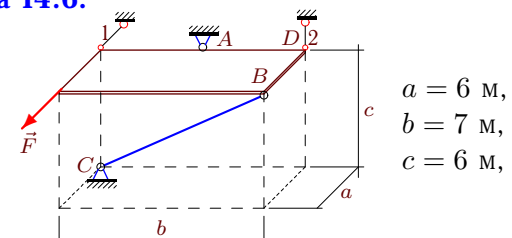
$AD = 4 \text{ м}, G=32 \text{ кН}, F=2 \text{ кН}.$

Задача 14.5.



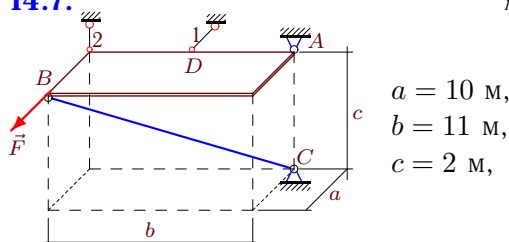
$AD = 7 \text{ м}, G=112 \text{ кН}, F=30 \text{ кН}.$

Задача 14.6.



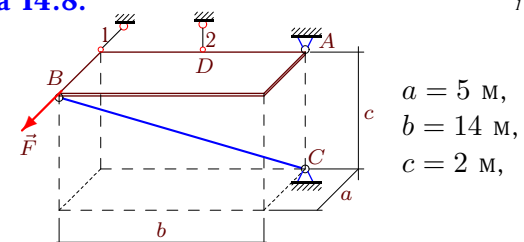
$AD = 3 \text{ м}, G=36 \text{ кН}, F=2 \text{ кН}.$

Задача 14.7.



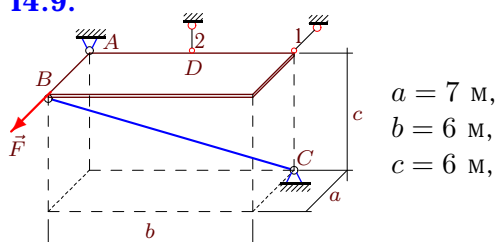
$AD = 5 \text{ м}, G=12 \text{ кН}, F=10 \text{ кН}.$

Задача 14.8.



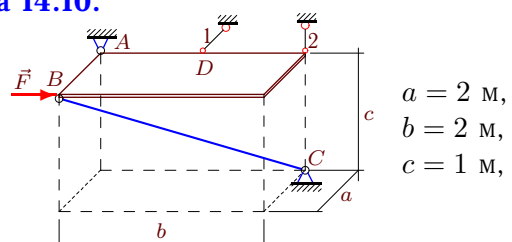
$AD = 7 \text{ м}, G=4 \text{ кН}, F=7 \text{ кН}.$

Задача 14.9.



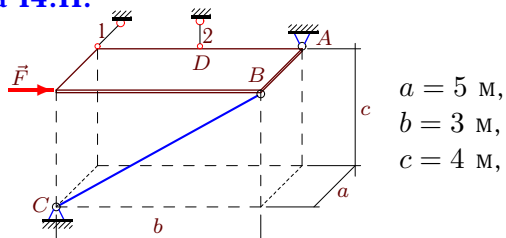
$AD = 3 \text{ м}, G=12 \text{ кН}, F=4 \text{ кН}.$

Задача 14.10.



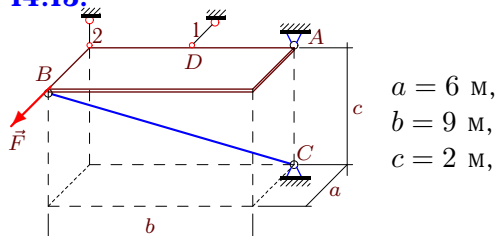
$AD = 1 \text{ м}, G=4 \text{ кН}, F=1 \text{ кН}.$

Задача 14.11.



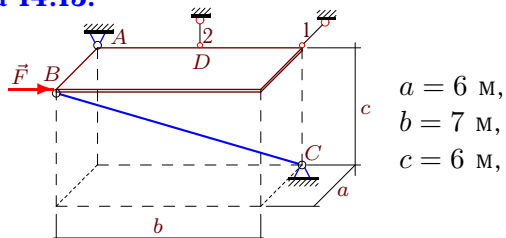
$AD = 1 \text{ м}, G=24 \text{ кН}, F=3 \text{ кН}.$

Задача 14.13.



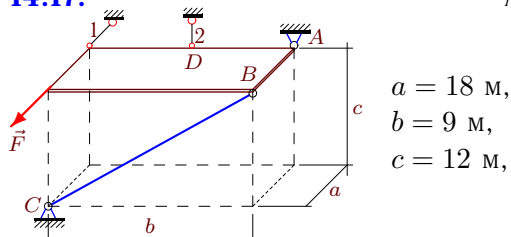
$AD = 4 \text{ м}, G=4 \text{ кН}, F=8 \text{ кН}.$

Задача 14.15.



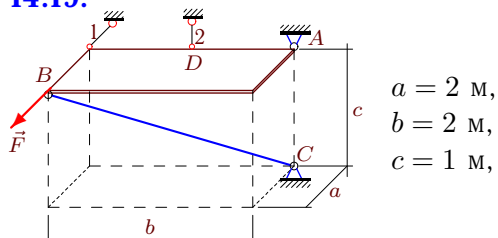
$AD = 3 \text{ м}, G=108 \text{ кН}, F=14 \text{ кН}.$

Задача 14.17.



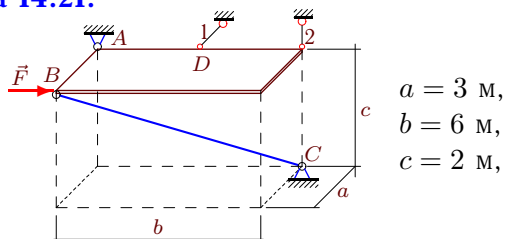
$AD = 4 \text{ м}, G=16 \text{ кН}, F=3 \text{ кН}.$

Задача 14.19.



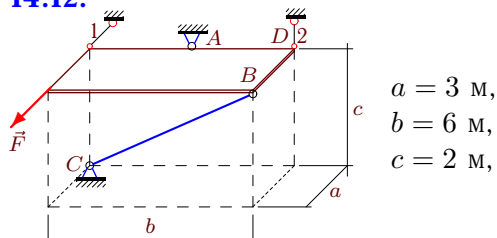
$AD = 1 \text{ м}, G=6 \text{ кН}, F=4 \text{ кН}.$

Задача 14.21.



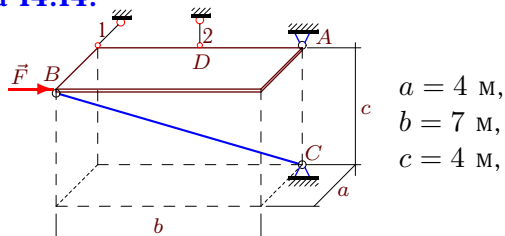
$AD = 3 \text{ м}, G=4 \text{ кН}, F=2 \text{ кН}.$

Задача 14.12.



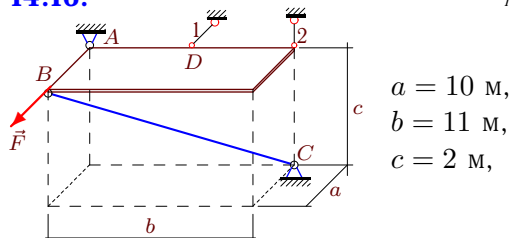
$AD = 3 \text{ м}, G=8 \text{ кН}, F=1 \text{ кН}.$

Задача 14.14.



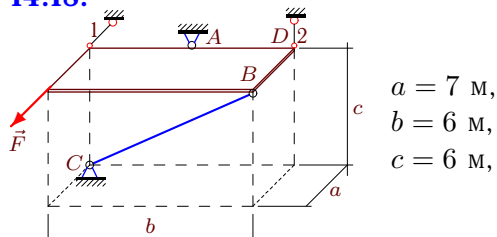
$AD = 3 \text{ м}, G=16 \text{ кН}, F=7 \text{ кН}.$

Задача 14.16.



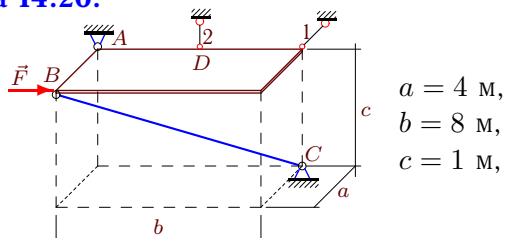
$AD = 5 \text{ м}, G=16 \text{ кН}, F=1 \text{ кН}.$

Задача 14.18.



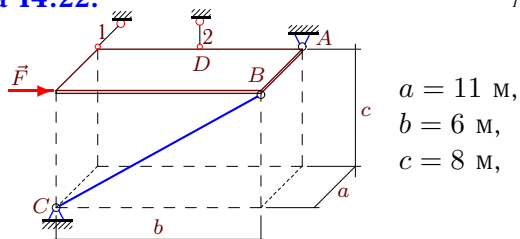
$AD = 3 \text{ м}, G=12 \text{ кН}, F=1 \text{ кН}.$

Задача 14.20.



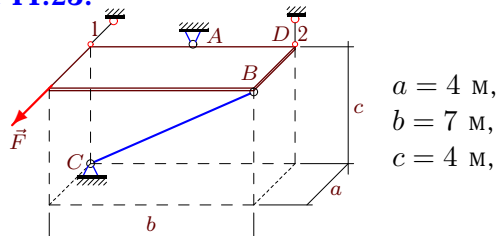
$AD = 4 \text{ м}, G=4 \text{ кН}, F=2 \text{ кН}.$

Задача 14.22.



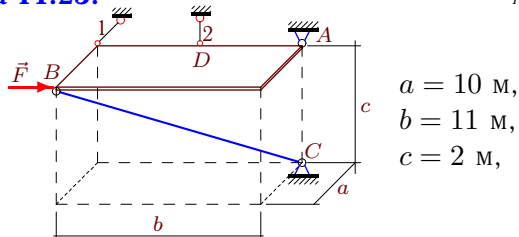
$AD = 3 \text{ м}, G=24 \text{ кН}, F=3 \text{ кН}.$

Задача 14.23.



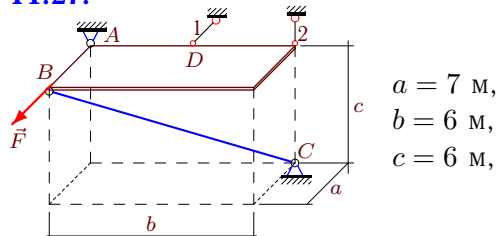
$AD = 3 \text{ м}, G=72 \text{ кН}, F=4 \text{ кН}.$

Задача 14.25.



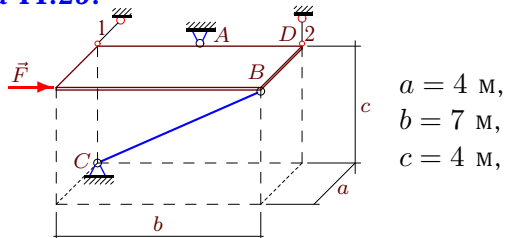
$AD = 5 \text{ м}, G=4 \text{ кН}, F=22 \text{ кН}.$

Задача 14.27.



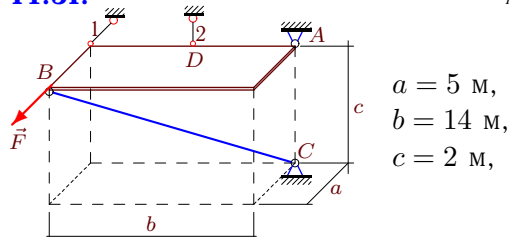
$AD = 3 \text{ м}, G=36 \text{ кН}, F=2 \text{ кН}.$

Задача 14.29.



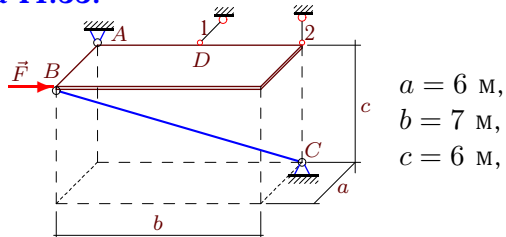
$AD = 3 \text{ м}, G=24 \text{ кН}, F=8 \text{ кН}.$

Задача 14.31.



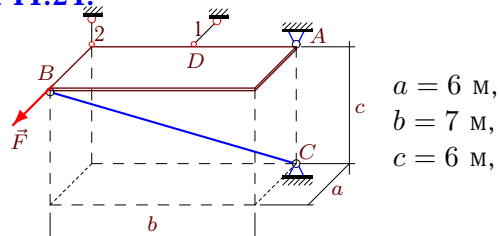
$AD = 7 \text{ м}, G=12 \text{ кН}, F=14 \text{ кН}.$

Задача 14.33.



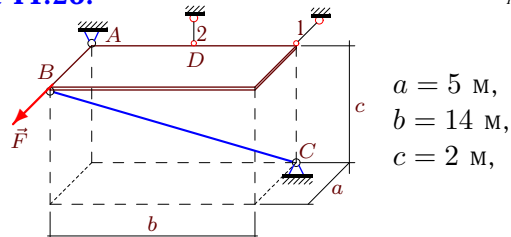
$AD = 3 \text{ м}, G=12 \text{ кН}, F=1 \text{ кН}.$

Задача 14.24.



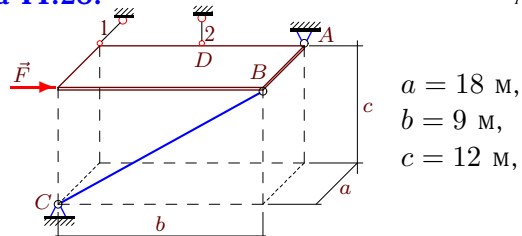
$AD = 3 \text{ м}, G=24 \text{ кН}, F=3 \text{ кН}.$

Задача 14.26.



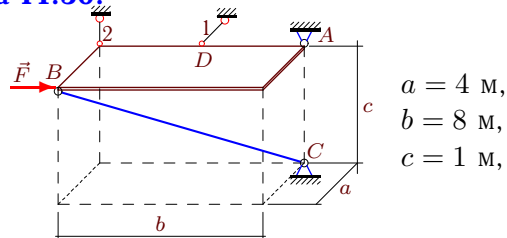
$AD = 7 \text{ м}, G=4 \text{ кН}, F=2 \text{ кН}.$

Задача 14.28.



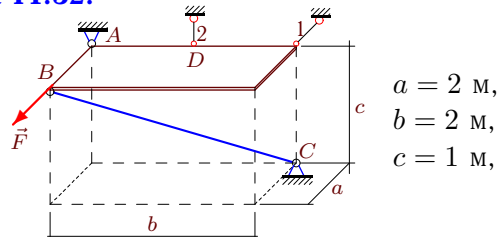
$AD = 4 \text{ м}, G=64 \text{ кН}, F=3 \text{ кН}.$

Задача 14.30.



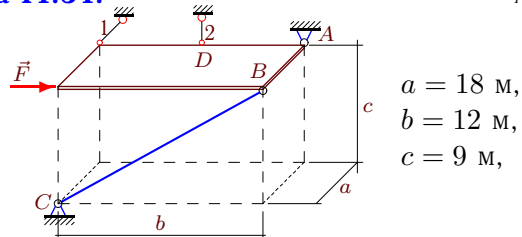
$AD = 4 \text{ м}, G=2 \text{ кН}, F=4 \text{ кН}.$

Задача 14.32.



$AD = 1 \text{ м}, G=2 \text{ кН}, F=1 \text{ кН}.$

Задача 14.34.



$AD = 6 \text{ м}, G=36 \text{ кН}, F=2 \text{ кН}.$

Равновесие полки

	H	V	X_A	Y_A	Z_A	S
1	2	0	-4	1	1	-3
2	4	0	-8	0	1	-9
3	-9	12	-4	18	-6	-21
4	-105	16	57	70	0	-88
5	-180	120	180	-135	-64	-119
6	-20	-24	0	-21	42	-33
7	-22	0	-18	33	6	-45
8	-7	0	-5	14	2	-15
9	-7	12	-4	6	-6	-11
10	-6	2	2	3	0	-6
11	-20	36	20	-12	-24	-15
12	-7	-4	0	-12	8	-14
13	-18	0	4	9	2	-11
14	4	0	-12	7	8	-18
15	-42	126	-12	49	-72	-99
16	-88	8	47	44	0	-60
17	-15	18	12	-6	-10	-10
18	-8	-6	0	-6	12	-11
19	-4	0	-6	6	3	-9
20	-7	4	-1	14	-2	-18
21	-4	2	1	4	0	-7
22	-22	24	22	-12	-12	-15
23	-40	-48	0	-63	84	-81
24	-7	0	-8	14	12	-22
25	20	0	-30	-11	2	-15
26	-5	4	-2	14	-2	-15
27	-42	18	19	18	0	-33
28	-54	72	54	-27	-40	-40
29	-20	-16	8	-29	28	-27
30	4	0	-8	4	1	-9
31	-14	0	-15	42	6	-45
32	-2	2	-1	2	-1	-3
33	-12	6	6	6	0	-11
34	-39	36	39	-26	-18	-30