

# Центр тяжести тела, составленного из пластин

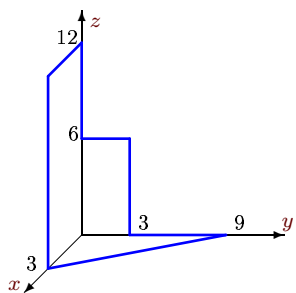
Найти координаты центра тяжести пространственной фигуры, состоящей из трех однородных пластин. Размеры даны в метрах.

Кирсанов М.Н. Теоретическая механика. Сборник задач – М.: Инфра-М, 2014. — 430 с. (с.135)

Кирсанов М.Н. Решения задач по теоретической механике. – М.: Инфра-М, 2015. — 216 с. (с.78)

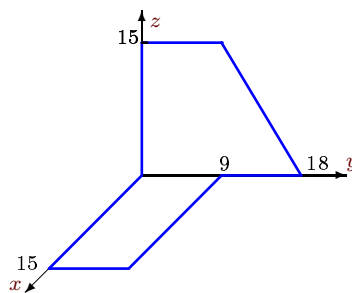
Задача S-19.1.

3



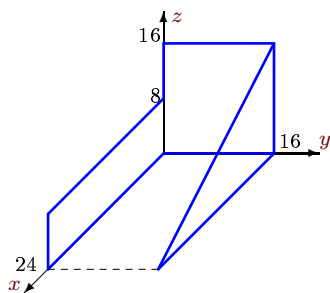
Задача S-19.2.

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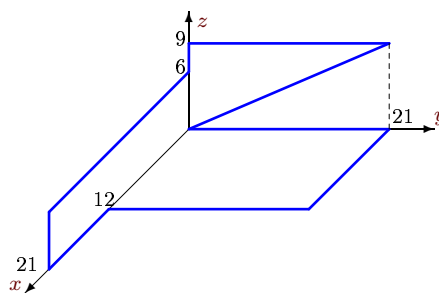
Задача S-19.3.

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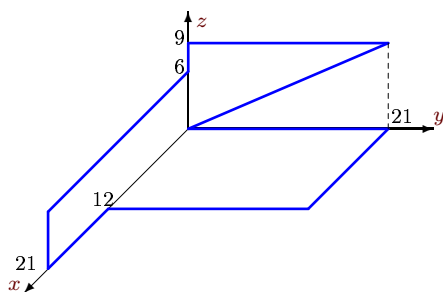
Задача S-19.4.

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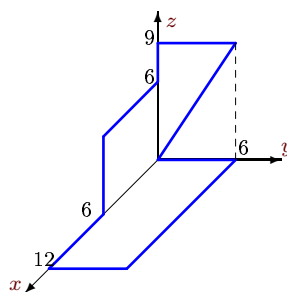
Задача S-19.5.

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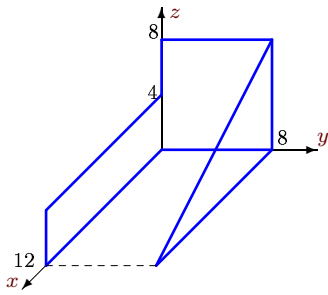
Задача S-19.6.

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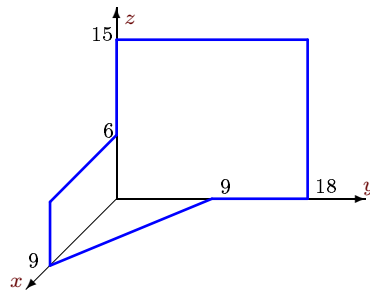
Задача S-19.7.

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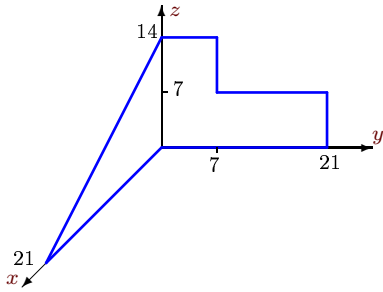
Задача S-19.8.

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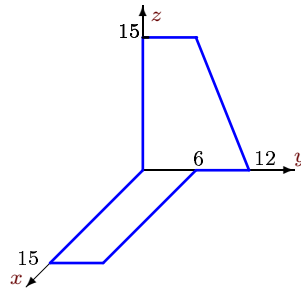
Задача S-19.9.

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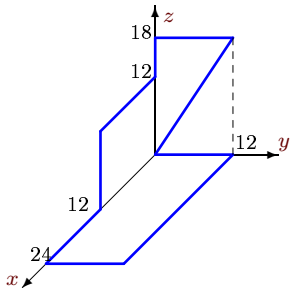
Задача S-19.10.

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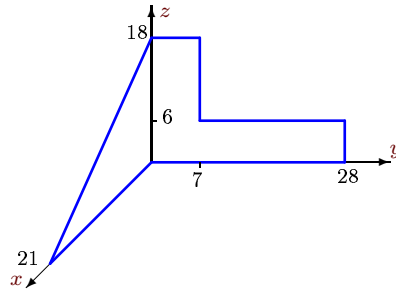
Задача S-19.11.

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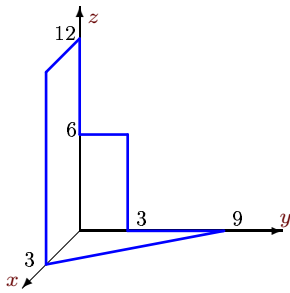
Задача S-19.12.

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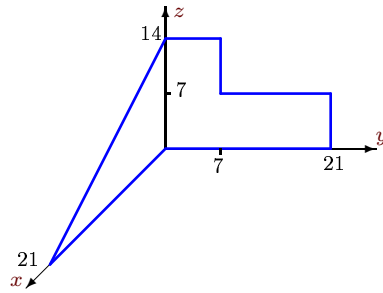
Задача S-19.13.

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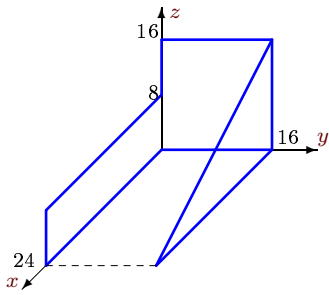
Задача S-19.14.

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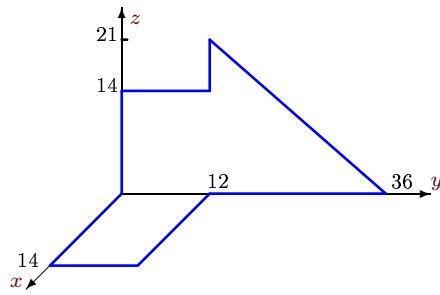
Задача S-19.15.

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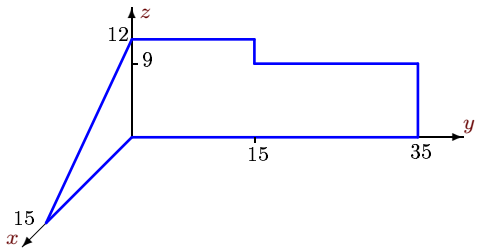
Задача S-19.16.

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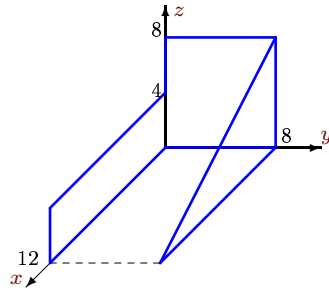
Задача S-19.17.

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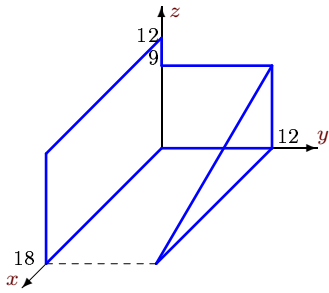
Задача S-19.18.

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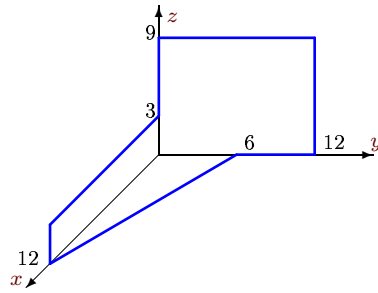
Задача S-19.19.

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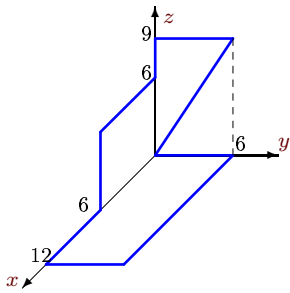
Задача S-19.20.

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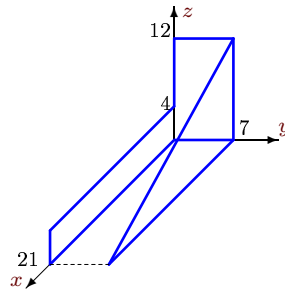
Задача S-19.21.

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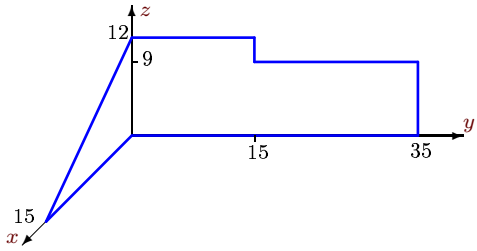
Задача S-19.22.

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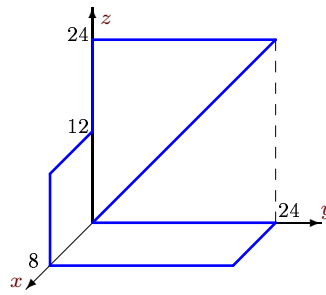
Задача S-19.23.

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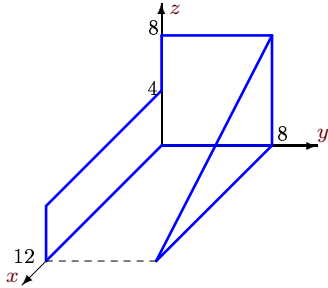
Задача S-19.24.

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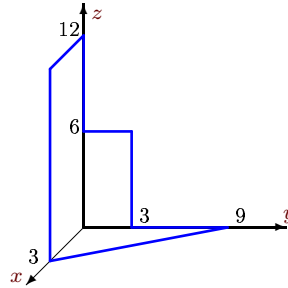
Задача S-19.25.

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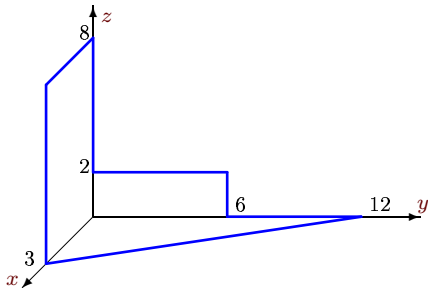
Задача S-19.26.

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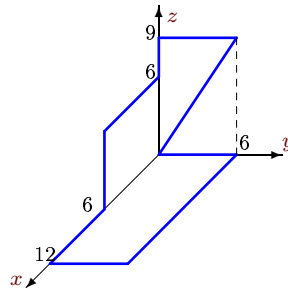
Задача S-19.27.

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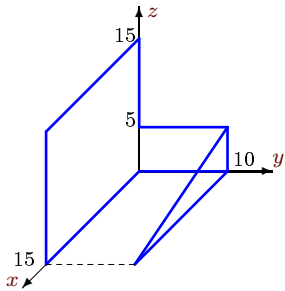
Задача S-19.28.

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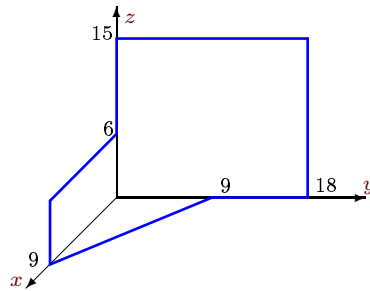
Задача S-19.29.

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Задача S-19.30.

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**Ответы.****Центр тяжести тела, составленного из пластин**

17.02.2015

| №  | $x_c$ | $y_c$ | $z_c$ | $F$   |
|----|-------|-------|-------|-------|
| 1  | 1     | 1     | 4     | 67.5  |
| 2  | 3     | 6     | 4     | 337.5 |
| 3  | 6     | 8     | 6     | 640.0 |
| 4  | 6     | 7     | 2     | 472.5 |
| 5  | 6     | 7     | 2     | 472.5 |
| 6  | 4     | 2     | 2     | 135.0 |
| 7  | 3     | 4     | 3     | 160.0 |
| 8  | 1     | 7     | 6     | 364.5 |
| 9  | 3     | 5     | 5     | 343.0 |
| 10 | 3     | 4     | 4     | 225.0 |
| 11 | 8     | 4     | 4     | 540.0 |
| 12 | 3     | 6     | 6     | 441.0 |
| 13 | 1     | 1     | 4     | 67.5  |
| 14 | 3     | 5     | 5     | 343.0 |
| 15 | 6     | 8     | 6     | 640.0 |
| 16 | 2     | 12    | 5     | 588.0 |
| 17 | 1     | 13    | 5     | 450.0 |
| 18 | 3     | 4     | 3     | 160.0 |
| 19 | 6     | 4     | 5     | 405.0 |
| 20 | 2     | 4     | 3     | 180.0 |
| 21 | 4     | 2     | 2     | 135.0 |
| 22 | 6     | 4     | 4     | 294.0 |
| 23 | 1     | 13    | 5     | 450.0 |
| 24 | 2     | 8     | 9     | 576.0 |
| 25 | 3     | 4     | 3     | 160.0 |
| 26 | 1     | 1     | 4     | 67.5  |
| 27 | 1     | 2     | 2     | 54.0  |
| 28 | 4     | 2     | 2     | 135.0 |
| 29 | 6     | 2     | 6     | 312.5 |
| 30 | 1     | 7     | 6     | 364.5 |

S-19 файл о19s3A