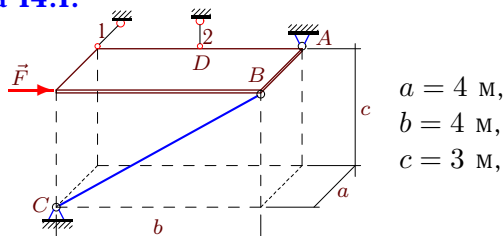


Равновесие полки

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).

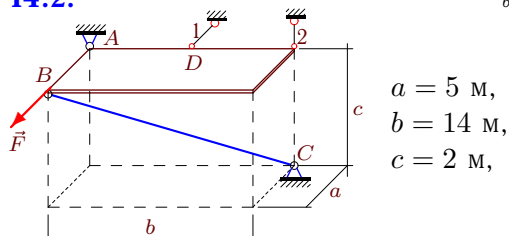
Кирсанов М.Н. **Решebник. Теоретическая механика**/Под ред. А. И. Кириллова.– М.:ФИЗМАТЛИТ, 2008.– 384 с. (с.106.)

Задача 14.1.



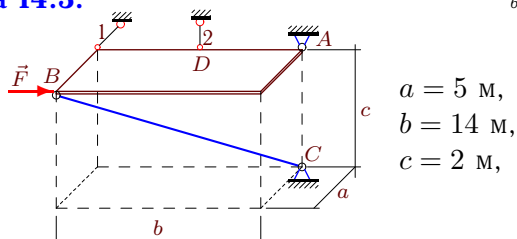
$AD = 2$ м, $G = 12$ кН, $F = 1$ кН.

Задача 14.2.



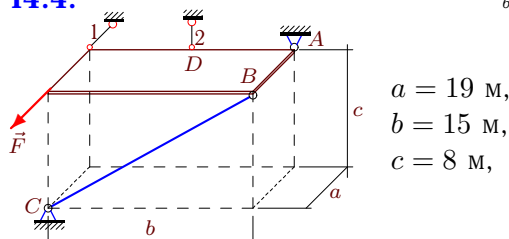
$AD = 7$ м, $G = 12$ кН, $F = 2$ кН.

Задача 14.3.



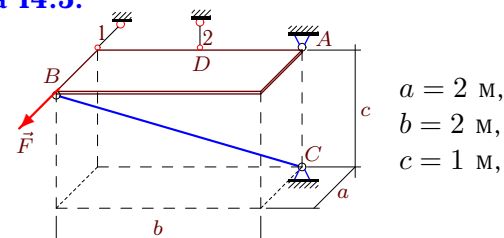
$AD = 7$ м, $G = 4$ кН, $F = 14$ кН.

Задача 14.4.



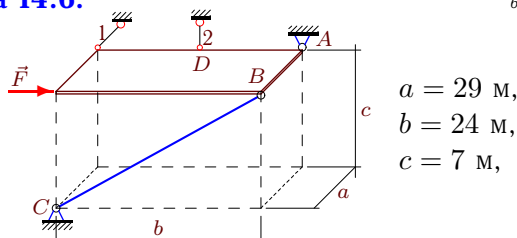
$AD = 7$ м, $G = 112$ кН, $F = 30$ кН.

Задача 14.5.



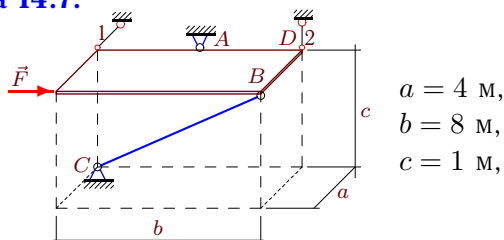
$AD = 1$ м, $G = 2$ кН, $F = 2$ кН.

Задача 14.6.



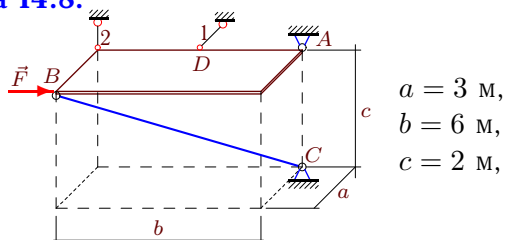
$AD = 12$ м, $G = 168$ кН, $F = 24$ кН.

Задача 14.7.



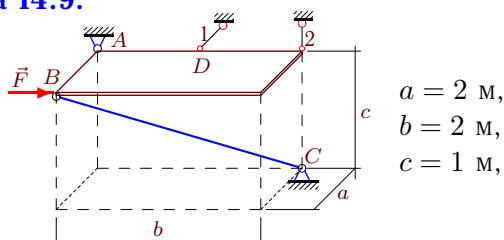
$AD = 4$ м, $G = 6$ кН, $F = 1$ кН.

Задача 14.8.



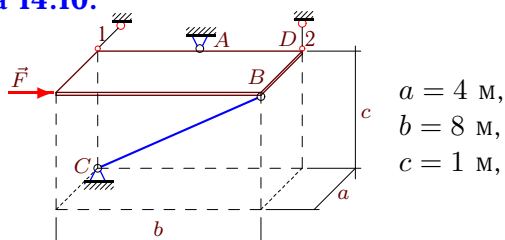
$AD = 3$ м, $G = 4$ кН, $F = 2$ кН.

Задача 14.9.



$AD = 1$ м, $G = 2$ кН, $F = 1$ кН.

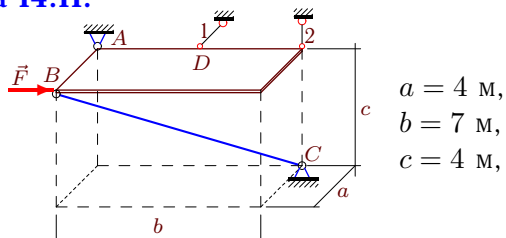
Задача 14.10.



$AD = 4$ м, $G = 6$ кН, $F = 2$ кН.

Задача 14.11.

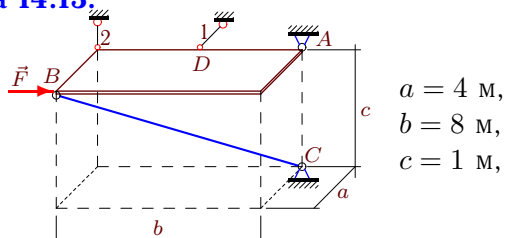
6



$AD = 3 \text{ м}, G = 24 \text{ кН}, F = 6 \text{ кН}.$

Задача 14.13.

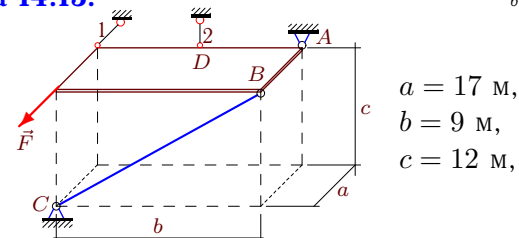
6



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

Задача 14.15.

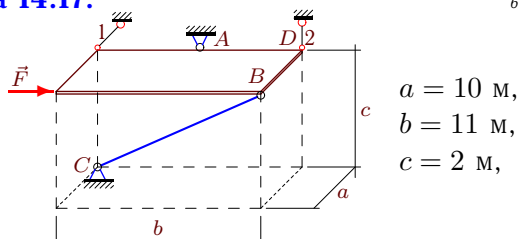
6



$AD = 4 \text{ м}, G = 48 \text{ кН}, F = 9 \text{ кН}.$

Задача 14.17.

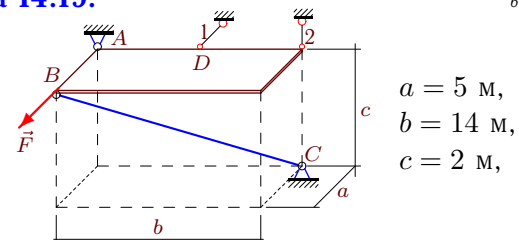
6



$AD = 5 \text{ м}, G = 20 \text{ кН}, F = 3 \text{ кН}.$

Задача 14.19.

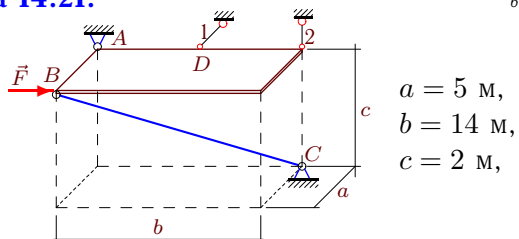
6



$AD = 7 \text{ м}, G = 4 \text{ кН}, F = 1 \text{ кН}.$

Задача 14.21.

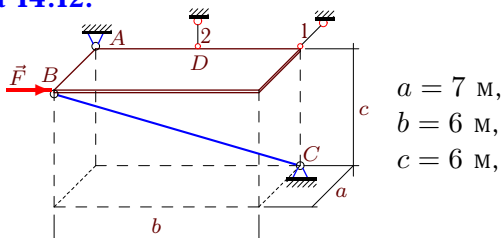
6



$AD = 7 \text{ м}, G = 84 \text{ кН}, F = 7 \text{ кН}.$

Задача 14.12.

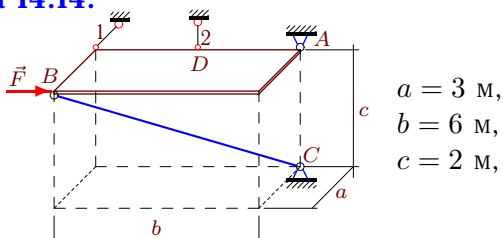
6



$AD = 3 \text{ м}, G = 72 \text{ кН}, F = 6 \text{ кН}.$

Задача 14.14.

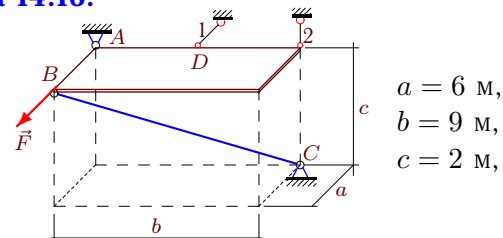
6



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

Задача 14.16.

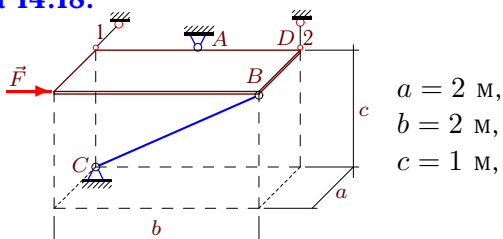
6



$AD = 4 \text{ м}, G = 16 \text{ кН}, F = 1 \text{ кН}.$

Задача 14.18.

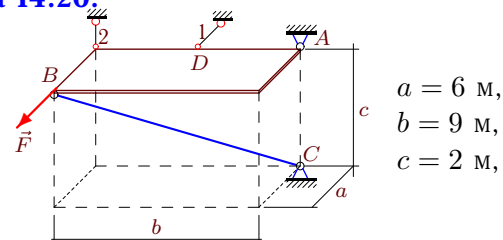
6



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

Задача 14.20.

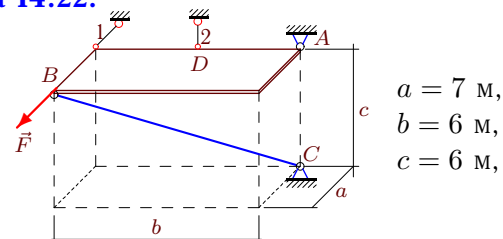
6



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

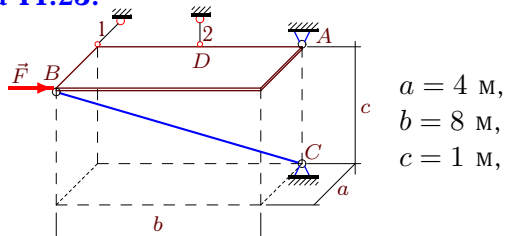
Задача 14.22.

6



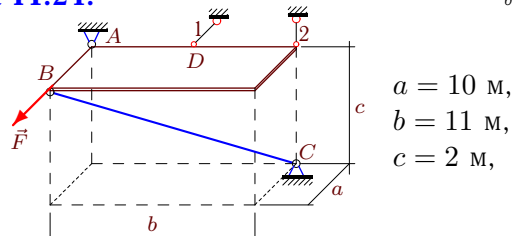
$AD = 3 \text{ м}, G = 12 \text{ кН}, F = 3 \text{ кН}.$

Задача 14.23.



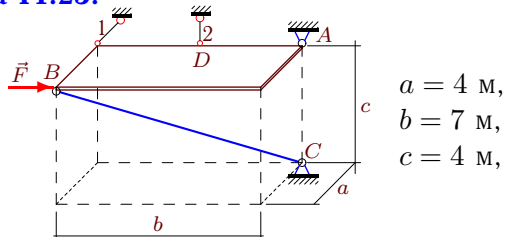
$AD = 4 \text{ м}, G=2 \text{ кН}, F=4 \text{ кН}.$

Задача 14.24.



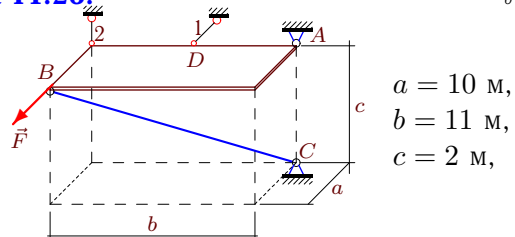
$AD = 5 \text{ м}, G=4 \text{ кН}, F=2 \text{ кН}.$

Задача 14.25.



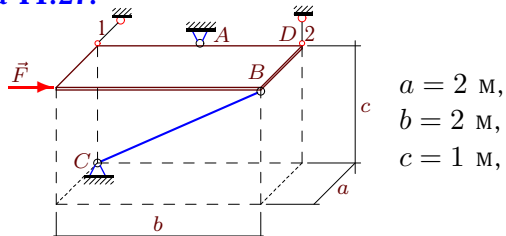
$AD = 3 \text{ м}, G=8 \text{ кН}, F=7 \text{ кН}.$

Задача 14.26.



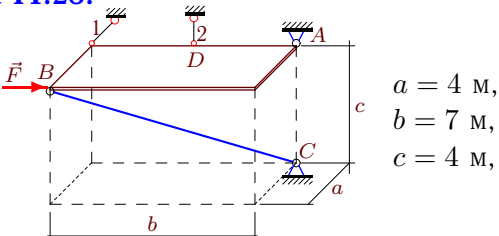
$AD = 5 \text{ м}, G=4 \text{ кН}, F=5 \text{ кН}.$

Задача 14.27.



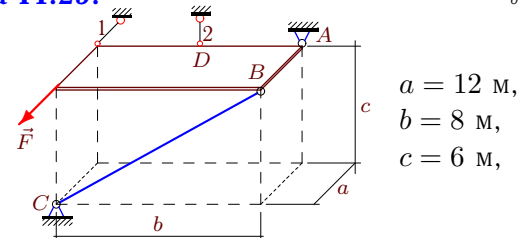
$AD = 1 \text{ м}, G=2 \text{ кН}, F=1 \text{ кН}.$

Задача 14.28.



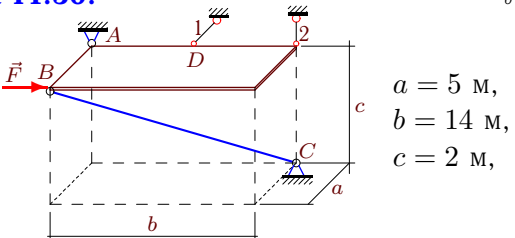
$AD = 3 \text{ м}, G=24 \text{ кН}, F=7 \text{ кН}.$

Задача 14.29.



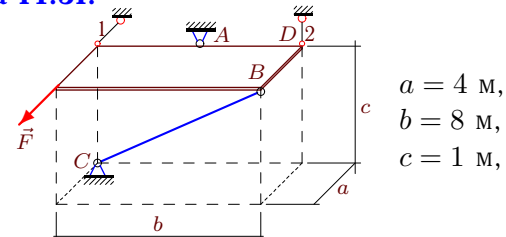
$AD = 4 \text{ м}, G=24 \text{ кН}, F=1 \text{ кН}.$

Задача 14.30.



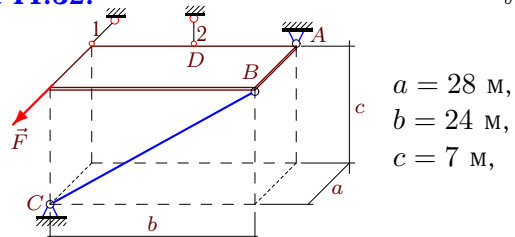
$AD = 7 \text{ м}, G=56 \text{ кН}, F=7 \text{ кН}.$

Задача 14.31.



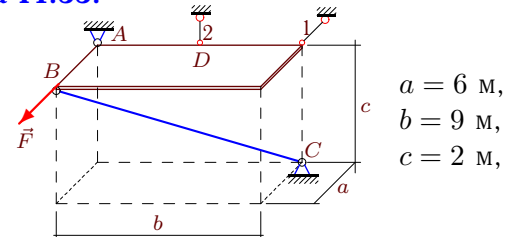
$AD = 4 \text{ м}, G=2 \text{ кН}, F=1 \text{ кН}.$

Задача 14.32.



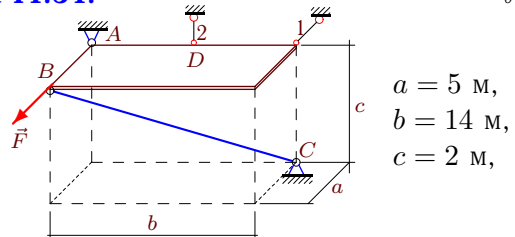
$AD = 12 \text{ м}, G=28 \text{ кН}, F=1 \text{ кН}.$

Задача 14.33.



$AD = 4 \text{ м}, G=32 \text{ кН}, F=9 \text{ кН}.$

Задача 14.34.



$AD = 7 \text{ м}, G=4 \text{ кН}, F=1 \text{ кН}.$

Равновесие полки

	H	V	X_A	Y_A	Z_A	S
1	-9	12	9	-9	-6	-10
2	-30	6	13	42	0	-45
3	5	0	-10	0	2	-15
4	-163	120	133	-105	-64	-119
5	-2	0	-2	2	1	-3
6	-377	168	377	-312	-84	-300
7	-13	-3	1	-25	6	-27
8	2	0	-5	4	2	-7
9	-2	1	0	1	0	-3
10	-14	-3	2	-26	6	-27
11	-20	12	8	15	0	-27
12	-35	72	-7	30	-36	-66
13	8	0	-12	0	1	-9
14	6	0	-9	-6	2	-7
15	-43	54	34	-18	-30	-30
16	-54	8	29	36	0	-44
17	-55	-12	5	-58	22	-75
18	-4	-1	2	-3	2	-3
19	-10	2	4	14	0	-15
20	-9	0	-7	18	4	-22
21	-205	42	100	287	0	-315
22	-3	0	-7	6	6	-11
23	2	0	-6	4	1	-9
24	-22	2	10	11	0	-15
25	4	0	-8	0	4	-9
26	-11	0	-4	11	2	-15
27	-4	-1	2	-3	2	-3
28	4	0	-16	14	12	-27
29	-25	24	24	-16	-12	-20
30	-135	28	65	189	0	-210
31	-5	-1	0	-8	2	-9
32	-57	28	56	-48	-14	-50
33	-48	36	-9	72	-20	-88
34	-5	4	-1	14	-2	-15