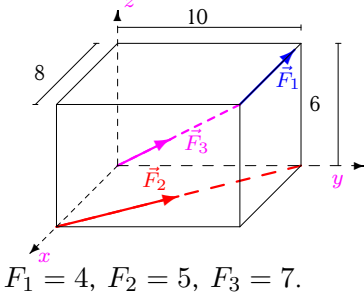


## Момент силы относительно оси

Найти моменты сил относительно осей. Размеры на рисунках даны в м, силы — в Н.

Кирсанов М.Н. **Решебник. Теоретическая механика**/Под ред. А. И. Кириллова.— М.: ФИЗМАТЛИТ, 2002.— 384 с. (с. 91.)

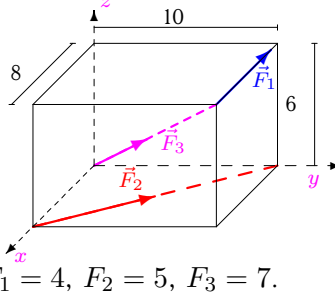
**Задача 22.1**



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

22.5

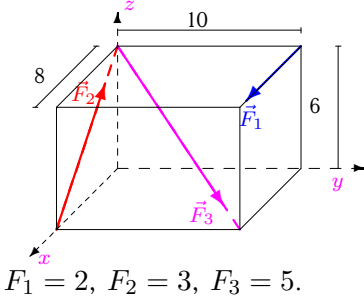
**Задача 22.2**



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

22.5

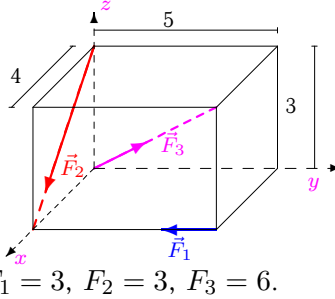
**Задача 22.3**



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

22.5

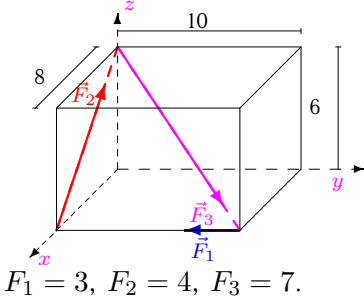
**Задача 22.4**



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

22.5

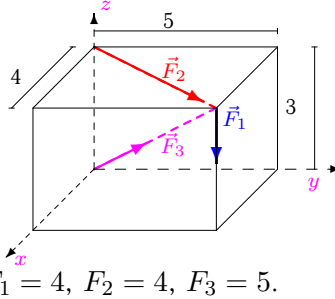
**Задача 22.5**



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

22.5

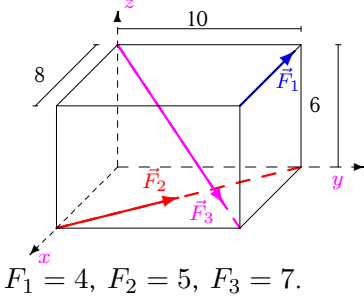
**Задача 22.6**



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

22.5

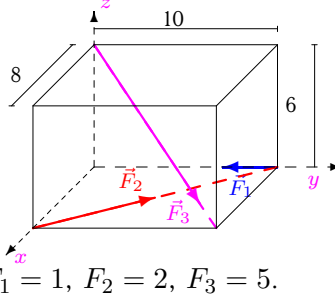
**Задача 22.7**



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

22.5

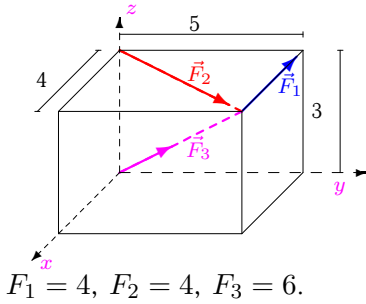
**Задача 22.8**



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

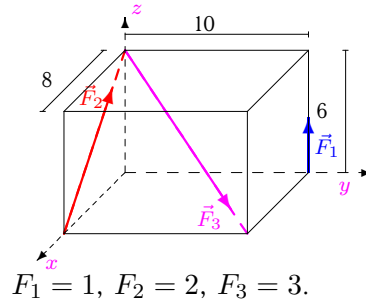
22.5

**Задача 22.9**



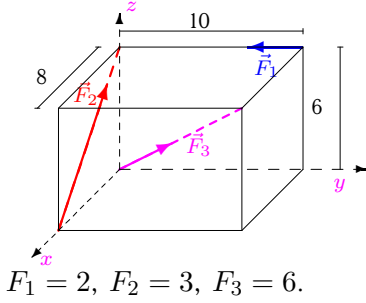
22.5

**Задача 22.10**



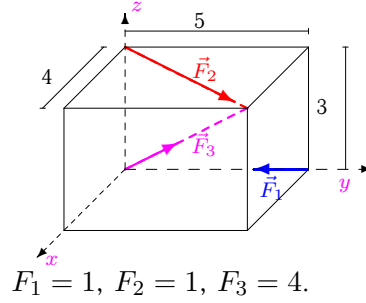
22.5

**Задача 22.11**



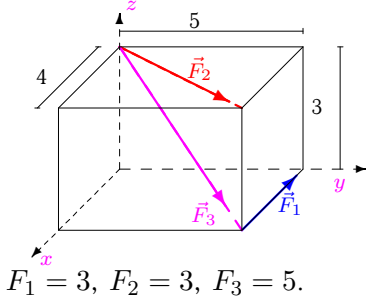
22.5

**Задача 22.12**



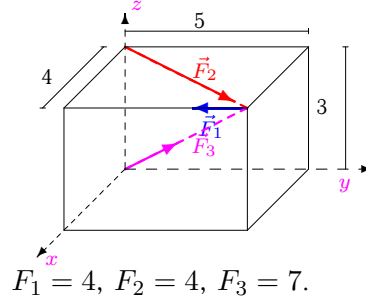
22.5

**Задача 22.13**



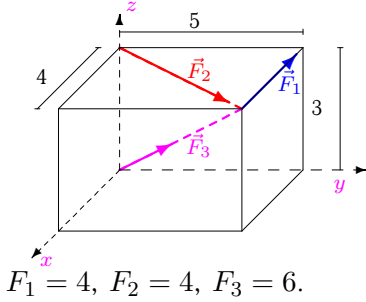
22.5

**Задача 22.14**



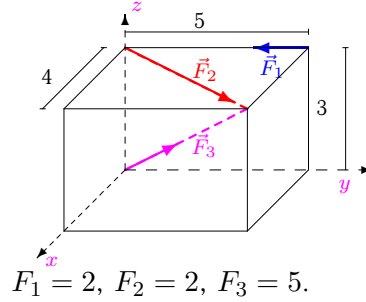
22.5

**Задача 22.15**



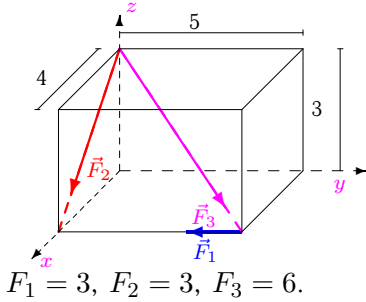
22.5

**Задача 22.16**



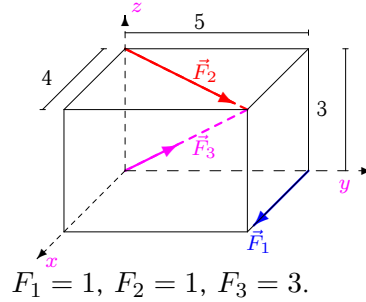
22.5

**Задача 22.17**



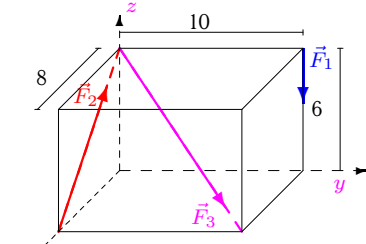
22.5

**Задача 22.18**



22.5

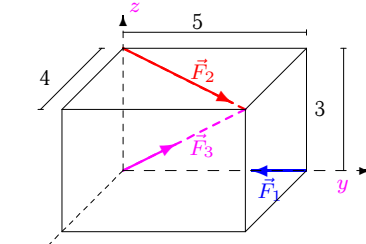
**Задача 22.19**



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

22.5

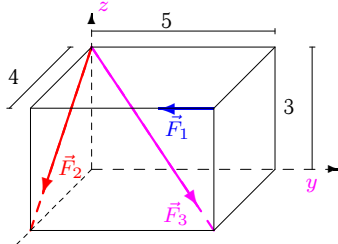
**Задача 22.20**



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

22.5

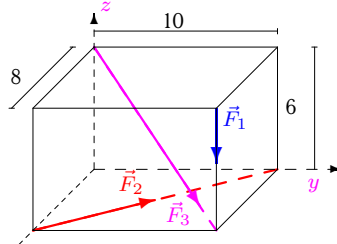
**Задача 22.21**



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

22.5

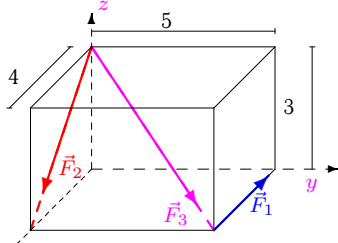
**Задача 22.22**



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

22.5

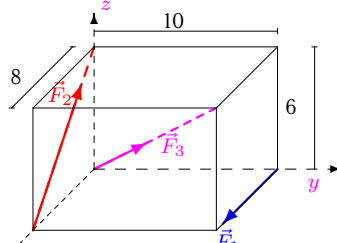
**Задача 22.23**



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

22.5

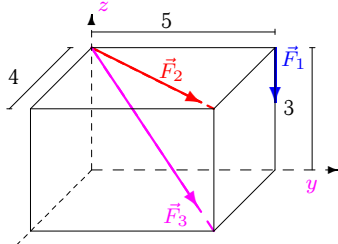
**Задача 22.24**



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

22.5

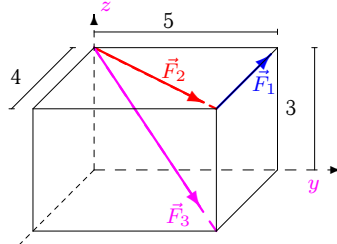
**Задача 22.25**



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

22.5

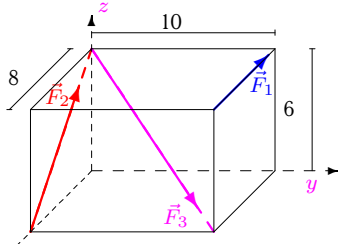
**Задача 22.26**



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

22.5

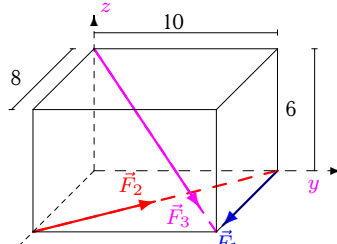
**Задача 22.27**



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

22.5

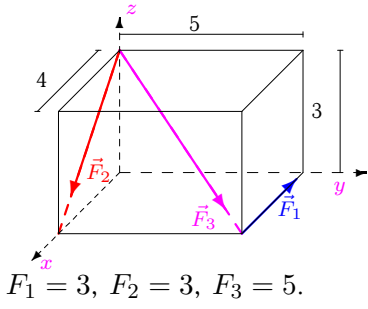
**Задача 22.28**



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

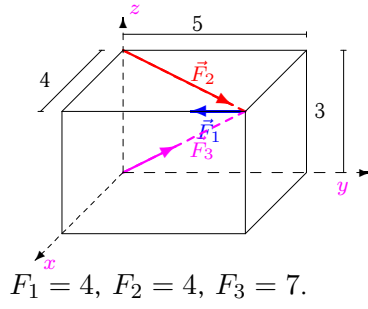
22.5

**Задача 22.29**



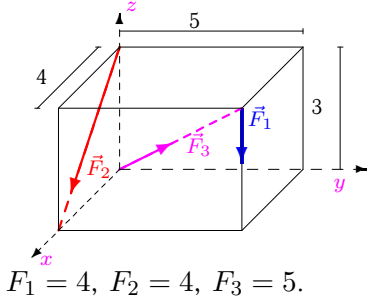
22.5

**Задача 22.30**



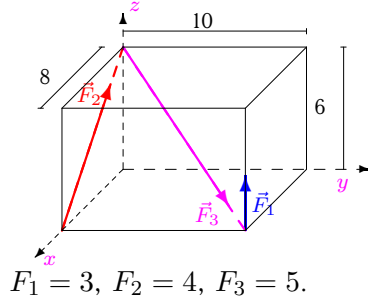
22.5

**Задача 22.31**



22.5

**Задача 22.32**



22.5

**Момент силы относительно оси**

	$M_{1x}$	$M_{1y}$	$M_{1z}$	$M_{2x}$	$M_{2y}$	$M_{2z}$	$M_{3x}$	$M_{3y}$	$M_{3z}$
1	0.000	-24.000	40.000	0.000	0.000	31.235	0.000	0.000	0.000
2	0.000	-24.000	40.000	0.000	0.000	31.235	0.000	0.000	0.000
3	0.000	12.000	-20.000	0.000	-14.400	0.000	-21.213	16.971	0.000
4	0.000	0.000	-12.000	0.000	7.200	0.000	0.000	0.000	0.000
5	0.000	0.000	-24.000	0.000	-19.200	0.000	-29.698	23.759	0.000
6	-20.000	16.000	0.000	-9.370	7.496	0.000	0.000	0.000	0.000
7	0.000	-24.000	40.000	0.000	0.000	31.235	-29.698	23.759	0.000
8	0.000	0.000	0.000	0.000	0.000	12.494	-21.213	16.971	0.000
9	0.000	-12.000	20.000	-9.370	7.496	0.000	0.000	0.000	0.000
10	10.000	0.000	0.000	0.000	-9.600	0.000	-12.728	10.182	0.000
11	12.000	0.000	0.000	0.000	-14.400	0.000	0.000	0.000	0.000
12	0.000	0.000	0.000	-2.343	1.874	0.000	0.000	0.000	0.000
13	0.000	0.000	15.000	-7.028	5.622	0.000	-10.607	8.485	0.000
14	12.000	0.000	-16.000	-9.370	7.496	0.000	0.000	0.000	0.000
15	0.000	-12.000	20.000	-9.370	7.496	0.000	0.000	0.000	0.000
16	6.000	0.000	0.000	-4.685	3.748	0.000	0.000	0.000	0.000
17	0.000	0.000	-12.000	0.000	7.200	0.000	-12.728	10.182	0.000
18	0.000	0.000	-5.000	-2.343	1.874	0.000	0.000	0.000	0.000
19	-20.000	0.000	0.000	0.000	-14.400	0.000	-16.971	13.576	0.000
20	0.000	0.000	0.000	-2.343	1.874	0.000	0.000	0.000	0.000
21	12.000	0.000	-16.000	0.000	9.600	0.000	-14.849	11.879	0.000
22	-40.000	32.000	0.000	0.000	0.000	31.235	-25.456	20.365	0.000
23	0.000	0.000	15.000	0.000	7.200	0.000	-10.607	8.485	0.000
24	0.000	0.000	-10.000	0.000	-9.600	0.000	0.000	0.000	0.000
25	-10.000	0.000	0.000	-4.685	3.748	0.000	-6.364	5.091	0.000
26	0.000	-12.000	20.000	-9.370	7.496	0.000	-12.728	10.182	0.000
27	0.000	-24.000	40.000	0.000	-24.000	0.000	-29.698	23.759	0.000
28	0.000	0.000	-10.000	0.000	0.000	12.494	-16.971	13.576	0.000
29	0.000	0.000	15.000	0.000	7.200	0.000	-10.607	8.485	0.000
30	12.000	0.000	-16.000	-9.370	7.496	0.000	0.000	0.000	0.000
31	-20.000	16.000	0.000	0.000	9.600	0.000	0.000	0.000	0.000
32	30.000	-24.000	0.000	0.000	-19.200	0.000	-21.213	16.971	0.000