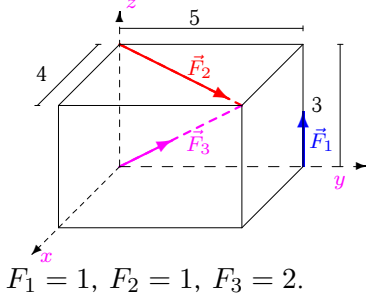


Момент силы относительно оси

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

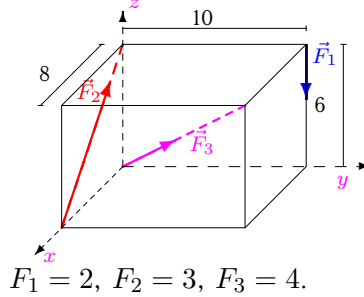
Кирсанов М.Н. **Решебник. Теоретическая механика**/Под ред. А. И. Кириллова.— М.:ФИЗМАТЛИТ, 2008.— 384 с. (с.91.)

Задача 22.1.



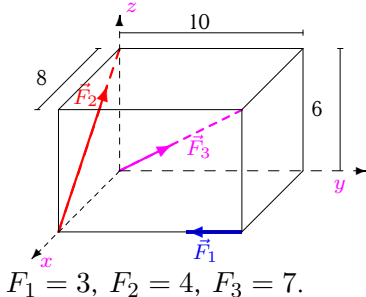
$F_1 = 1, F_2 = 1, F_3 = 2.$

Задача 22.2.



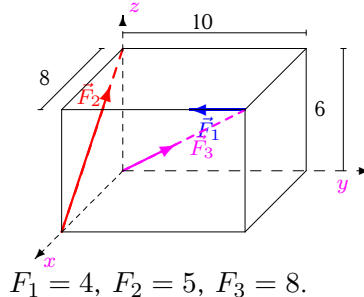
$F_1 = 2, F_2 = 3, F_3 = 4.$

Задача 22.3.



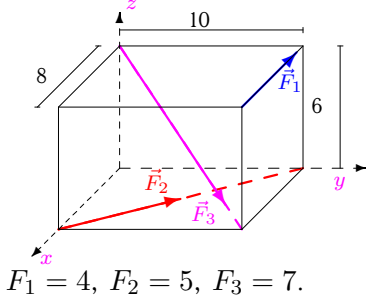
$F_1 = 3, F_2 = 4, F_3 = 7.$

Задача 22.4.



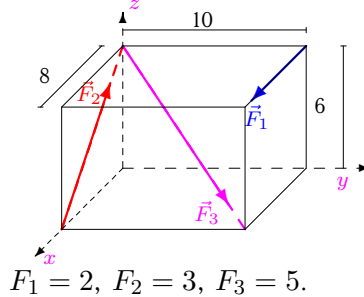
$F_1 = 4, F_2 = 5, F_3 = 8.$

Задача 22.5.



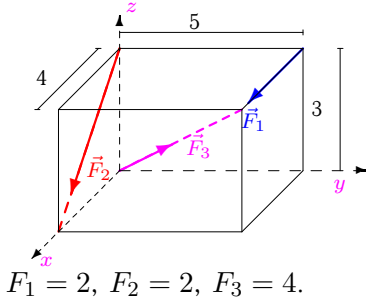
$F_1 = 4, F_2 = 5, F_3 = 7.$

Задача 22.6.



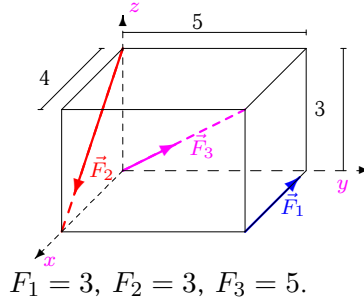
$F_1 = 2, F_2 = 3, F_3 = 5.$

Задача 22.7.



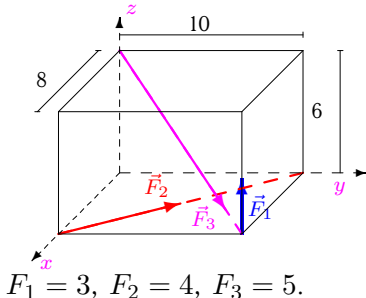
$F_1 = 2, F_2 = 2, F_3 = 4.$

Задача 22.8.



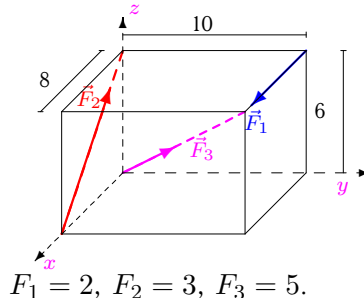
$F_1 = 3, F_2 = 3, F_3 = 5.$

Задача 22.9.



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

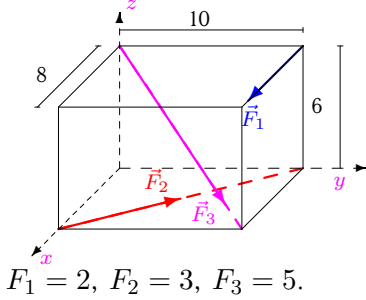
Задача 22.10.



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

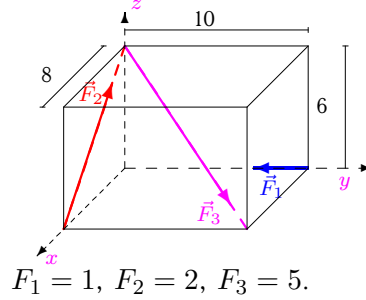
Задача 22.11.

8



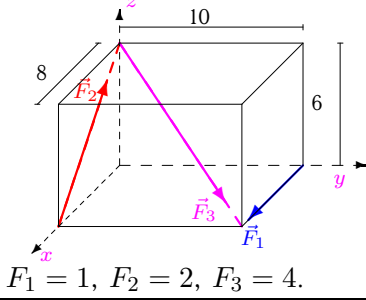
Задача 22.12.

8



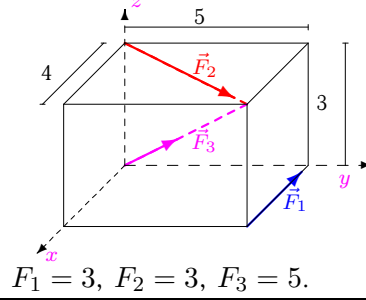
Задача 22.13.

8



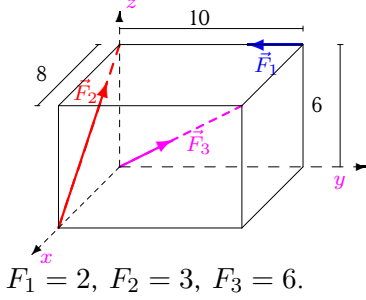
Задача 22.14.

8



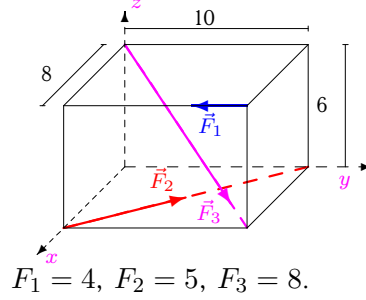
Задача 22.15.

8



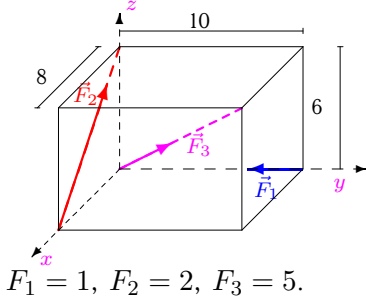
Задача 22.16.

8



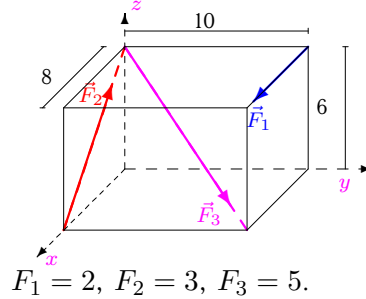
Задача 22.17.

8



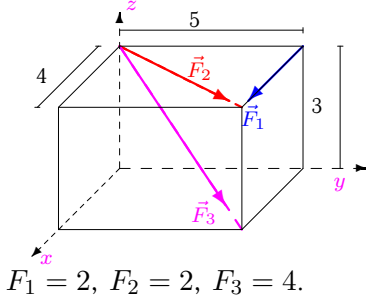
Задача 22.18.

8



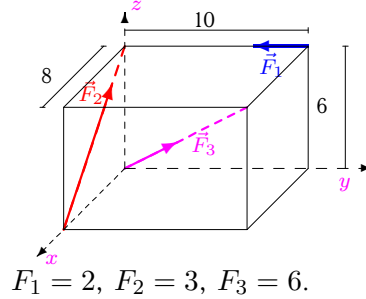
Задача 22.19.

8



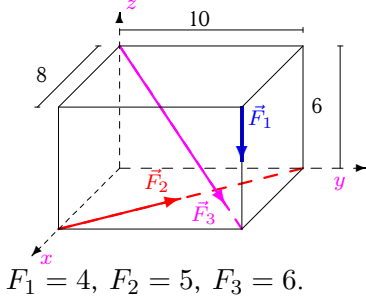
Задача 22.20.

8



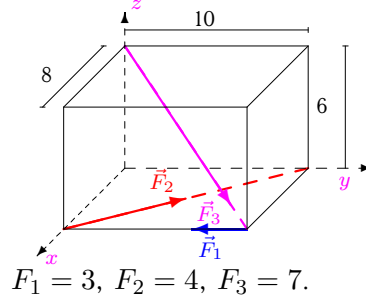
Задача 22.21.

8



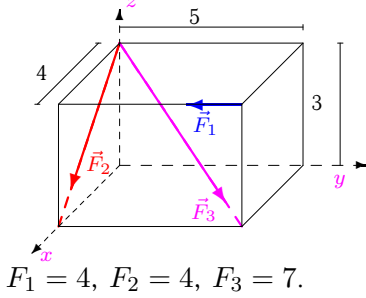
Задача 22.22.

8



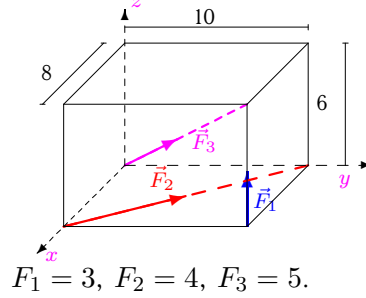
Задача 22.23.

8



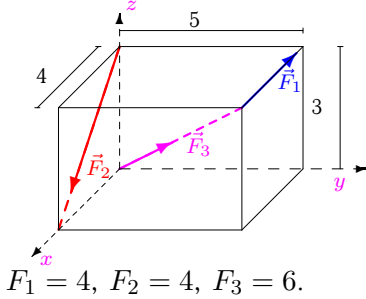
Задача 22.24.

8



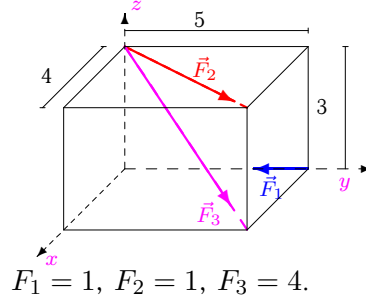
Задача 22.25.

8



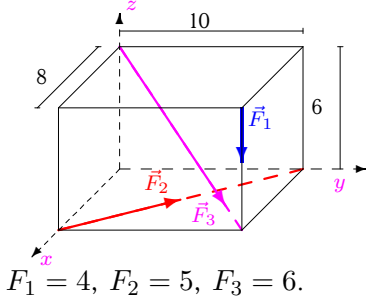
Задача 22.26.

8



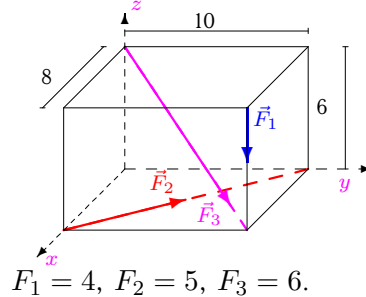
Задача 22.27.

8



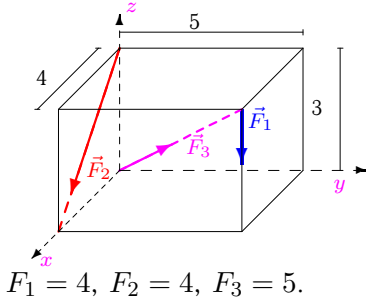
Задача 22.28.

8



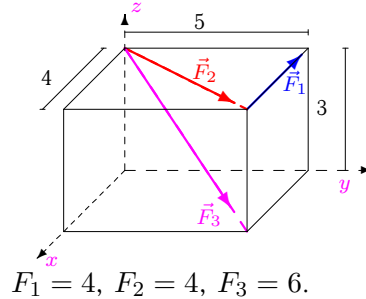
Задача 22.29.

8



Задача 22.30.

8



Момент силы относительно оси

| | M_{1x} | M_{1y} | M_{1z} | M_{2x} | M_{2y} | M_{2z} | M_{3x} | M_{3y} | M_{3z} |
|----|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 1 | 5.000 | 0.000 | 0.000 | -2.343 | 1.874 | 0.000 | 0.000 | 0.000 | 0.000 |
| 2 | -20.000 | 0.000 | 0.000 | 0.000 | -14.400 | 0.000 | 0.000 | 0.000 | 0.000 |
| 3 | 0.000 | 0.000 | -24.000 | 0.000 | -19.200 | 0.000 | 0.000 | 0.000 | 0.000 |
| 4 | 24.000 | 0.000 | -32.000 | 0.000 | -24.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 5 | 0.000 | -24.000 | 40.000 | 0.000 | 0.000 | 31.235 | -29.698 | 23.759 | 0.000 |
| 6 | 0.000 | 12.000 | -20.000 | 0.000 | -14.400 | 0.000 | -21.213 | 16.971 | 0.000 |
| 7 | 0.000 | 6.000 | -10.000 | 0.000 | 4.800 | 0.000 | 0.000 | 0.000 | 0.000 |
| 8 | 0.000 | 0.000 | 15.000 | 0.000 | 7.200 | 0.000 | 0.000 | 0.000 | 0.000 |
| 9 | 30.000 | -24.000 | 0.000 | 0.000 | 0.000 | 24.988 | -21.213 | 16.971 | 0.000 |
| 10 | 0.000 | 12.000 | -20.000 | 0.000 | -14.400 | 0.000 | 0.000 | 0.000 | 0.000 |
| 11 | 0.000 | 12.000 | -20.000 | 0.000 | 0.000 | 18.741 | -21.213 | 16.971 | 0.000 |
| 12 | 0.000 | 0.000 | 0.000 | 0.000 | -9.600 | 0.000 | -21.213 | 16.971 | 0.000 |
| 13 | 0.000 | 0.000 | -10.000 | 0.000 | -9.600 | 0.000 | -16.971 | 13.576 | 0.000 |
| 14 | 0.000 | 0.000 | 15.000 | -7.028 | 5.622 | 0.000 | 0.000 | 0.000 | 0.000 |
| 15 | 12.000 | 0.000 | 0.000 | 0.000 | -14.400 | 0.000 | 0.000 | 0.000 | 0.000 |
| 16 | 24.000 | 0.000 | -32.000 | 0.000 | 0.000 | 31.235 | -33.941 | 27.153 | 0.000 |
| 17 | 0.000 | 0.000 | 0.000 | 0.000 | -9.600 | 0.000 | 0.000 | 0.000 | 0.000 |
| 18 | 0.000 | 12.000 | -20.000 | 0.000 | -14.400 | 0.000 | -21.213 | 16.971 | 0.000 |
| 19 | 0.000 | 6.000 | -10.000 | -4.685 | 3.748 | 0.000 | -8.485 | 6.788 | 0.000 |
| 20 | 12.000 | 0.000 | 0.000 | 0.000 | -14.400 | 0.000 | 0.000 | 0.000 | 0.000 |
| 21 | -40.000 | 32.000 | 0.000 | 0.000 | 0.000 | 31.235 | -25.456 | 20.365 | 0.000 |
| 22 | 0.000 | 0.000 | -24.000 | 0.000 | 0.000 | 24.988 | -29.698 | 23.759 | 0.000 |
| 23 | 12.000 | 0.000 | -16.000 | 0.000 | 9.600 | 0.000 | -14.849 | 11.879 | 0.000 |
| 24 | 30.000 | -24.000 | 0.000 | 0.000 | 0.000 | 24.988 | 0.000 | 0.000 | 0.000 |
| 25 | 0.000 | -12.000 | 20.000 | 0.000 | 9.600 | 0.000 | 0.000 | 0.000 | 0.000 |
| 26 | 0.000 | 0.000 | 0.000 | -2.343 | 1.874 | 0.000 | -8.485 | 6.788 | 0.000 |
| 27 | -40.000 | 32.000 | 0.000 | 0.000 | 0.000 | 31.235 | -25.456 | 20.365 | 0.000 |
| 28 | -40.000 | 32.000 | 0.000 | 0.000 | 0.000 | 31.235 | -25.456 | 20.365 | 0.000 |
| 29 | -20.000 | 16.000 | 0.000 | 0.000 | 9.600 | 0.000 | 0.000 | 0.000 | 0.000 |
| 30 | 0.000 | -12.000 | 20.000 | -9.370 | 7.496 | 0.000 | -12.728 | 10.182 | 0.000 |