

Центр тяжести пространственной стержневой фигуры

Найти координаты центра тяжести пространственной фигуры, состоящей из шести однородных стержней. Размеры даны в метрах.

Кирсанов М.Н. **Решебник. Теоретическая механика**/Под ред. А. И. Кириллова. – М.:ФИЗМАТЛИТ, 2008. – 384 с. (с.122.)

Задача 21.1. 10

$a = 7,$
 $b = 6,$
 $c = 5,$
 $d = 4.$

Задача 21.2. 10

$a = 6,$
 $b = 5,$
 $c = 4,$
 $d = 3.$

Задача 21.3. 10

$a = 7,$
 $b = 6,$
 $c = 5,$
 $d = 3.$

Задача 21.4. 10

$a = 7,$
 $b = 6,$
 $c = 5,$
 $d = 4.$

Задача 21.5. 10

$a = 6,$
 $b = 5,$
 $c = 4,$
 $d = 2.$

Задача 21.6. 10

$a = 7,$
 $b = 6,$
 $c = 5,$
 $d = 4.$

Задача 21.7. 10

$a = 6,$
 $b = 5,$
 $c = 4,$
 $d = 2.$

Задача 21.8. 10

$a = 4,$
 $b = 6,$
 $c = 5,$
 $d = 3.$

Задача 21.9. 10

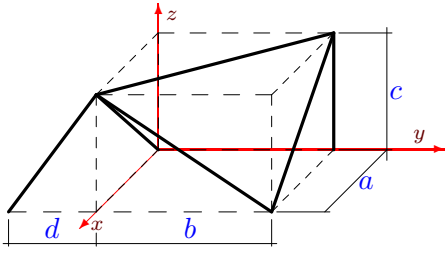
$a = 3,$
 $b = 4,$
 $c = 3,$
 $d = 1.$

Задача 21.10. 10

$a = 7,$
 $b = 6,$
 $c = 5,$
 $d = 4.$

Задача 21.11.

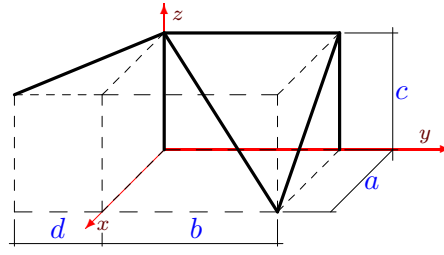
10



$$\begin{aligned} a &= 3, \\ b &= 4, \\ c &= 3, \\ d &= 2. \end{aligned}$$

Задача 21.12.

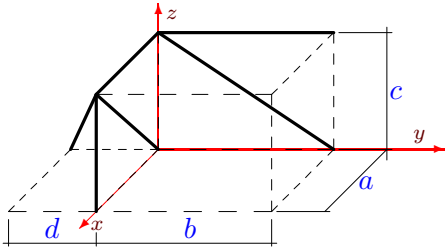
10



$$\begin{aligned} a &= 6, \\ b &= 5, \\ c &= 4, \\ d &= 2. \end{aligned}$$

Задача 21.13.

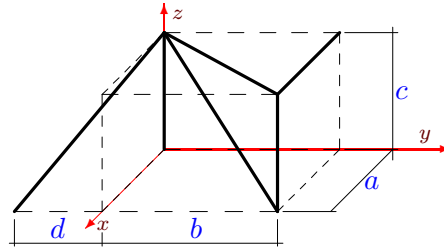
10



$$\begin{aligned} a &= 3, \\ b &= 4, \\ c &= 3, \\ d &= 2. \end{aligned}$$

Задача 21.14.

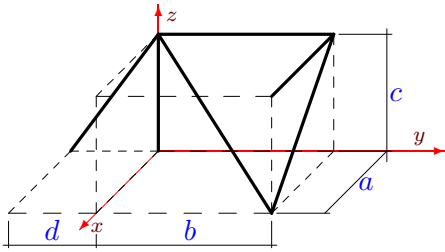
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$$\begin{aligned} a &= 5, \\ b &= 4, \\ c &= 3, \\ d &= 1. \end{aligned}$$

Задача 21.15.

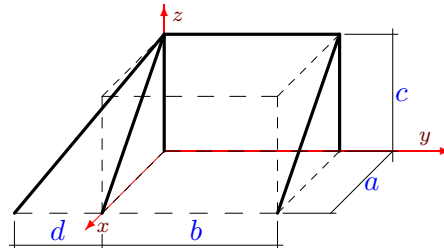
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$$\begin{aligned} a &= 2, \\ b &= 3, \\ c &= 4, \\ d &= 2. \end{aligned}$$

Задача 21.16.

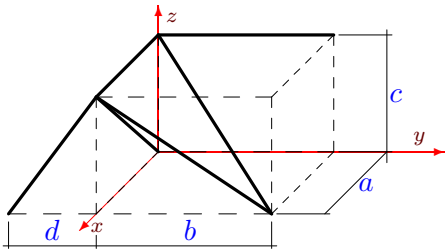
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$$\begin{aligned} a &= 4, \\ b &= 6, \\ c &= 5, \\ d &= 3. \end{aligned}$$

Задача 21.17.

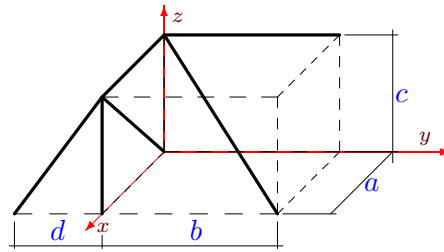
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$$\begin{aligned} a &= 6, \\ b &= 5, \\ c &= 4, \\ d &= 3. \end{aligned}$$

Задача 21.18.

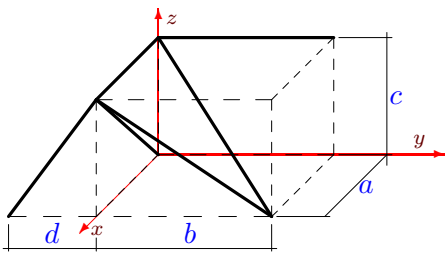
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$$\begin{aligned} a &= 6, \\ b &= 5, \\ c &= 4, \\ d &= 3. \end{aligned}$$

Задача 21.19.

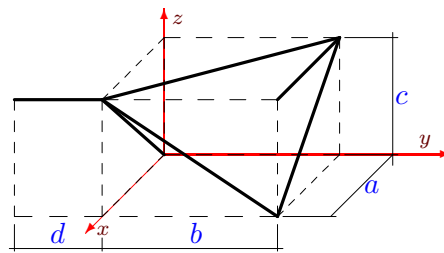
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$$\begin{aligned} a &= 2, \\ b &= 3, \\ c &= 4, \\ d &= 3. \end{aligned}$$

Задача 21.20.

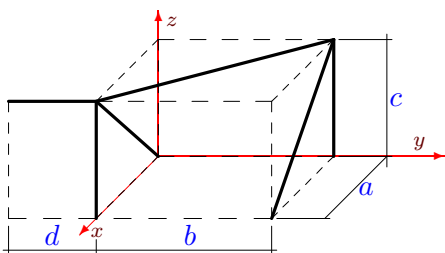
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$$\begin{aligned} a &= 3, \\ b &= 4, \\ c &= 3, \\ d &= 2. \end{aligned}$$

Задача 21.21.

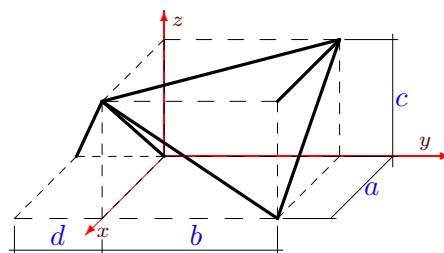
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$$\begin{aligned} a &= 2, \\ b &= 3, \\ c &= 4, \\ d &= 3. \end{aligned}$$

Задача 21.22.

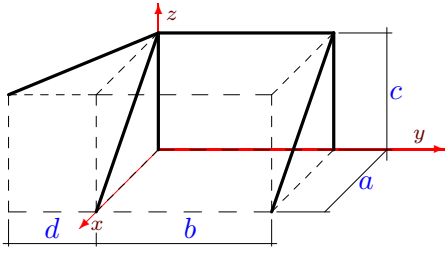
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$$\begin{aligned} a &= 2, \\ b &= 3, \\ c &= 4, \\ d &= 3. \end{aligned}$$

Задача 21.23.

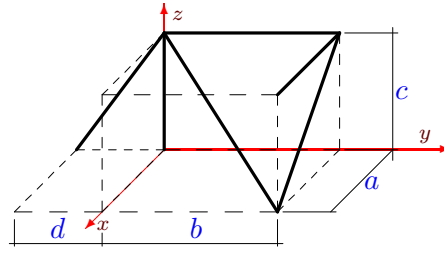
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$$\begin{aligned} a &= 6, \\ b &= 5, \\ c &= 4, \\ d &= 2. \end{aligned}$$

Задача 21.24.

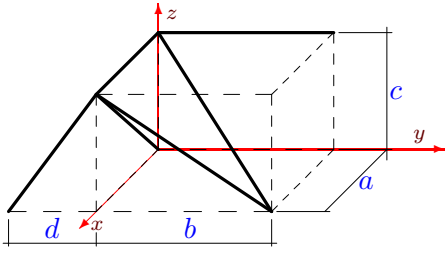
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$$\begin{aligned} a &= 6, \\ b &= 5, \\ c &= 4, \\ d &= 2. \end{aligned}$$

Задача 21.25.

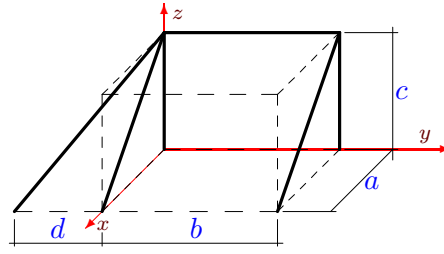
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$$\begin{aligned} a &= 4, \\ b &= 6, \\ c &= 5, \\ d &= 4. \end{aligned}$$

Задача 21.26.

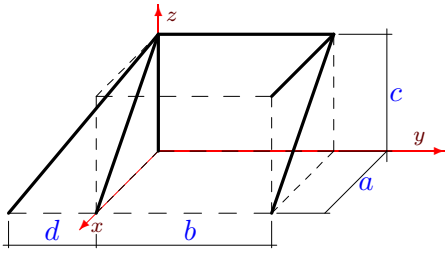
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$$\begin{aligned} a &= 7, \\ b &= 6, \\ c &= 5, \\ d &= 3. \end{aligned}$$

Задача 21.27.

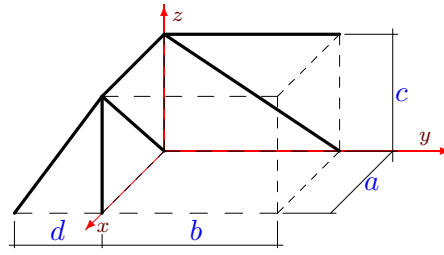
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$$\begin{aligned} a &= 3, \\ b &= 4, \\ c &= 3, \\ d &= 1. \end{aligned}$$

Задача 21.28.

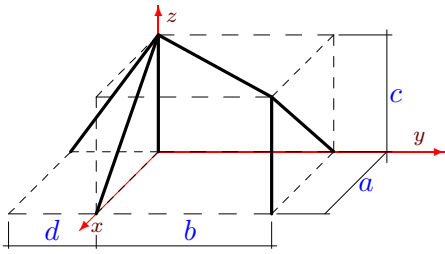
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$$\begin{aligned} a &= 4, \\ b &= 6, \\ c &= 5, \\ d &= 4. \end{aligned}$$

Задача 21.29.

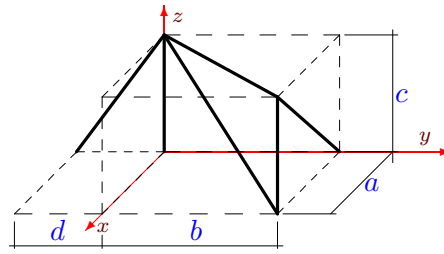
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$$\begin{aligned} a &= 2, \\ b &= 3, \\ c &= 4, \\ d &= 2. \end{aligned}$$

Задача 21.30.

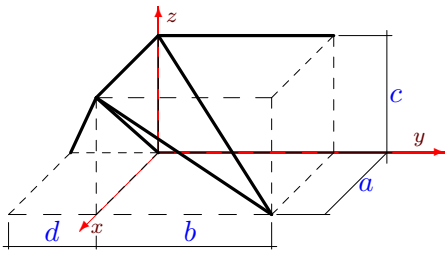
10



$$\begin{aligned} a &= 2, \\ b &= 3, \\ c &= 4, \\ d &= 2. \end{aligned}$$

Задача 21.31.

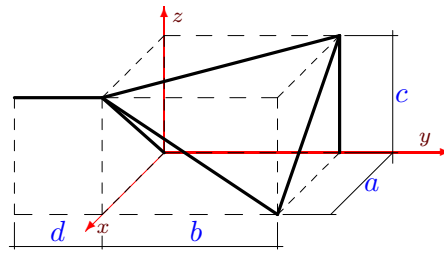
10



$$\begin{aligned} a &= 7, \\ b &= 6, \\ c &= 5, \\ d &= 4. \end{aligned}$$

Задача 21.32.

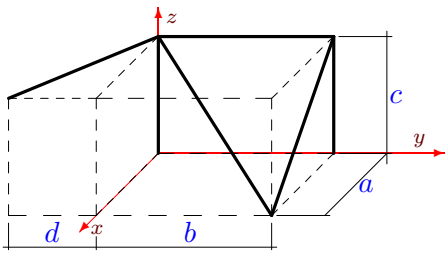
10



$$\begin{aligned} a &= 4, \\ b &= 6, \\ c &= 5, \\ d &= 4. \end{aligned}$$

Задача 21.33.

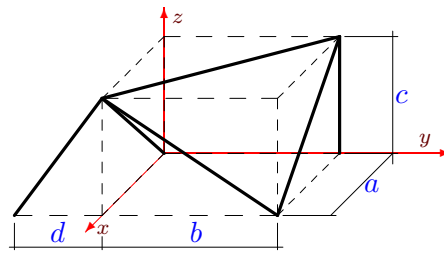
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$$\begin{aligned} a &= 3, \\ b &= 4, \\ c &= 3, \\ d &= 1. \end{aligned}$$

Задача 21.34.

10



$$\begin{aligned} a &= 5, \\ b &= 4, \\ c &= 3, \\ d &= 2. \end{aligned}$$

Центр тяжести пространственной стержневой фигуры

	L	x_c	y_c	z_c
1	43.494	3.935	0.843	3.247
2	38.043	3.000	1.679	2.411
3	47.420	3.500	2.680	2.986
4	47.638	4.544	2.769	3.351
5	36.505	3.000	1.700	2.757
6	43.899	2.798	0.512	3.240
7	38.121	3.000	2.392	2.742
8	35.848	1.675	2.268	3.003
9	23.236	0.650	2.025	1.758
10	43.901	3.963	1.478	3.468
11	25.091	1.835	1.808	1.799
12	35.311	1.896	2.384	2.641
13	23.933	1.124	0.556	1.939
14	30.390	2.500	1.842	2.063
15	23.329	0.508	1.180	2.429
16	35.877	1.108	2.113	2.918
17	38.389	3.500	1.119	2.573
18	35.986	3.333	0.749	2.611
19	24.857	1.282	0.506	2.402
20	23.485	1.947	2.000	2.139
21	23.550	1.127	1.118	2.561
22	24.935	1.201	0.972	2.450
23	33.747	1.844	1.844	2.671
24	35.458	1.860	2.708	2.620
25	39.391	2.417	1.395	3.135
26	42.315	2.177	2.031	2.854
27	22.844	1.040	1.523	1.960
28	35.616	1.865	0.804	3.202
29	25.022	0.821	1.053	2.288
30	25.935	0.828	1.328	2.278
31	49.387	3.628	1.092	3.158
32	36.828	2.370	2.864	3.261
33	23.236	0.854	2.025	1.962
34	29.671	2.972	1.838	1.824