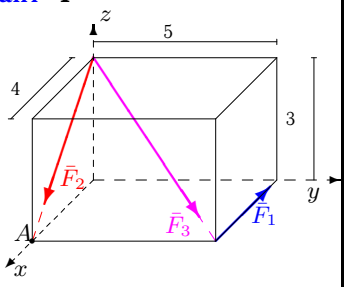
Приведение системы сил к простейшему виду

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

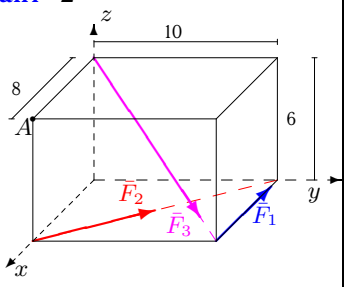
С12.



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

Вариант 2

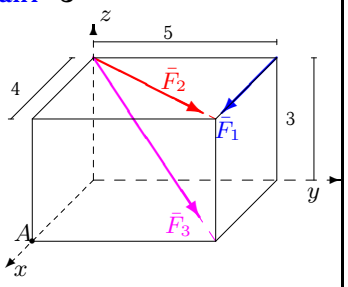
С12.



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

Вариант 3

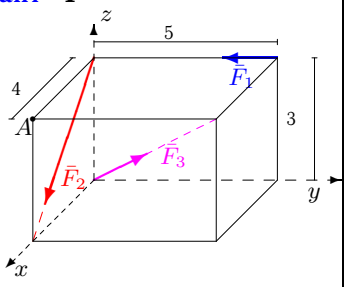
С12.



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

Вариант 4

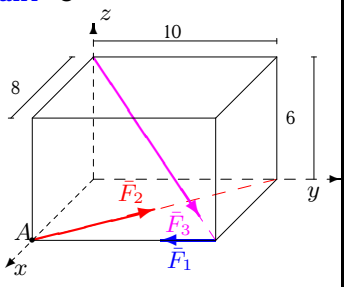
С12.



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

Вариант 5

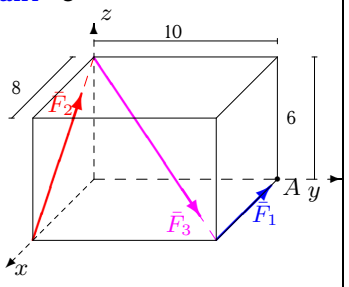
С12.



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

Вариант 6

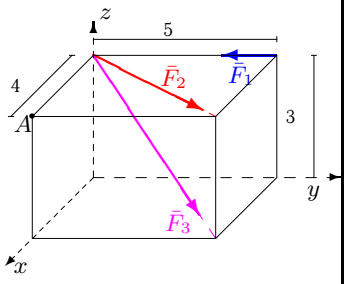
С12.



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

Вариант 7

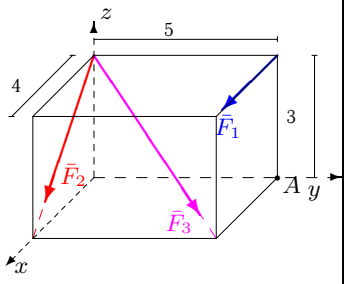
C12.



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

Вариант 8

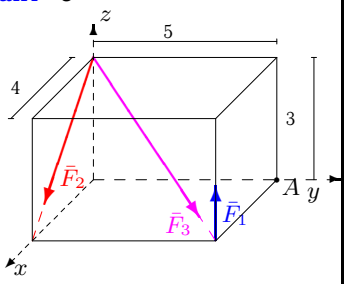
C12.



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

Вариант 9

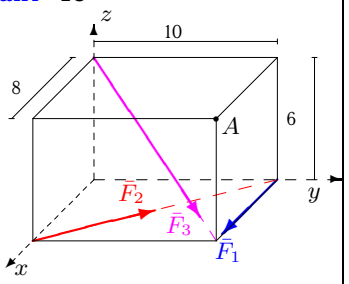
C12.



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

Вариант 10

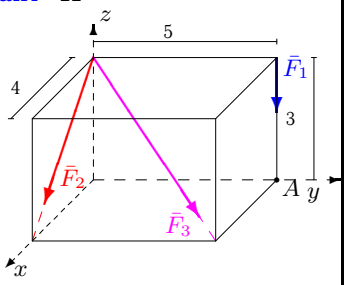
C12.



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

Вариант 11

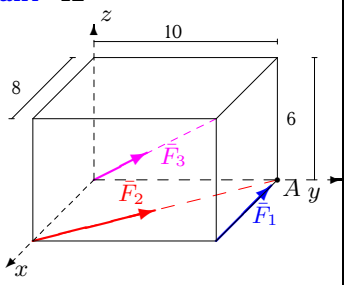
C12.



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

Вариант 12

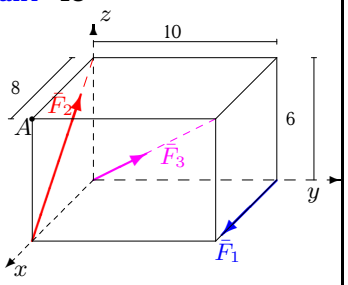
C12.



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

Вариант 13

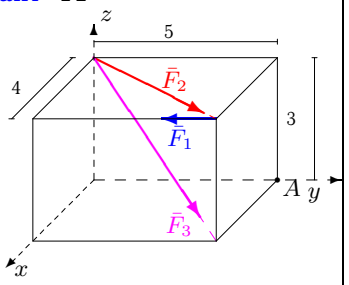
C12.



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

Вариант 14

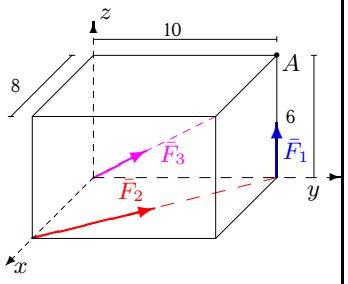
C12.



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

Вариант 15

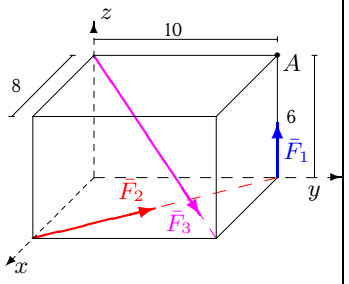
*C*12.



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

Вариант 16

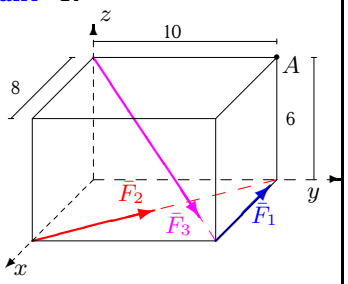
*C*12.



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

Вариант 17

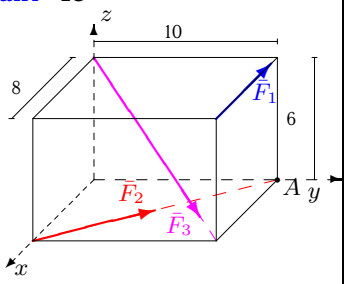
*C*12.



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

Вариант 18

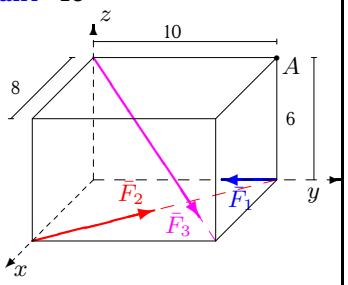
*C*12.



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

Вариант 19

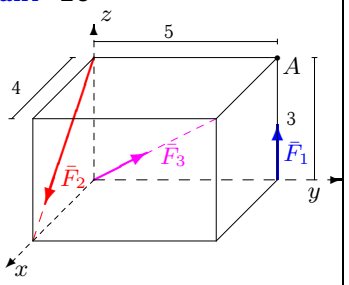
*C*12.



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

Вариант 20

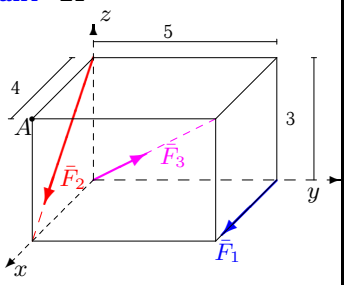
*C*12.



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

Вариант 21

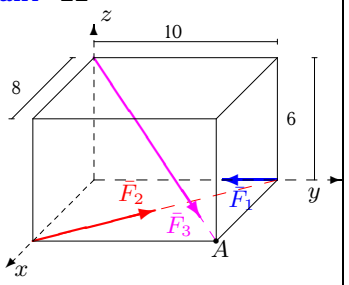
*C*12.



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

Вариант 22

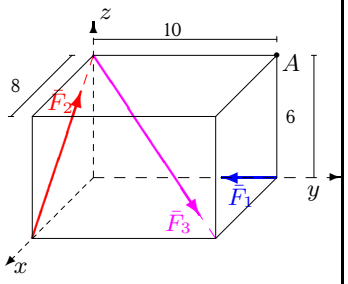
*C*12.



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

Вариант 23

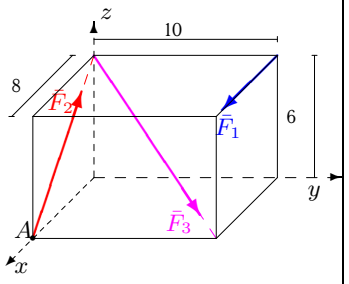
C12.



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

Вариант 24

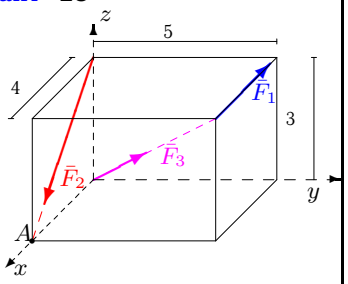
C12.



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

Вариант 25

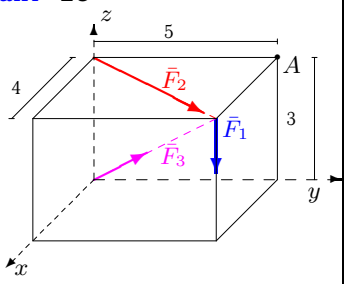
C12.



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

Вариант 26

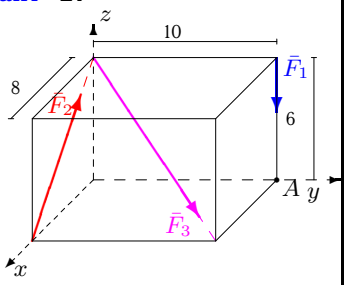
C12.



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

Вариант 27

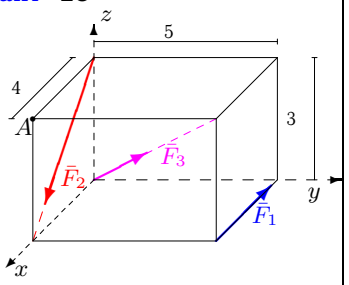
C12.



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

Вариант 28

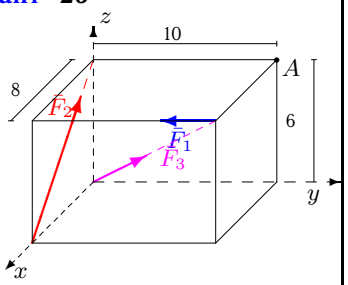
C12.



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

Вариант 29

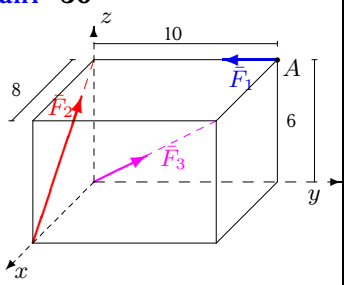
C12.



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

Вариант 30

C12.



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

Ответы

	R_x	R_y	R_z	R	M_x	M_y	M_z	M	x_A	y_A
1	2.228	3.536	-3.921	5.731	-10.607	15.685	15.000	24.156	4.741	2.238
2	-2.105	7.366	-2.546	8.073	-25.456	20.365	54.988	63.925	5.176	9.193
3	5.512	4.390	-1.697	7.248	-13.170	16.536	-10.000	23.386	8.909	8.810
4	4.428	1.536	0.921	4.777	6.000	4.800	0.000	7.684	-2.731	-0.637
5	1.461	5.073	-2.970	6.057	-29.698	23.759	0.988	38.045	4.545	10.995
6	-2.806	4.243	-0.146	5.089	-25.456	1.165	30.000	39.362	-73.031	121.263
7	4.078	3.097	-2.121	5.543	-9.292	12.233	0.000	15.362	5.767	4.380
8	5.863	2.828	-2.897	7.125	-8.485	17.588	-10.000	21.940	5.514	4.084
9	4.663	2.828	-0.497	5.476	6.515	1.988	0.000	6.811	-2.831	-1.845
10	2.013	4.390	-1.697	5.119	-16.971	13.576	2.494	21.876	5.907	10.960
11	3.297	2.121	-4.473	5.948	-16.364	9.891	0.000	19.121	2.653	2.972
12	-2.105	7.366	2.546	8.073	0.000	0.000	54.988	54.988	6.215	1.776
13	1.663	2.828	2.897	4.377	0.000	-9.600	-10.000	13.862	0.454	1.681
14	6.459	4.073	-2.970	8.193	-12.220	19.376	-16.000	27.942	5.553	5.654
15	0.448	3.683	2.273	4.351	10.000	0.000	12.494	16.003	2.814	4.058
16	0.448	3.683	-0.273	3.720	-2.728	10.182	12.494	16.347	5.257	13.898
17	-2.105	7.366	-2.546	8.073	-25.456	20.365	54.988	63.925	5.176	9.193
18	-3.164	8.854	-2.970	9.860	-29.698	-0.241	71.235	77.178	3.590	11.312
19	1.579	4.097	-2.121	4.877	-21.213	16.971	12.494	29.901	7.226	10.298
20	1.931	1.414	1.249	2.700	5.000	2.400	0.000	5.546	0.106	1.235
21	3.497	2.121	0.673	4.145	0.000	2.400	-5.000	5.546	-3.250	-0.523
22	1.579	4.097	-2.121	4.877	-21.213	16.971	12.494	29.901	7.226	10.298
23	1.228	2.536	-0.921	2.964	-21.213	7.371	0.000	22.457	10.308	21.906
24	2.428	3.536	-0.321	4.301	-21.213	14.571	-20.000	32.593	41.524	68.644
25	2.594	4.243	0.146	4.975	0.000	-2.400	20.000	20.143	7.925	5.234
26	5.327	6.659	-1.879	8.732	-29.370	23.496	0.000	37.612	12.507	15.634
27	-0.137	2.828	-1.897	3.408	-36.971	-0.824	0.000	36.980	-0.786	19.471
28	2.228	3.536	0.321	4.192	0.000	7.200	15.000	16.639	-3.447	-11.951
29	0.525	1.657	6.394	6.626	24.000	-24.000	-32.000	46.648	2.386	4.187
30	0.994	2.243	4.346	4.990	12.000	-14.400	0.000	18.745	2.892	2.949