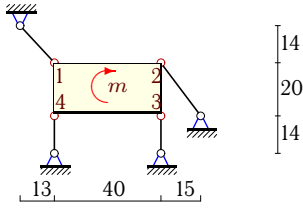


Статически неопределимая стержневая система (1)

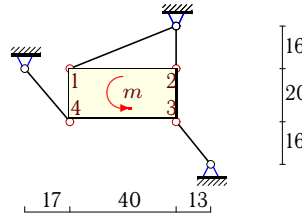
Однородная пластина весом P удерживается в вертикальной плоскости четырьмя стержнями одинаковой жесткости. На пластину действует момент m . Размеры даны в см. Найти усилия в стержнях.

Задача 23.1. 4



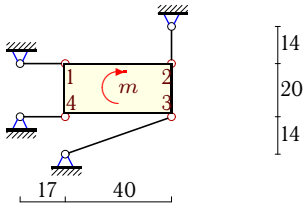
$P = 6 \text{ Н}$, $m = 0.13 \text{ Нм}$.

Задача 23.2. 4



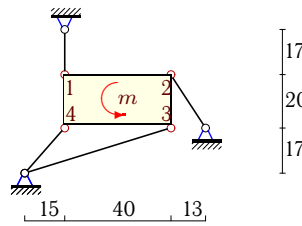
$P = 8 \text{ Н}$, $m = 0.07 \text{ Нм}$.

Задача 23.3. 4



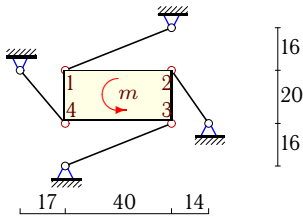
$P = 5 \text{ Н}$, $m = 0.14 \text{ Нм}$.

Задача 23.4. 4



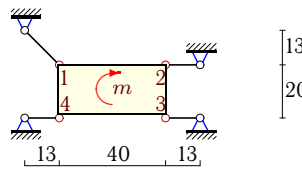
$P = 7 \text{ Н}$, $m = 0.1 \text{ Нм}$.

Задача 23.5. 4



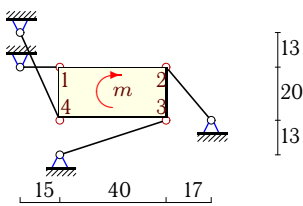
$P = 8 \text{ Н}$, $m = 0.13 \text{ Нм}$.

Задача 23.6. 4



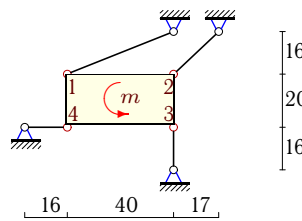
$P = 6 \text{ Н}$, $m = 0.11 \text{ Нм}$.

Задача 23.7. 4



$P = 5 \text{ Н}$, $m = 0.26 \text{ Нм}$.

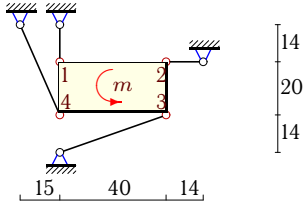
Задача 23.8. 4



$P = 8 \text{ Н}$, $m = 0.09 \text{ Нм}$.

Задача 23.9.

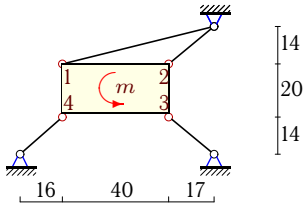
4



$P = 7 \text{ Н}, m = 0.1 \text{ Нм.}$

Задача 23.11.

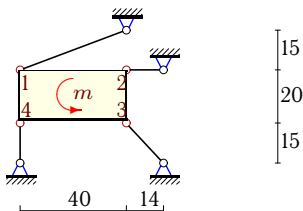
4



$P = 9 \text{ Н}, m = 0.18 \text{ Нм.}$

Задача 23.13.

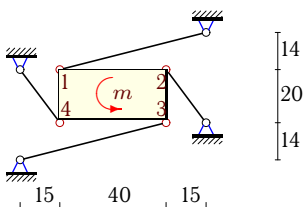
4



$P = 8 \text{ Н}, m = 0.11 \text{ Нм.}$

Задача 23.15.

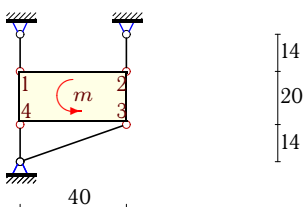
4



$P = 9 \text{ Н}, m = 0.26 \text{ Нм.}$

Задача 23.17.

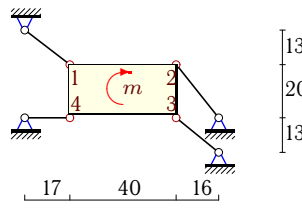
4



$P = 7 \text{ Н}, m = 0.1 \text{ Нм.}$

Задача 23.10.

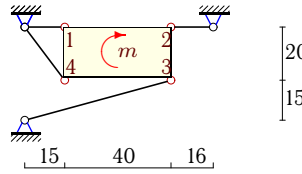
4



$P = 6 \text{ Н}, m = 0.13 \text{ Нм.}$

Задача 23.12.

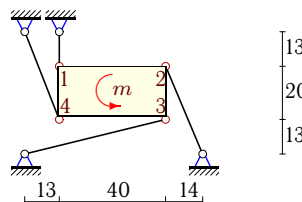
4



$P = 5 \text{ Н}, m = 0.22 \text{ Нм.}$

Задача 23.14.

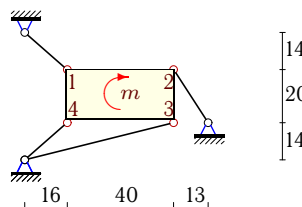
4



$P = 7 \text{ Н}, m = 0.1 \text{ Нм.}$

Задача 23.16.

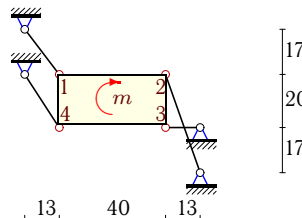
4



$P = 6 \text{ Н}, m = 0.13 \text{ Нм.}$

Задача 23.18.

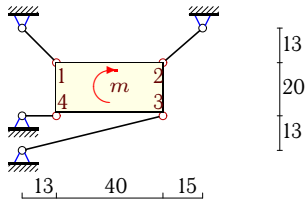
4



$P = 6 \text{ Н}, m = 0.15 \text{ Нм.}$

Задача 23.19.

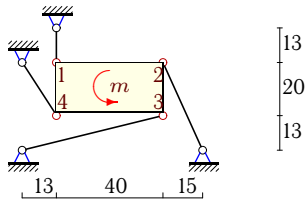
4



$$P = 6 \text{ Н}, m = 0.09 \text{ Нм.}$$

Задача 23.21.

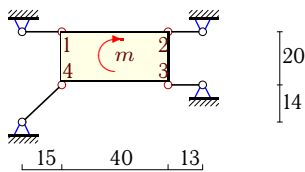
4



$$P = 7 \text{ Н}, m = 0.1 \text{ Нм.}$$

Задача 23.23.

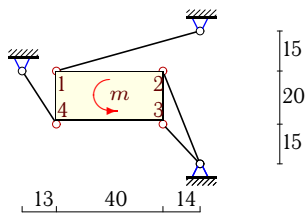
4



$$P = 5 \text{ Н}, m = 0.22 \text{ Нм.}$$

Задача 23.25.

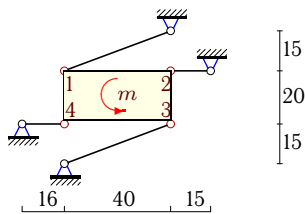
4



$$P = 9 \text{ Н}, m = 0.3 \text{ Нм.}$$

Задача 23.27.

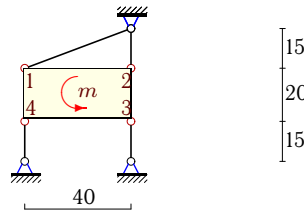
4



$$P = 8 \text{ Н}, m = 0.11 \text{ Нм.}$$

Задача 23.20.

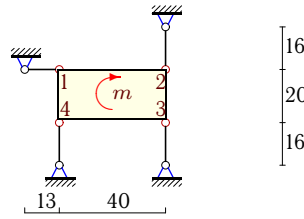
4



$$P = 8 \text{ Н}, m = 0.07 \text{ Нм.}$$

Задача 23.22.

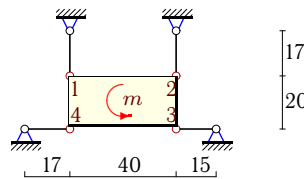
4



$$P = 5 \text{ Н}, m = 0.14 \text{ Нм.}$$

Задача 23.24.

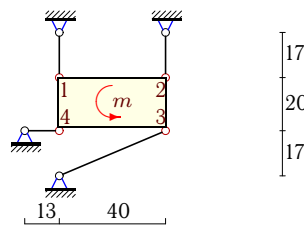
4



$$P = 7 \text{ Н}, m = 0.1 \text{ Нм.}$$

Задача 23.26.

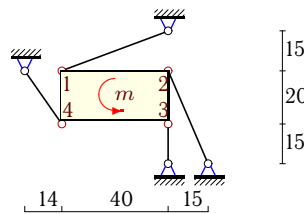
4



$$P = 7 \text{ Н}, m = 0.1 \text{ Нм.}$$

Задача 23.28.

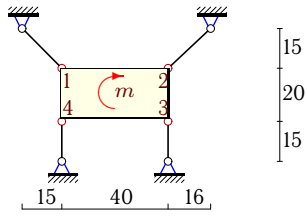
4



$$P = 8 \text{ Н}, m = 0.15 \text{ Нм.}$$

Задача 23.29.

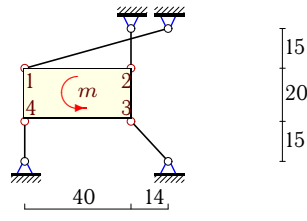
4



$P = 6 \text{ Н}$, $m = 0.09 \text{ Нм}$.

Задача 23.30.

4



$P = 9 \text{ Н}$, $m = 0.14 \text{ Нм}$.

Статически неопределимая стержневая система (1)

№	S_1	S_2	S_3	S_4
1	-0.210	-0.239	-3.134	-2.829
2	2.625	4.116	-1.195	2.600
3	-4.300	5.257	0.777	3.567
4	3.182	-2.825	-0.376	-1.784
5	2.795	-3.723	-2.303	4.012
6	8.485	-0.550	3.275	-3.275
7	-1.444	-3.106	-1.616	2.344
8	3.643	3.243	-4.424	5.744
9	4.836	-3.686	-4.259	0.827
10	9.232	2.349	-3.530	-8.606
11	1.688	0.021	-7.652	-5.648
12	1.564	-1.466	-5.834	4.331
13	1.597	5.023	-9.554	-0.455
14	3.587	-2.628	-1.331	0.727
15	3.069	-4.229	-2.780	5.218
16	2.732	-1.990	-0.355	-3.715
17	1.875	3.250	0.000	-1.875
18	2.407	-2.384	3.448	2.194
19	5.645	2.063	-2.761	0.249
20	0.000	1.913	-1.913	-4.175
21	3.823	-2.606	-1.422	0.555
22	-0.000	1.425	-1.425	-2.150
23	2.832	-3.268	0.743	-7.328
24	3.750	3.250	0.000	0.000
25	4.611	-4.194	-1.777	3.069
26	3.750	3.102	-0.379	0.348
27	11.661	-10.558	-11.123	10.775
28	2.298	-0.765	-3.847	3.226
29	1.100	1.066	-2.496	-1.997
30	0.808	3.705	-1.141	-4.245