

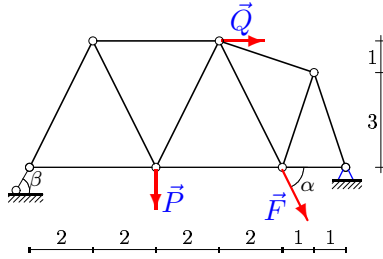
Расчет фермы (треугольная решетка)

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

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

Задача S-6.1.

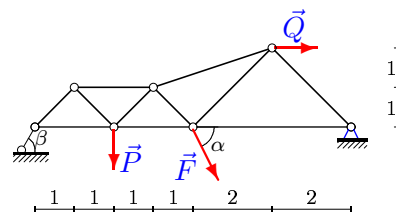
Акперов Эмиль



$$\begin{aligned}
 P &= 30 \text{ кН,} \\
 F &= 23 \text{ кН,} \\
 Q &= 30 \text{ кН,} \\
 \alpha &= 60^\circ, \\
 \beta &= 45^\circ.
 \end{aligned}$$

Задача S-6.2.

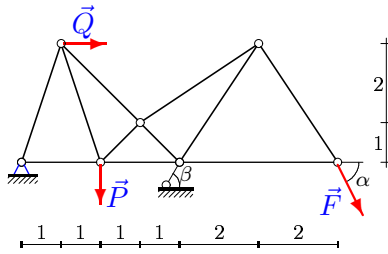
Алексеев Максим



$$\begin{aligned}
 P &= 40 \text{ кН,} \\
 F &= 24 \text{ кН,} \\
 Q &= 40 \text{ кН,} \\
 \alpha &= 70^\circ, \\
 \beta &= 60^\circ.
 \end{aligned}$$

Задача S-6.3.

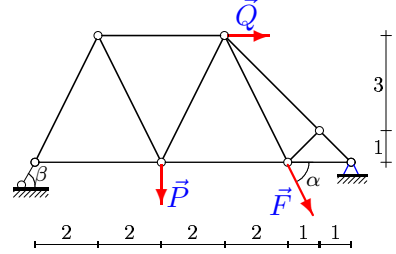
Архипова Евгения



$$\begin{aligned}
 P &= 45 \text{ кН,} \\
 F &= 6 \text{ кН,} \\
 Q &= 40 \text{ кН,} \\
 \alpha &= 75^\circ, \\
 \beta &= 60^\circ.
 \end{aligned}$$

Задача S-6.4.

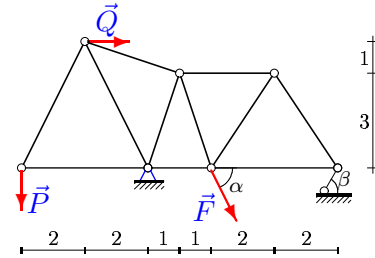
Борисов Илья



$$\begin{aligned}
 P &= 45 \text{ кН,} \\
 F &= 24 \text{ кН,} \\
 Q &= 30 \text{ кН,} \\
 \alpha &= 75^\circ, \\
 \beta &= 60^\circ.
 \end{aligned}$$

Задача S-6.5.

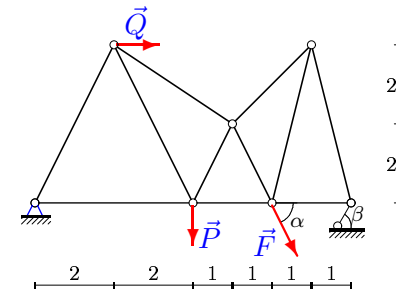
Горюнов Антон



$$\begin{aligned}
 P &= 35 \text{ кН,} \\
 F &= 2 \text{ кН,} \\
 Q &= 50 \text{ кН,} \\
 \alpha &= 65^\circ, \\
 \beta &= 45^\circ.
 \end{aligned}$$

Задача S-6.6.

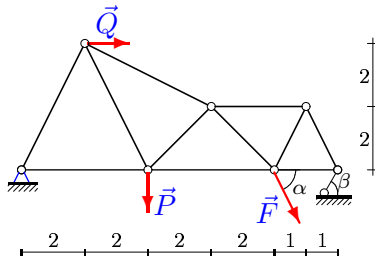
Давтян Инга



$$\begin{aligned}
 P &= 15 \text{ кН,} \\
 F &= 33 \text{ кН,} \\
 Q &= 10 \text{ кН,} \\
 \alpha &= 45^\circ, \\
 \beta &= 30^\circ.
 \end{aligned}$$

Задача S-6.7.

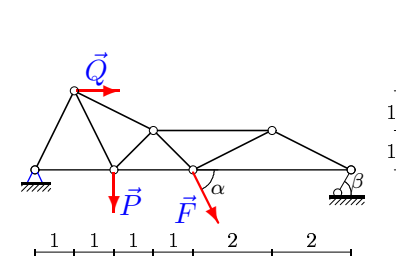
Дзядевич Дмитрий



$$\begin{aligned}
 P &= 5 \text{ кН,} \\
 F &= 18 \text{ кН,} \\
 Q &= 30 \text{ кН,} \\
 \alpha &= 35^\circ, \\
 \beta &= 30^\circ.
 \end{aligned}$$

Задача S-6.8.

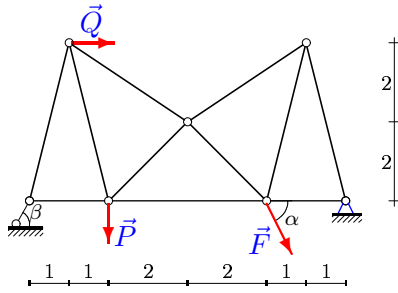
Ефимов Василий



$$\begin{aligned}
 P &= 25 \text{ кН,} \\
 F &= 11 \text{ кН,} \\
 Q &= 40 \text{ кН,} \\
 \alpha &= 55^\circ, \\
 \beta &= 45^\circ.
 \end{aligned}$$

Задача S-6.9.

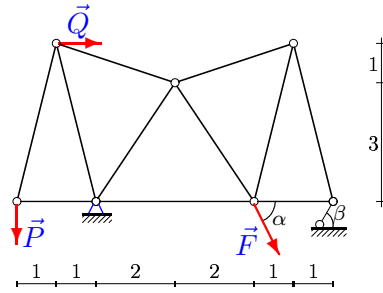
Савельев Никита



$P = 40 \text{ кН,}$
 $F = 28 \text{ кН,}$
 $Q = 20 \text{ кН,}$
 $\alpha = 70^\circ,$
 $\beta = 60^\circ.$

Задача S-6.10.

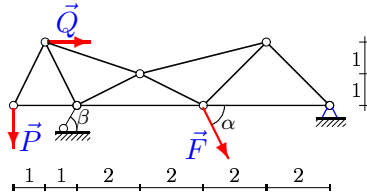
Захаров Алексей



$P = 45 \text{ кН,}$
 $F = 23 \text{ кН,}$
 $Q = 20 \text{ кН,}$
 $\alpha = 75^\circ,$
 $\beta = 60^\circ.$

Задача S-6.11.

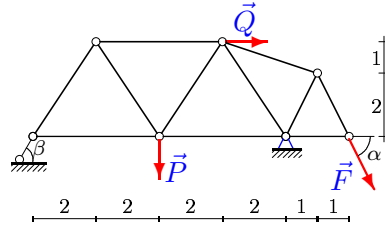
Золотых Дмитрий



$P = 15 \text{ кН,}$
 $F = 24 \text{ кН,}$
 $Q = 60 \text{ кН,}$
 $\alpha = 45^\circ,$
 $\beta = 30^\circ.$

Задача S-6.12.

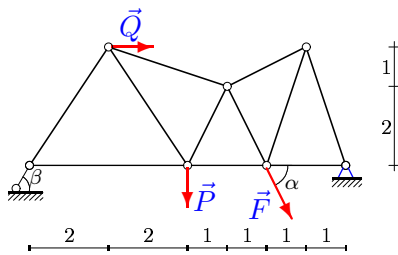
Зубков Антон



$P = 15 \text{ кН,}$
 $F = 26 \text{ кН,}$
 $Q = 30 \text{ кН,}$
 $\alpha = 45^\circ,$
 $\beta = 30^\circ.$

Задача S-6.13.

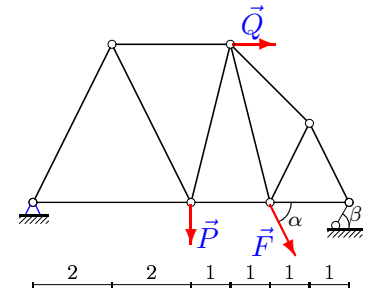
Зяблицын Даниил



$P = 35 \text{ кН,}$
 $F = 3 \text{ кН,}$
 $Q = 10 \text{ кН,}$
 $\alpha = 65^\circ,$
 $\beta = 45^\circ.$

Задача S-6.14.

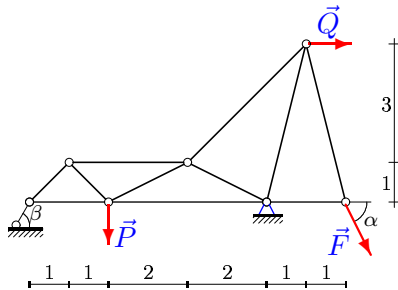
Кирюхин Антон



$P = 10 \text{ кН,}$
 $F = 31 \text{ кН,}$
 $Q = 10 \text{ кН,}$
 $\alpha = 40^\circ,$
 $\beta = 30^\circ.$

Задача S-6.15.

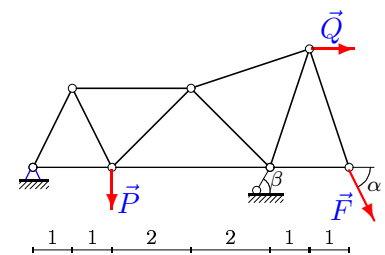
Мамонов Богдан



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

Задача S-6.16.

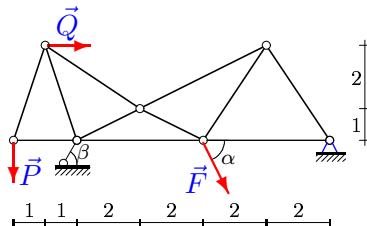
Молдареева Мария



$P = 35 \text{ кН,}$
 $F = 16 \text{ кН,}$
 $Q = 20 \text{ кН,}$
 $\alpha = 65^\circ,$
 $\beta = 45^\circ.$

Задача S-6.17.

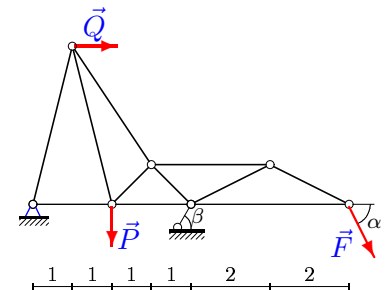
Морозов Максим



$P = 25 \text{ кН,}$
 $F = 1 \text{ кН,}$
 $Q = 60 \text{ кН,}$
 $\alpha = 55^\circ,$
 $\beta = 45^\circ.$

Задача S-6.18.

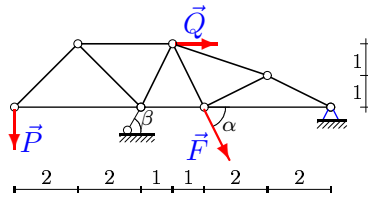
Мурушкин Сергей



$P = 10 \text{ кН,}$
 $F = 4 \text{ кН,}$
 $Q = 40 \text{ кН,}$
 $\alpha = 40^\circ,$
 $\beta = 30^\circ.$

Задача S-6.19.

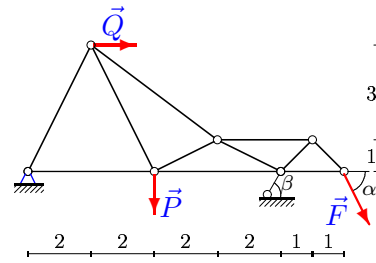
Обновленный Михаил



$P = 35 \text{ кН},$
 $F = 22 \text{ кН},$
 $Q = 50 \text{ кН},$
 $\alpha = 65^\circ,$
 $\beta = 45^\circ.$

Задача S-6.20.

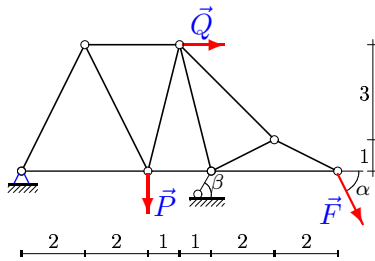
Султыгов Али



$P = 25 \text{ кН},$
 $F = 21 \text{ кН},$
 $Q = 30 \text{ кН},$
 $\alpha = 55^\circ,$
 $\beta = 45^\circ.$

Задача S-6.21.

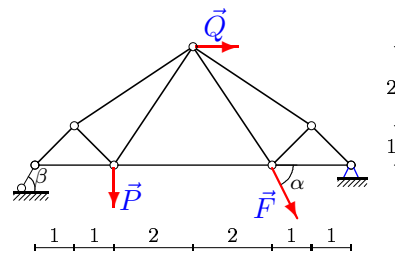
Сурков Вячеслав



$P = 40 \text{ кН},$
 $F = 5 \text{ кН},$
 $Q = 50 \text{ кН},$
 $\alpha = 70^\circ,$
 $\beta = 60^\circ.$

Задача S-6.22.

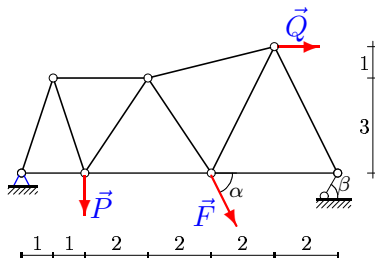
Суслов Даниил



$P = 5 \text{ кН},$
 $F = 12 \text{ кН},$
 $Q = 20 \text{ кН},$
 $\alpha = 35^\circ,$
 $\beta = 30^\circ.$

Задача S-6.23.

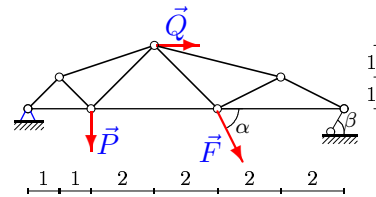
Сяскова Валерия



$P = 45 \text{ кН},$
 $F = 2 \text{ кН},$
 $Q = 60 \text{ кН},$
 $\alpha = 75^\circ,$
 $\beta = 60^\circ.$

Задача S-6.24.

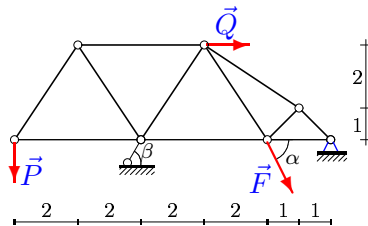
Фандеев Алексей



$P = 30 \text{ кН},$
 $F = 30 \text{ кН},$
 $Q = 60 \text{ кН},$
 $\alpha = 60^\circ,$
 $\beta = 45^\circ.$

Задача S-6.25.

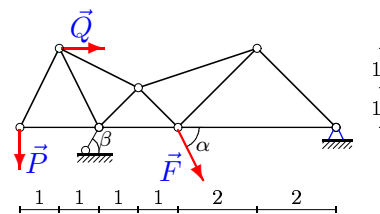
Цупенков Дмитрий



$P = 20 \text{ кН},$
 $F = 26 \text{ кН},$
 $Q = 30 \text{ кН},$
 $\alpha = 50^\circ,$
 $\beta = 45^\circ.$

Задача S-6.26.

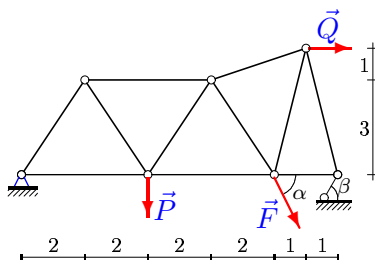
Чечнева Наталья



$P = 5 \text{ кН},$
 $F = 7 \text{ кН},$
 $Q = 40 \text{ кН},$
 $\alpha = 35^\circ,$
 $\beta = 30^\circ.$

Задача S-6.27.

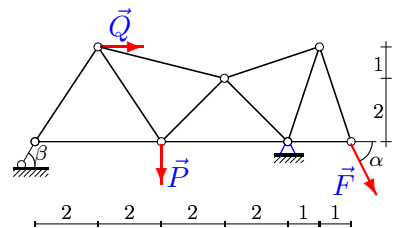
Чиждова Александра



$P = 25 \text{ кН},$
 $F = 16 \text{ кН},$
 $Q = 30 \text{ кН},$
 $\alpha = 55^\circ,$
 $\beta = 45^\circ.$

Задача S-6.28.

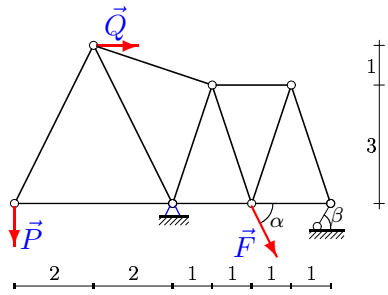
Шаронова Дарья



$P = 25 \text{ кН},$
 $F = 15 \text{ кН},$
 $Q = 30 \text{ кН},$
 $\alpha = 55^\circ,$
 $\beta = 45^\circ.$

Задача S-6.29.

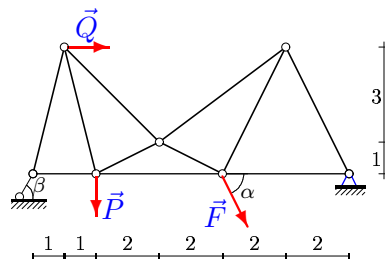
Шашелко Арсентий



$P = 20$ кН,
 $F = 30$ кН,
 $Q = 10$ кН,
 $\alpha = 50^\circ$,
 $\beta = 45^\circ$.

Задача S-6.30.

Бондаренко Дарья



$P = 20$ кН,
 $F = 31$ кН,
 $Q = 60$ кН,
 $\alpha = 50^\circ$,
 $\beta = 45^\circ$.