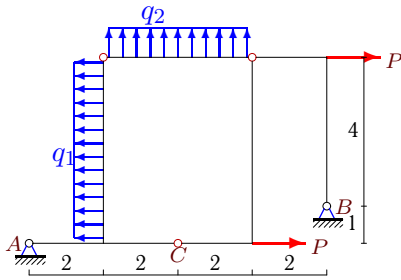


Статически определимая рама

Задача 21.1.

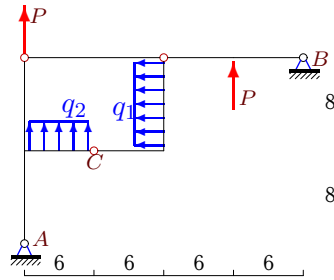
Ламзов Виталий



$$\begin{aligned} q_1 &= 15 \text{ кН/м}, \\ q_2 &= 18 \text{ кН/м}, \\ P &= 33 \text{ кН}. \end{aligned}$$

Задача 21.2.

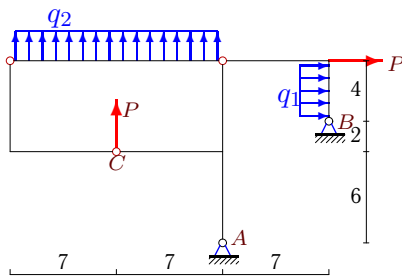
Мискимова Асия



$$\begin{aligned} q_1 &= 6 \text{ кН/м}, \\ q_2 &= 39 \text{ кН/м}, \\ P &= 39 \text{ кН}. \end{aligned}$$

Задача 21.3.

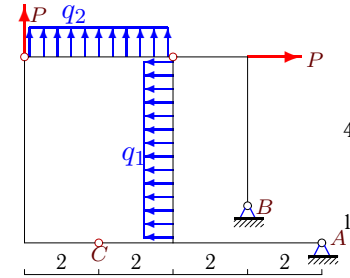
Петрова Людмила



$$\begin{aligned} q_1 &= 5 \text{ кН/м}, \\ q_2 &= 3 \text{ кН/м}, \\ P &= 36 \text{ кН}. \end{aligned}$$

Задача 21.4.

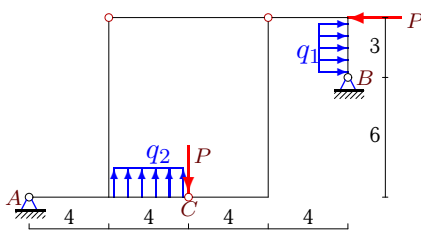
Сонников Владимир



$$\begin{aligned} q_1 &= 9 \text{ кН/м}, \\ q_2 &= 36 \text{ кН/м}, \\ P &= 24 \text{ кН}. \end{aligned}$$

Задача 21.5.

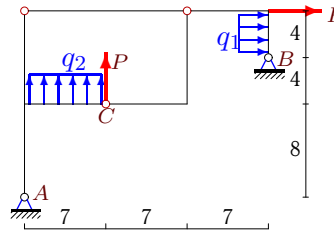
Томашевская Мария



$$\begin{aligned} q_1 &= 3 \text{ кН/м}, \\ q_2 &= 30 \text{ кН/м}, \\ P &= 3 \text{ кН}. \end{aligned}$$

Задача 21.6.

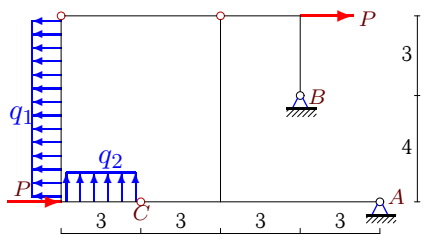
Уткина Мария



$$\begin{aligned} q_1 &= 3 \text{ кН/м}, \\ q_2 &= 9 \text{ кН/м}, \\ P &= 18 \text{ кН}. \end{aligned}$$

Задача 21.7.

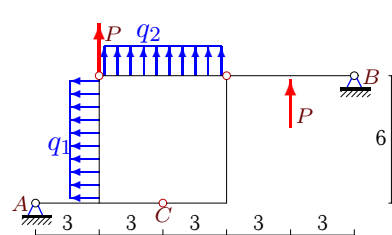
Мокшин Михаил



$$\begin{aligned} q_1 &= 12 \text{ кН/м}, \\ q_2 &= 18 \text{ кН/м}, \\ P &= 6 \text{ кН}. \end{aligned}$$

Задача 21.8.

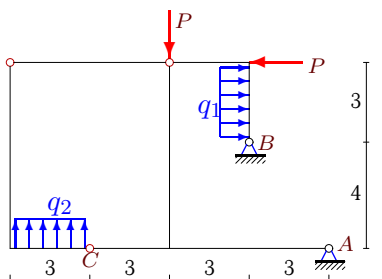
Востриков Евгений



$$\begin{aligned} q_1 &= 3 \text{ кН/м}, \\ q_2 &= 27 \text{ кН/м}, \\ P &= 36 \text{ кН}. \end{aligned}$$

Задача 21.9.

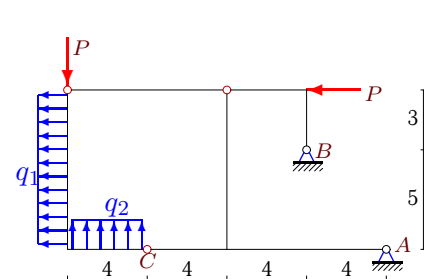
Васильченко А.И.



$$\begin{aligned} q_1 &= 5 \text{ кН/м}, \\ q_2 &= 9 \text{ кН/м}, \\ P &= 6 \text{ кН}. \end{aligned}$$

Задача 21.10.

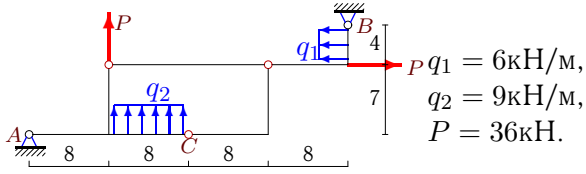
Гузей М.В.



$$\begin{aligned} q_1 &= 6 \text{ кН/м}, \\ q_2 &= 21 \text{ кН/м}, \\ P &= 3 \text{ кН}. \end{aligned}$$

Задача 21.11.

Арсеньев В.В.

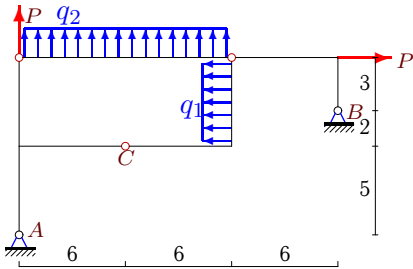


$$q_1 = 6 \text{ кН/м},$$

$$q_2 = 9 \text{ кН/м},$$

$$P = 36 \text{ кН}.$$

Задача 21.13.

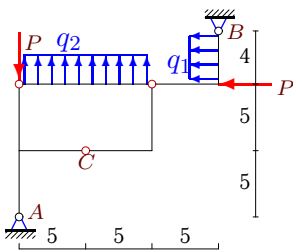


$$q_1 = 9 \text{ кН/м},$$

$$q_2 = 39 \text{ кН/м},$$

$$P = 6 \text{ кН}.$$

Задача 21.15.

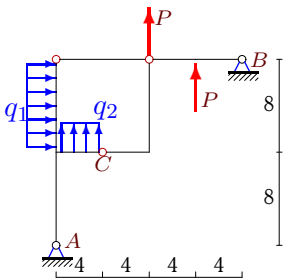


$$q_1 = 6 \text{ кН/м},$$

$$q_2 = 15 \text{ кН/м},$$

$$P = 6 \text{ кН}.$$

Задача 21.17.



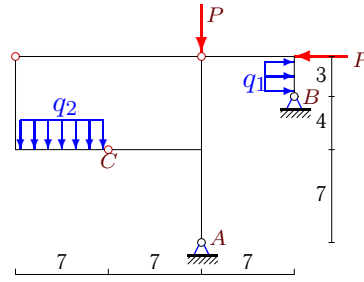
$$q_1 = 6 \text{ кН/м},$$

$$q_2 = 30 \text{ кН/м},$$

$$P = 18 \text{ кН}.$$

Задача 21.12.

Дараев Андрей

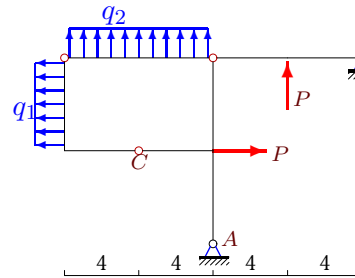


$$q_1 = 6 \text{ кН/м},$$

$$q_2 = 9 \text{ кН/м},$$

$$P = 18 \text{ кН}.$$

Задача 21.14.

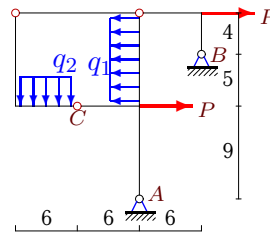


$$q_1 = 12 \text{ кН/м},$$

$$q_2 = 33 \text{ кН/м},$$

$$P = 3 \text{ кН}.$$

Задача 21.16.

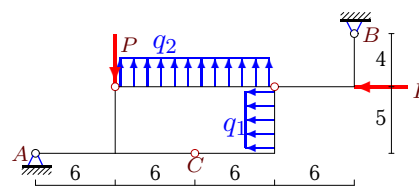


$$q_1 = 15 \text{ кН/м},$$

$$q_2 = 6 \text{ кН/м},$$

$$P = 24 \text{ кН}.$$

Задача 21.18.



$$q_1 = 3 \text{ кН/м},$$

$$q_2 = 33 \text{ кН/м},$$

$$P = 15 \text{ кН}.$$

№	X_A	X_B	Y_A	Y_B	x_A	x_B	y_A	y_B	$EJ\Delta \cdot 10^{-3}$
1	-9.265	18.265	-35.471	-36.529	-0.235	0.235	-0.529	-0.471	0.270
2	-46.500	94.500	-292.500	-19.500	-0.375	0.375	-1.000	0.000	14.274
3	45.500	-101.500	-130.286	52.286	0.583	-0.583	-1.333	0.333	12.472
4	-333.500	354.500	541.000	-709.000	-2.000	2.000	3.000	-4.000	89.966
5	-39.417	33.417	-88.563	-28.437	-0.444	0.444	-0.667	-0.333	9.955
6	-22.438	-7.563	-81.893	0.893	-0.292	0.292	-0.833	-0.167	6.712
7	387.000	-315.000	-369.000	315.000	9.000	-9.000	-10.000	9.000	666.468
8	-198.000	216.000	-216.000	-18.000	-1.000	1.000	-1.000	0.000	14.013
9	256.500	-265.500	-279.000	258.000	9.000	-9.000	-10.000	9.000	501.056
10	507.000	-456.000	-423.000	342.000	6.000	-6.000	-5.500	4.500	930.864
11	172.800	-184.800	-9.600	-98.400	3.200	-3.200	0.600	-1.600	106.680
12	-47.250	47.250	105.107	-24.107	-0.500	-0.500	-0.214	0.214	0.967
13	-153.844	192.844	-377.578	-96.422	-0.375	0.375	-0.813	-0.188	9.334
14	119.100	-62.100	-265.500	-1.500	0.400	-0.400	-1.000	0.000	4.576
15	-447.000	477.000	-516.000	372.000	-2.500	2.500	-3.000	2.000	232.578
16	3.750	83.250	91.500	-55.500	0.333	-0.333	-1.222	0.222	-4.649
17	-40.500	-7.500	-147.000	-9.000	-0.250	0.250	-1.000	0.000	3.648
18	712.071	-682.071	73.714	-454.714	1.714	-1.714	0.143	-1.143	110.258