

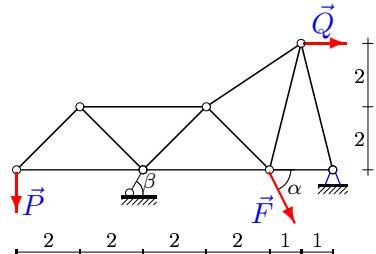
Расчет фермы (треугольная решетка)

Найти усилия в стержнях плоской фермы. Размеры даны в метрах.

Кирсанов М.Н. Решебник. Теоретическая механика/Под ред. А. И. Кириллова.—
М.: ФИЗМАТЛИТ, 2008. — 384 с. (с.45.)

Задача S-6.1.

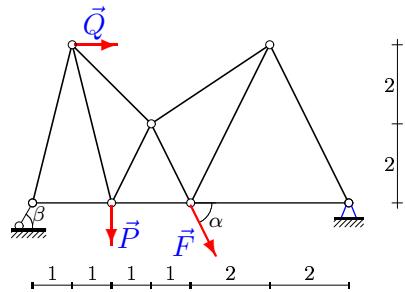
Горелова Валерия



$$P = 35 \text{ кн}, \\ F = 9 \text{ кн}, \\ Q = 30 \text{ кн}, \\ \alpha = 65^\circ, \\ \beta = 45^\circ.$$

Задача S-6.3.

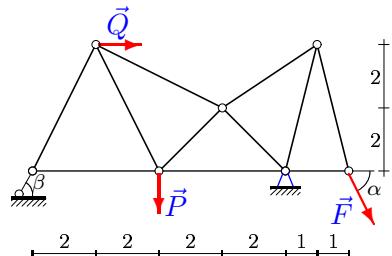
Гурьянова Ксения



$$P = 25 \text{ кн}, \\ F = 30 \text{ кн}, \\ Q = 40 \text{ кн}, \\ \alpha = 55^\circ, \\ \beta = 45^\circ.$$

Задача S-6.5.

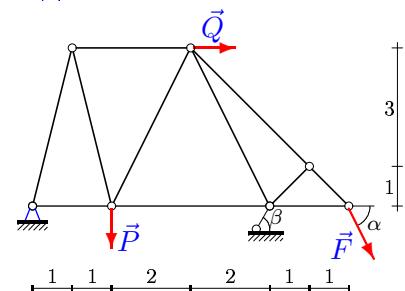
Душеин Александр



$$P = 40 \text{ кн}, \\ F = 1 \text{ кн}, \\ Q = 30 \text{ кн}, \\ \alpha = 70^\circ, \\ \beta = 60^\circ.$$

Задача S-6.7.

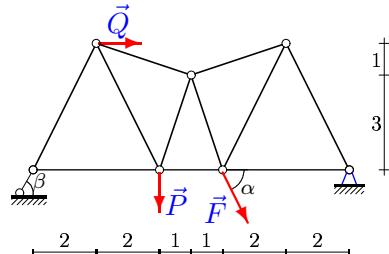
Куликов Алексей



$$P = 45 \text{ кн}, \\ F = 31 \text{ кн}, \\ Q = 20 \text{ кн}, \\ \alpha = 75^\circ, \\ \beta = 60^\circ.$$

Задача S-6.2.

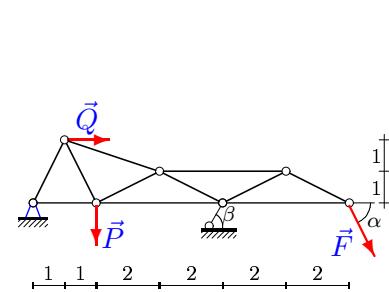
Горин Николай



$$P = 25 \text{ кн}, \\ F = 9 \text{ кн}, \\ Q = 50 \text{ кн}, \\ \alpha = 55^\circ, \\ \beta = 45^\circ.$$

Задача S-6.4.

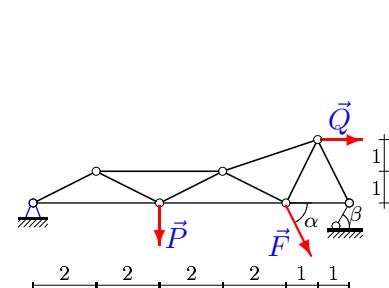
Дардас Халед



$$P = 20 \text{ кн}, \\ F = 5 \text{ кн}, \\ Q = 60 \text{ кн}, \\ \alpha = 50^\circ, \\ \beta = 45^\circ.$$

Задача S-6.6.

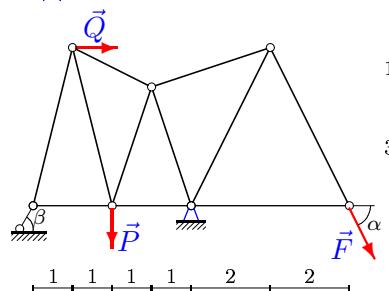
Коваль Данил



$$P = 20 \text{ кн}, \\ F = 1 \text{ кн}, \\ Q = 30 \text{ кн}, \\ \alpha = 50^\circ, \\ \beta = 45^\circ.$$

Задача S-6.8.

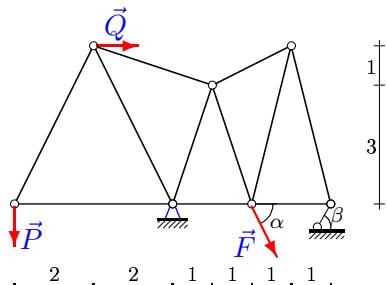
Лезин Владислав



$$P = 20 \text{ кн}, \\ F = 11 \text{ кн}, \\ Q = 40 \text{ кн}, \\ \alpha = 50^\circ, \\ \beta = 45^\circ.$$

Задача S-6.9.

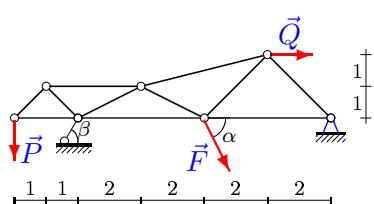
Макаров Станислав



$$\begin{aligned}P &= 35 \text{ кн}, \\F &= 21 \text{ кн}, \\Q &= 10 \text{ кн}, \\\alpha &= 65^\circ, \\\beta &= 45^\circ.\end{aligned}$$

Задача S-6.11.

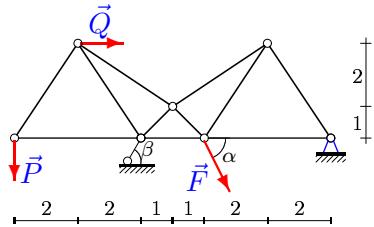
Мордасов Денис



$$\begin{aligned}P &= 5 \text{ кн}, \\F &= 29 \text{ кн}, \\Q &= 60 \text{ кн}, \\\alpha &= 35^\circ, \\\beta &= 30^\circ.\end{aligned}$$

Задача S-6.13.

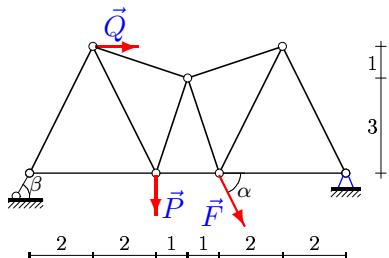
Олиференко Ярослав



$$\begin{aligned}P &= 5 \text{ кн}, \\F &= 15 \text{ кн}, \\Q &= 50 \text{ кн}, \\\alpha &= 35^\circ, \\\beta &= 30^\circ.\end{aligned}$$

Задача S-6.15.

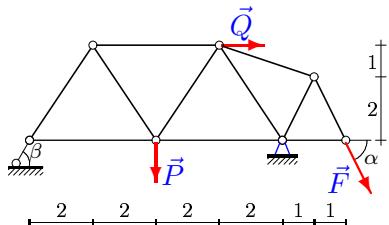
Прыгов Артём



$$\begin{aligned}P &= 10 \text{ кн}, \\F &= 2 \text{ кн}, \\Q &= 50 \text{ кн}, \\\alpha &= 40^\circ, \\\beta &= 30^\circ.\end{aligned}$$

Задача S-6.17.

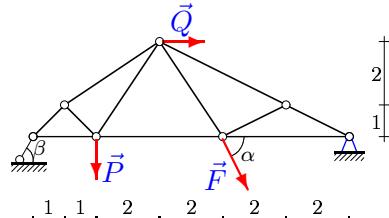
Чахкиев Магомед



$$\begin{aligned}P &= 5 \text{ кн}, \\F &= 19 \text{ кн}, \\Q &= 30 \text{ кн}, \\\alpha &= 35^\circ, \\\beta &= 30^\circ.\end{aligned}$$

Задача S-6.10.

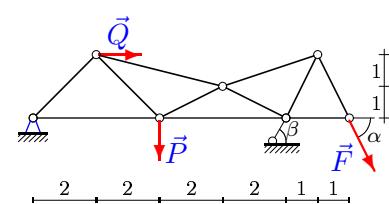
Мамедов Роман



$$\begin{aligned}P &= 40 \text{ кн}, \\F &= 22 \text{ кн}, \\Q &= 60 \text{ кн}, \\\alpha &= 70^\circ, \\\beta &= 60^\circ.\end{aligned}$$

Задача S-6.12.

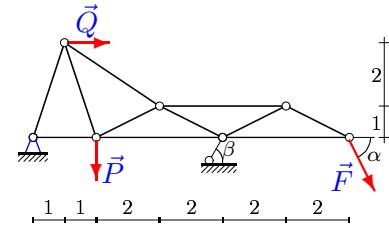
Овсянникова Варвара



$$\begin{aligned}P &= 10 \text{ кн}, \\F &= 7 \text{ кн}, \\Q &= 30 \text{ кн}, \\\alpha &= 40^\circ, \\\beta &= 30^\circ.\end{aligned}$$

Задача S-6.14.

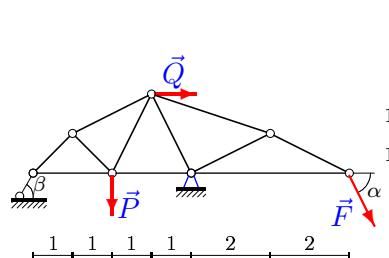
Опенышев Роман



$$\begin{aligned}P &= 10 \text{ кн}, \\F &= 27 \text{ кн}, \\Q &= 60 \text{ кн}, \\\alpha &= 40^\circ, \\\beta &= 30^\circ.\end{aligned}$$

Задача S-6.16.

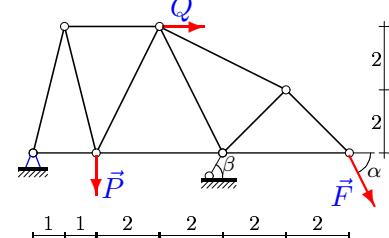
Терзе Сергей



$$\begin{aligned}P &= 35 \text{ кн}, \\F &= 14 \text{ кн}, \\Q &= 40 \text{ кн}, \\\alpha &= 65^\circ, \\\beta &= 45^\circ.\end{aligned}$$

Задача S-6.18.

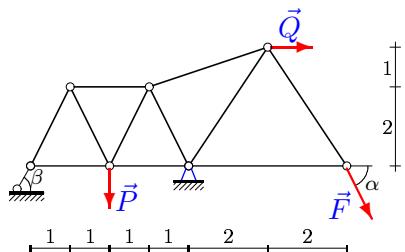
Чехлов Степан



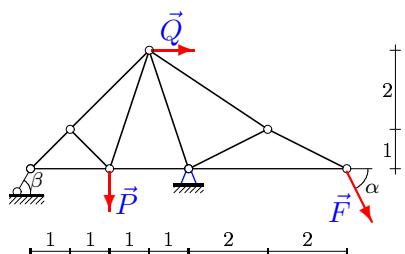
$$\begin{aligned}P &= 15 \text{ кн}, \\F &= 18 \text{ кн}, \\Q &= 60 \text{ кн}, \\\alpha &= 45^\circ, \\\beta &= 30^\circ.\end{aligned}$$

Задача S-6.19.

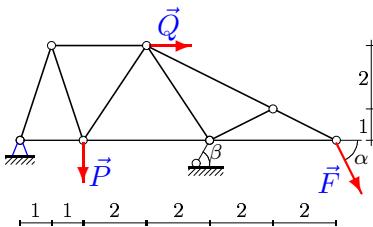
Шуррова Юлия



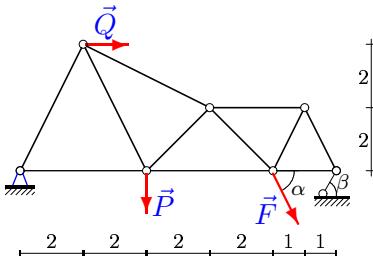
$$\begin{aligned}P &= 35 \text{ кН}, \\F &= 16 \text{ кН}, \\Q &= 40 \text{ кН}, \\\alpha &= 65^\circ, \\\beta &= 45^\circ.\end{aligned}$$

Задача S-6.21.

$$\begin{aligned}P &= 45 \text{ кН}, \\F &= 20 \text{ кН}, \\Q &= 40 \text{ кН}, \\\alpha &= 75^\circ, \\\beta &= 60^\circ.\end{aligned}$$

Задача S-6.20.

$$\begin{aligned}P &= 25 \text{ кН}, \\F &= 19 \text{ кН}, \\Q &= 60 \text{ кН}, \\\alpha &= 55^\circ, \\\beta &= 45^\circ.\end{aligned}$$

Задача S-6.22.

$$\begin{aligned}P &= 45 \text{ кН}, \\F &= 6 \text{ кН}, \\Q &= 30 \text{ кН}, \\\alpha &= 75^\circ, \\\beta &= 60^\circ.\end{aligned}$$