

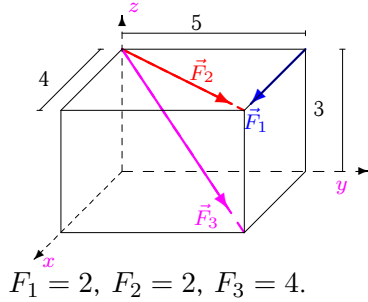
Приведение системы сил

Систему трех сил, приложенных к вершинам параллелепипеда, привести к началу координат. Найти координаты точки пересечения центральной винтовой оси с плоскостью xy . Размеры на рисунках даны в м, силы — в Н.

Кирсанов М.Н. **Решбник. Теоретическая механика**/Под ред. А. И. Кириллова.— М.: ФИЗМАТЛИТ, 2008. — 384 с. (с.111.)

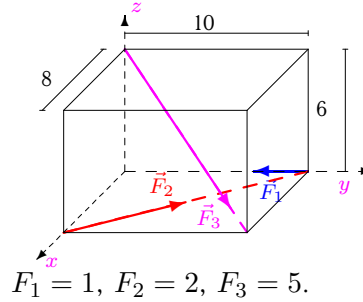
Задача 12.1.

3



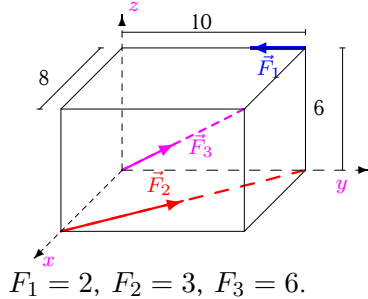
Задача 12.2.

3



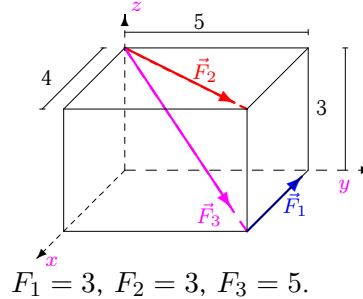
Задача 12.3.

3



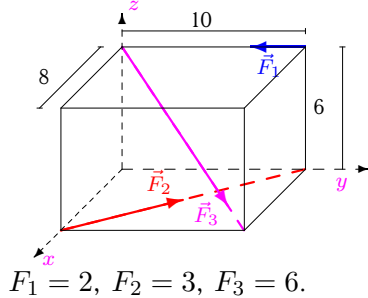
Задача 12.4.

3



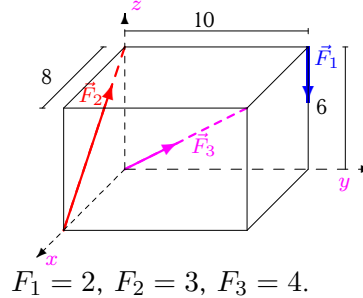
Задача 12.5.

3



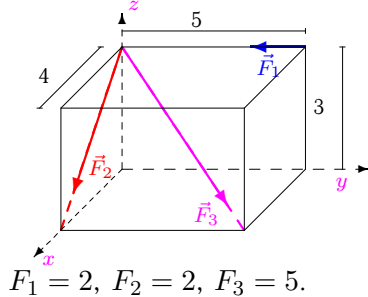
Задача 12.6.

3



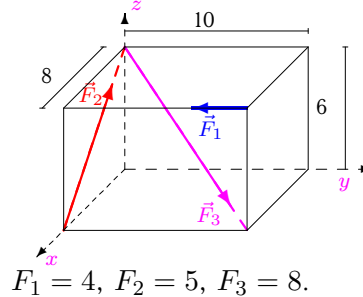
Задача 12.7.

3



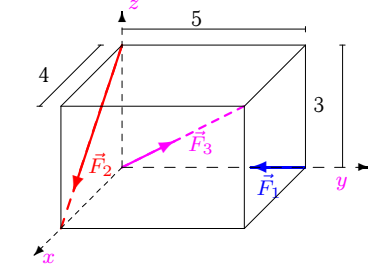
Задача 12.8.

3



Задача 12.9.

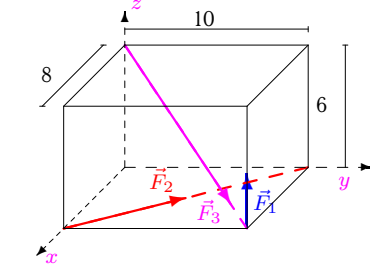
3



$F_1 = 1, F_2 = 1, F_3 = 4.$

Задача 12.10.

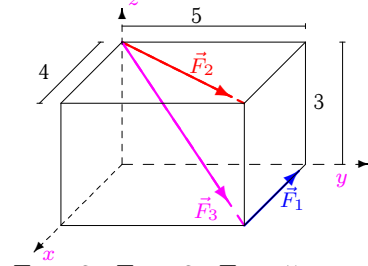
3



$F_1 = 3, F_2 = 4, F_3 = 5.$

Задача 12.11.

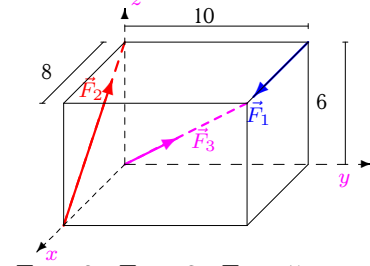
3



$F_1 = 3, F_2 = 3, F_3 = 5.$

Задача 12.12.

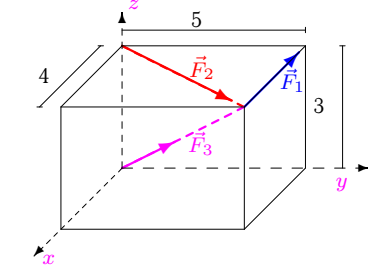
3



$F_1 = 2, F_2 = 3, F_3 = 5.$

Задача 12.13.

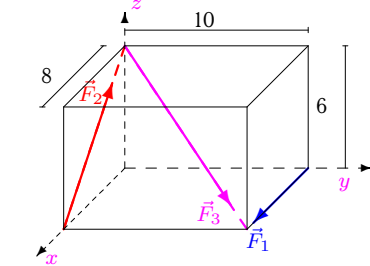
3



$F_1 = 4, F_2 = 4, F_3 = 6.$

Задача 12.14.

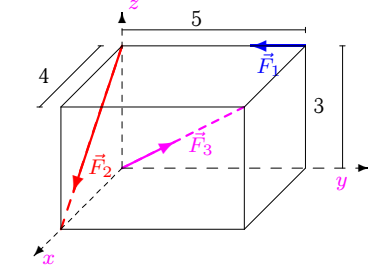
3



$F_1 = 1, F_2 = 2, F_3 = 4.$

Задача 12.15.

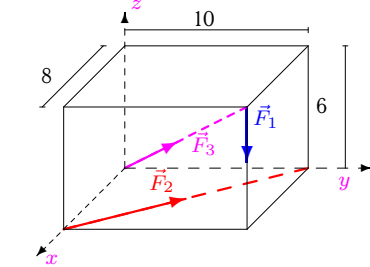
3



$F_1 = 2, F_2 = 2, F_3 = 5.$

Задача 12.16.

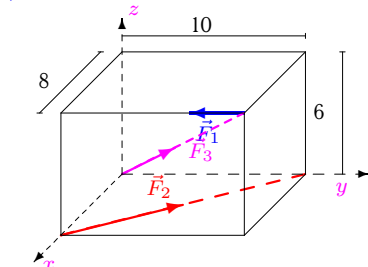
3



$F_1 = 4, F_2 = 5, F_3 = 6.$

Задача 12.17.

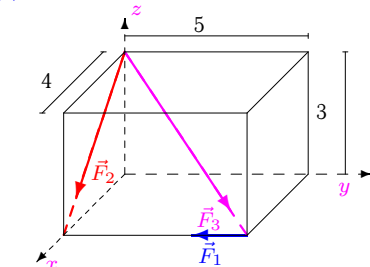
3



$F_1 = 4, F_2 = 5, F_3 = 8.$

Задача 12.18.

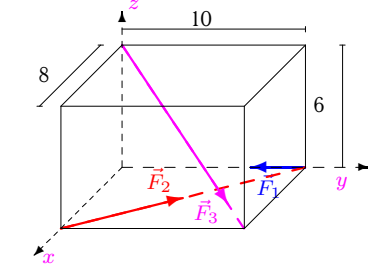
3



$F_1 = 3, F_2 = 3, F_3 = 6.$

Задача 12.19.

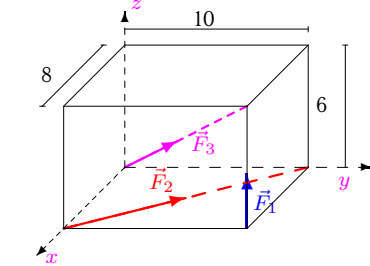
3



$F_1 = 1, F_2 = 2, F_3 = 5.$

Задача 12.20.

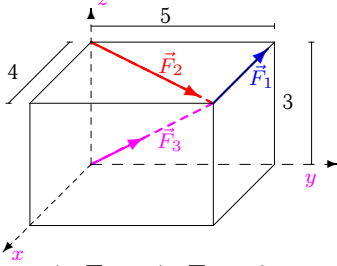
3



$F_1 = 3, F_2 = 4, F_3 = 5.$

Задача 12.21.

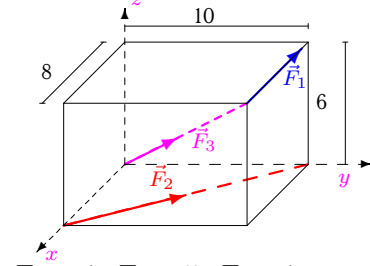
3



$F_1 = 4, F_2 = 4, F_3 = 6.$

Задача 12.22.

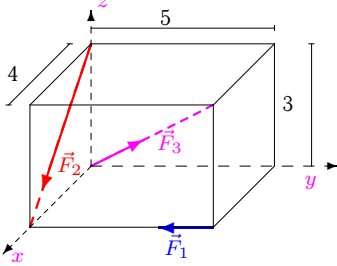
3



$F_1 = 4, F_2 = 5, F_3 = 7.$

Задача 12.23.

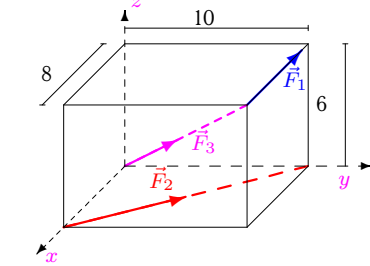
3



$F_1 = 3, F_2 = 3, F_3 = 6.$

Задача 12.24.

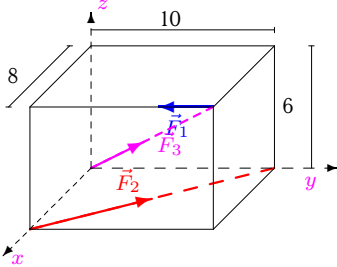
3



$F_1 = 4, F_2 = 5, F_3 = 7.$

Задача 12.25.

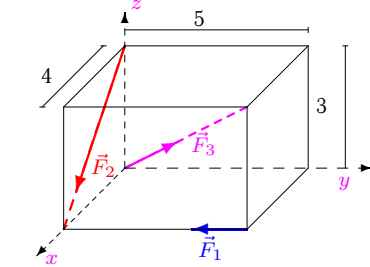
3



$F_1 = 4, F_2 = 5, F_3 = 8.$

Задача 12.26.

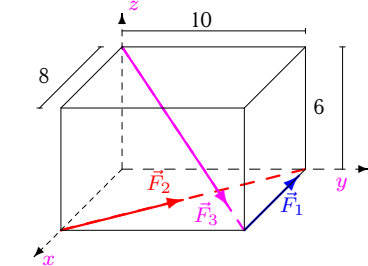
3



$F_1 = 3, F_2 = 3, F_3 = 6.$

Задача 12.27.

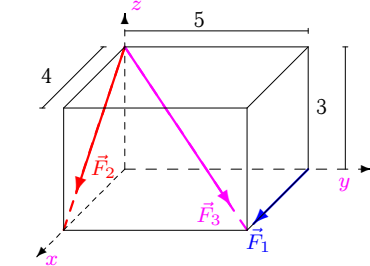
3



$F_1 = 3, F_2 = 4, F_3 = 6.$

Задача 12.28.

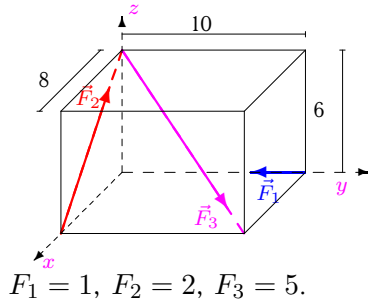
3



$F_1 = 1, F_2 = 1, F_3 = 3.$

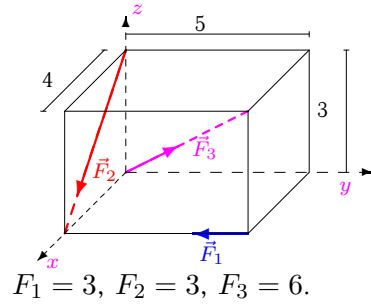
Задача 12.29.

3



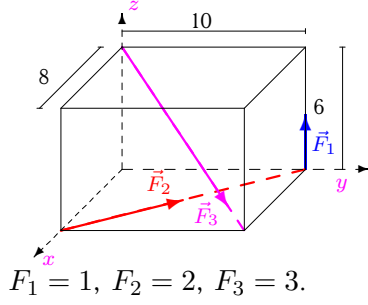
Задача 12.30.

3



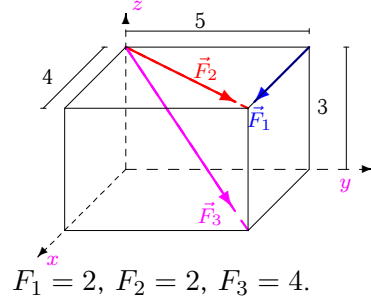
Задача 12.31.

3



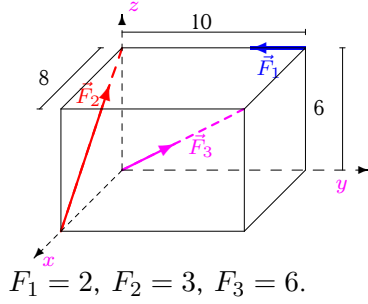
Задача 12.32.

3



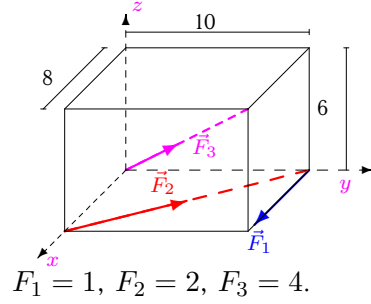
Задача 12.33.

3



Задача 12.34.

3



Приведение системы сил

	R_x	R_y	R_z	R	M_x	M_y	M_z	M	I	M_{min}	x_A	y_A
1	5.512	4.390	-1.697	7.248	-13.170	16.536	-10.000	23.386	16.971	2.341	8.909	8.810
2	1.579	4.097	-2.121	4.877	-21.213	16.971	12.494	29.901	9.533	1.955	7.226	10.298
3	1.520	4.585	2.546	5.460	12.000	0.000	18.741	22.254	65.947	12.077	3.984	3.393
4	1.703	5.878	-2.121	6.477	-17.634	14.108	15.000	27.111	21.083	3.255	5.258	8.716
5	1.520	4.585	-2.546	5.460	-13.456	20.365	18.741	30.773	25.217	4.618	6.477	5.791
6	-0.137	2.828	1.497	3.203	-20.000	-14.400	0.000	24.645	-37.984	-11.858	2.624	-13.699
7	4.428	1.536	-3.321	5.745	-4.607	13.285	0.000	14.061	0.000	0.000	4.000	1.387
8	0.525	1.657	-0.394	1.782	-9.941	3.153	-32.000	33.657	12.612	7.076	-8.690	30.518
9	3.063	1.828	1.097	3.732	0.000	2.400	0.000	2.400	4.388	1.176	-1.663	-0.880
10	0.330	6.659	0.879	6.725	8.787	-7.029	24.988	27.405	-21.956	-3.265	4.321	10.182
11	1.703	5.878	-2.121	6.477	-17.634	14.108	15.000	27.111	21.083	3.255	5.258	8.716
12	2.428	3.536	3.921	5.812	0.000	-2.400	-20.000	20.143	-86.912	-14.955	-1.708	1.594
13	1.893	7.366	2.546	8.020	-9.370	-4.504	20.000	22.541	-0.000	-0.000	1.769	-3.681
14	1.663	2.828	-0.497	3.318	-16.971	3.976	-10.000	20.095	-12.000	-3.616	14.201	30.497
15	4.428	1.536	0.921	4.777	6.000	4.800	0.000	7.684	33.941	7.105	-2.731	-0.637
16	0.271	8.147	-1.454	8.280	-40.000	32.000	31.235	59.997	204.450	24.691	5.298	28.057
17	1.402	5.561	3.394	6.664	24.000	0.000	-0.765	24.012	31.051	4.659	1.146	6.782
18	5.794	1.243	-4.346	7.348	-12.728	17.382	-12.000	24.661	-0.000	-0.000	4.000	2.929
19	1.579	4.097	-2.121	4.877	-21.213	16.971	12.494	29.901	9.533	1.955	7.226	10.298
20	0.330	6.659	5.121	8.407	30.000	-24.000	24.988	45.830	-21.956	-2.612	4.282	5.878
21	1.893	7.366	2.546	8.020	-9.370	-4.504	20.000	22.541	-0.000	-0.000	1.769	-3.681
22	-3.164	8.854	2.970	9.860	0.000	-24.000	71.235	75.169	-0.942	-0.096	8.052	-0.010
23	5.794	1.243	0.746	5.973	0.000	7.200	-12.000	13.994	0.000	0.000	-9.657	-0.000
24	-3.164	8.854	2.970	9.860	0.000	-24.000	71.235	75.169	-0.942	-0.096	8.052	-0.010
25	1.402	5.561	3.394	6.664	24.000	0.000	-0.765	24.012	31.051	4.659	1.146	6.782
26	5.794	1.243	0.746	5.973	0.000	7.200	-12.000	13.994	0.000	0.000	-9.657	-0.000
27	-2.105	7.366	-2.546	8.073	-25.456	20.365	54.988	63.925	63.609	7.879	5.176	9.193
28	3.497	2.121	-1.873	4.499	-6.364	7.491	-5.000	11.028	3.000	0.667	3.832	3.675
29	1.228	2.536	-0.921	2.964	-21.213	7.371	0.000	22.457	-7.371	-2.486	10.308	21.906
30	5.794	1.243	0.746	5.973	0.000	7.200	-12.000	13.994	0.000	0.000	-9.657	-0.000
31	0.448	3.683	-0.273	3.720	-2.728	10.182	12.494	16.347	32.873	8.836	5.257	13.898
32	5.512	4.390	-1.697	7.248	-13.170	16.536	-10.000	23.386	16.971	2.341	8.909	8.810
33	0.994	2.243	4.346	4.990	12.000	-14.400	0.000	18.745	-20.365	-4.081	2.892	2.949
34	2.013	4.390	1.697	5.119	0.000	0.000	2.494	2.494	4.232	0.827	0.418	-0.192