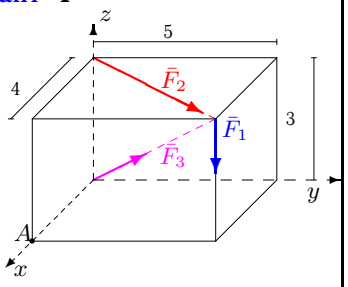
Приведение системы сил к простейшему виду

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. **Решебник. Теоретическая механика** с. 111.

Вариант 1

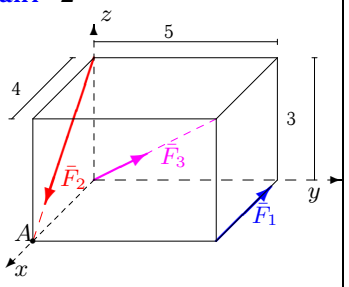
С12.



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

Вариант 2

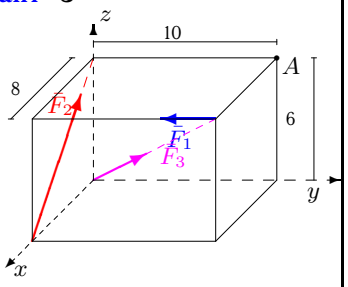
С12.



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

Вариант 3

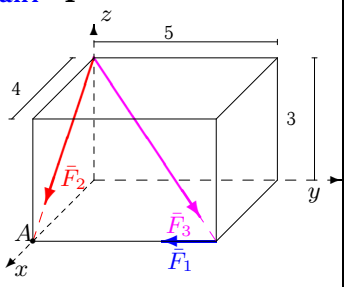
С12.



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

Вариант 4

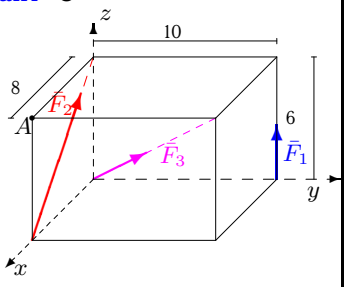
С12.



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

Вариант 5

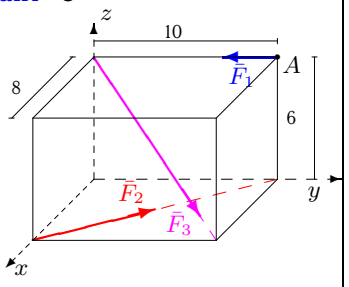
С12.



$F_1 = 1,\ F_2 = 2,\ F_3 = 3.$

Вариант 6

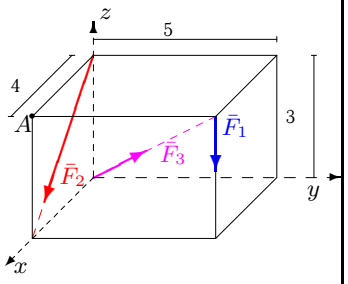
С12.



$F_1 = 2,\ F_2 = 3,\ F_3 = 6.$

Вариант 7

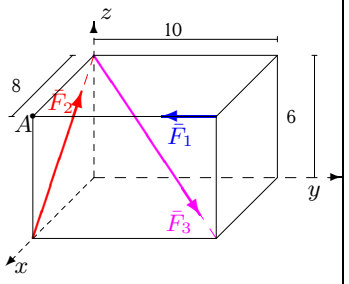
*C*12.



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

Вариант 8

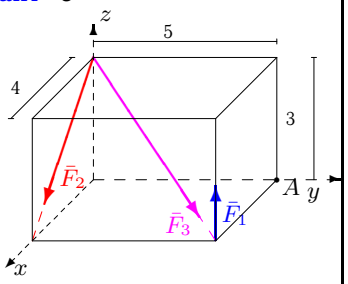
*C*12.



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

Вариант 9

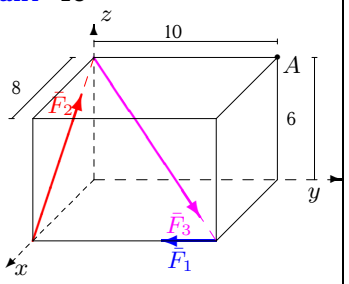
*C*12.



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

Вариант 10

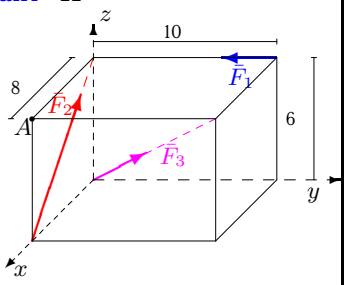
*C*12.



$F_1 = 3,\ F_2 = 4,\ F_3 = 7.$

Вариант 11

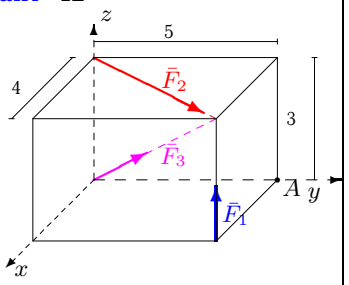
*C*12.



$F_1 = 2,\ F_2 = 3,\ F_3 = 6.$

Вариант 12

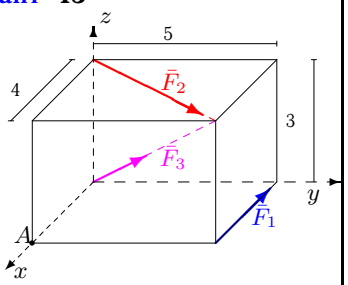
*C*12.



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

Вариант 13

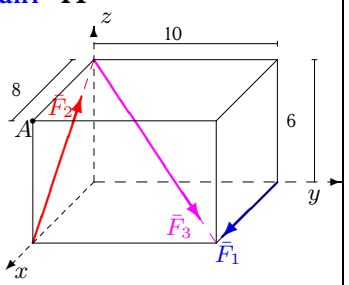
*C*12.



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

Вариант 14

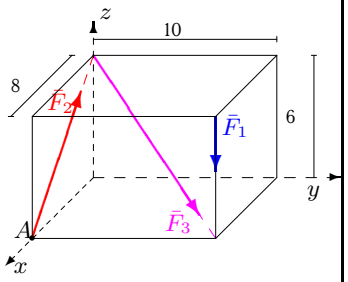
*C*12.



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

Вариант 15

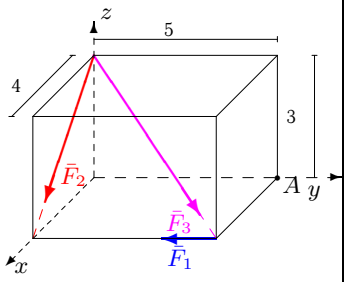
C12.



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

Вариант 16

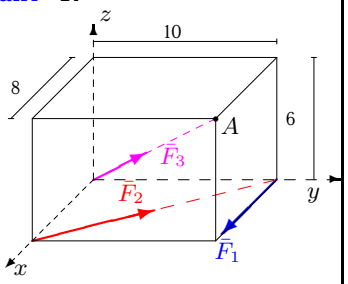
C12.



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

Вариант 17

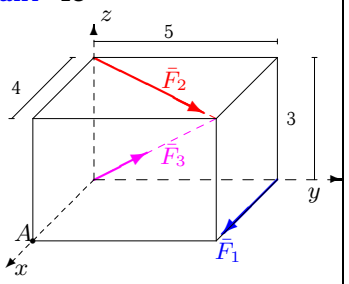
C12.



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

Вариант 18

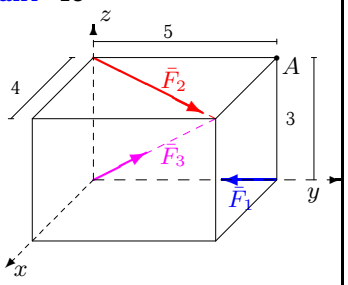
C12.



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

Вариант 19

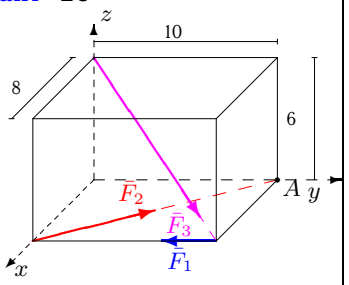
C12.



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

Вариант 20

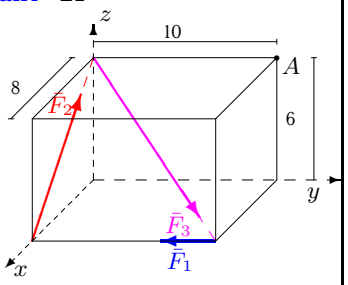
C12.



$F_1 = 3,\ F_2 = 4,\ F_3 = 7.$

Вариант 21

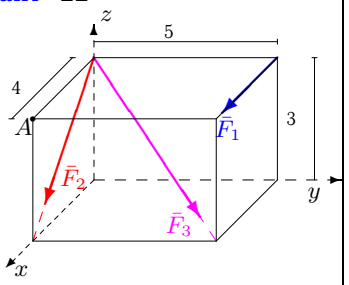
C12.



$F_1 = 3,\ F_2 = 4,\ F_3 = 7.$

Вариант 22

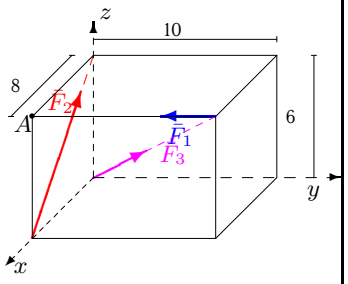
C12.



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

Вариант 23

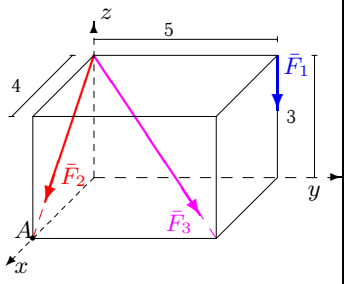
C12.



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

Вариант 24

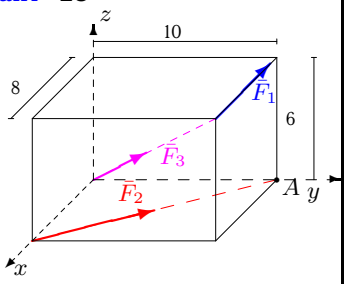
C12.



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

Вариант 25

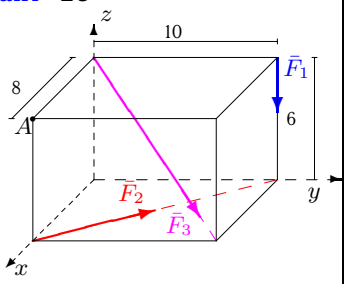
C12.



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

Вариант 26

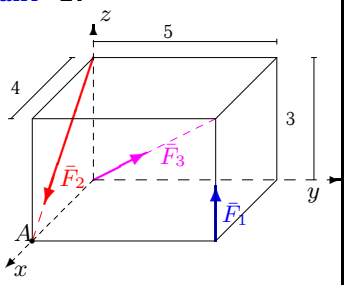
C12.



$F_1 = 2,\ F_2 = 3,\ F_3 = 4.$

Вариант 27

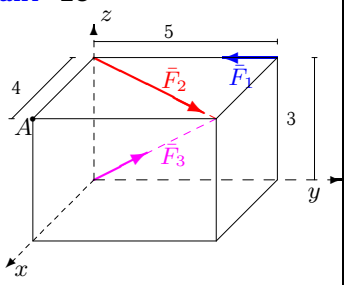
C12.



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

Вариант 28

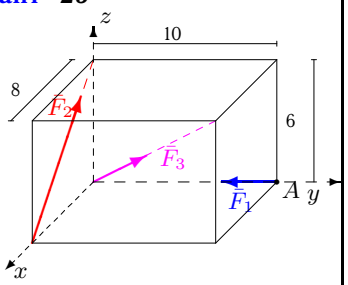
C12.



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

Вариант 29

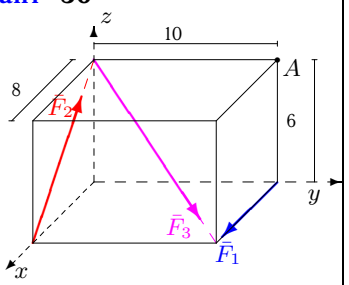
C12.



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

Вариант 30

C12.



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

Ответы

	R_x	R_y	R_z	R	M_x	M_y	M_z	M	x_A	y_A
1	5.327	6.659	-1.879	8.732	-29.370	23.496	0.000	37.612	12.507	15.634
2	2.228	3.536	0.321	4.192	0.000	7.200	15.000	16.639	-3.447	-11.951
3	0.525	1.657	6.394	6.626	24.000	-24.000	-32.000	46.648	2.386	4.187
4	5.794	1.243	-4.346	7.348	-12.728	17.382	-12.000	24.661	4.000	2.929
5	0.097	2.121	3.473	4.071	10.000	-9.600	0.000	13.862	2.049	2.912
6	1.520	4.585	-2.546	5.460	-13.456	20.365	18.741	30.773	6.477	5.791
7	6.028	3.536	-4.279	8.194	-20.000	25.600	0.000	32.486	6.353	4.044
8	0.525	1.657	-0.394	1.782	-9.941	3.153	-32.000	33.657	-8.690	30.518
9	4.663	2.828	-0.497	5.476	6.515	1.988	0.000	6.811	-2.831	-1.845
10	0.760	1.950	-0.570	2.169	-29.698	4.559	-24.000	38.455	8.000	52.116
11	0.994	2.243	4.346	4.990	12.000	-14.400	0.000	18.745	2.892	2.949
12	4.137	5.171	4.697	8.119	7.972	-6.378	0.000	10.209	1.358	1.697
13	1.703	5.878	2.121	6.477	-7.028	5.622	15.000	17.493	0.844	-4.325
14	1.663	2.828	-0.497	3.318	-16.971	3.976	-10.000	20.095	14.201	30.497
15	-0.606	4.243	-3.546	5.562	-65.456	28.365	0.000	71.337	1.812	17.577
16	5.794	1.243	-4.346	7.348	-12.728	17.382	-12.000	24.661	4.000	2.929
17	2.013	4.390	1.697	5.119	0.000	0.000	2.494	2.494	0.418	-0.192
18	3.322	2.902	1.273	4.591	-2.343	1.874	-5.000	5.831	-2.414	-0.762
19	2.887	2.609	1.697	4.246	-2.343	1.874	0.000	3.000	-1.264	-1.204
20	1.461	5.073	-2.970	6.057	-29.698	23.759	0.988	38.045	4.545	10.995
21	0.760	1.950	-0.570	2.169	-29.698	4.559	-24.000	38.455	8.000	52.116
22	5.863	2.828	-2.897	7.125	-8.485	17.588	-10.000	21.940	5.514	4.084
23	0.525	1.657	6.394	6.626	24.000	-24.000	-32.000	46.648	2.386	4.187
24	3.297	2.121	-4.473	5.948	-16.364	9.891	0.000	19.121	2.653	2.972
25	-3.164	8.854	2.970	9.860	0.000	-24.000	71.235	75.169	8.052	-0.010
26	0.389	5.171	-3.697	6.369	-36.971	13.576	18.741	43.616	4.136	9.965
27	4.663	2.828	2.897	6.175	15.000	-4.800	0.000	15.749	3.100	2.799
28	4.078	3.097	2.121	5.543	1.315	3.748	0.000	3.972	-0.960	-0.442
29	1.228	2.536	3.321	4.355	0.000	-9.600	0.000	9.600	1.911	0.475
30	1.663	2.828	-0.497	3.318	-16.971	3.976	-10.000	20.095	14.201	30.497