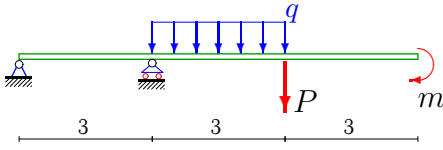


Балка

Построить эпюры моментов и перерезывающих сил в балке. Найти сечение балки с максимальным моментом. Определить прогиб Δy балки в точке приложения силы P .

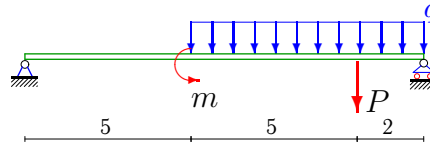
Задача 24.1



$P = 3 \text{ кН}, m = 20 \text{ кНм}, q = 12 \text{ кН/м}.$

24.1

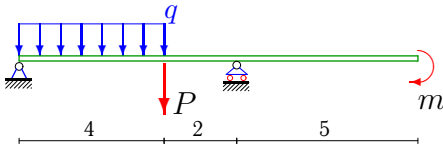
Задача 24.2



$P = 6 \text{ кН}, m = 20 \text{ кНм}, q = 28 \text{ кН/м}.$

24.1

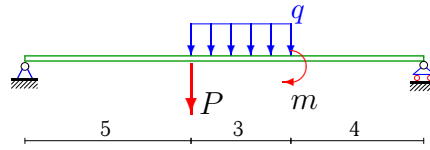
Задача 24.3



$P = 1 \text{ кН}, m = 20 \text{ кНм}, q = 12 \text{ кН/м}.$

24.1

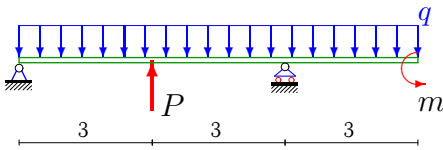
Задача 24.4



$P = 3 \text{ кН}, m = 10 \text{ кНм}, q = 16 \text{ кН/м}.$

24.1

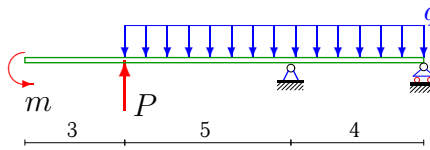
Задача 24.5



$P = 6 \text{ кН}, m = 10 \text{ кНм}, q = 24 \text{ кН/м}.$

24.1

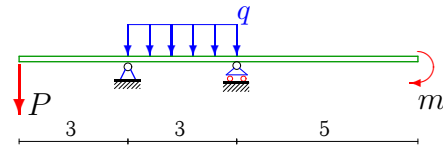
Задача 24.6



$P = 9 \text{ кН}, m = 24 \text{ кНм}, q = 20 \text{ кН/м}.$

24.1

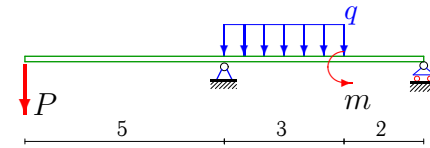
Задача 24.7



$P = 8 \text{ кН}, m = 30 \text{ кНм}, q = 8 \text{ кН/м}.$

24.1

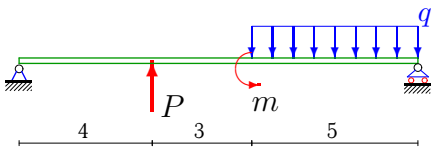
Задача 24.8



$P = 21 \text{ кН}, m = 30 \text{ кНм}, q = 32 \text{ кН/м}.$

24.1

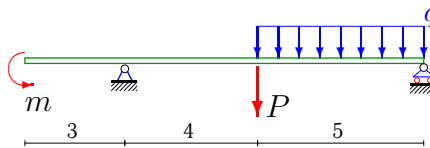
Задача 24.9



$P = 7 \text{ кН}, m = 40 \text{ кНм}, q = 36 \text{ кН/м}.$

24.1

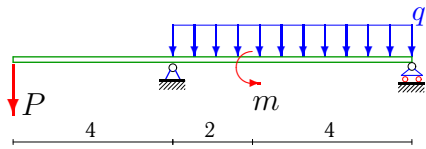
Задача 24.10



$P = 18 \text{ кН}, m = 40 \text{ кНм}, q = 36 \text{ кН/м}.$

24.1

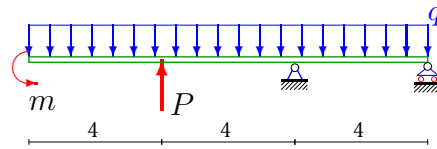
Задача 24.11



$P = 7 \text{ кН}, m = 10 \text{ кНм}, q = 24 \text{ кН/м}.$

24.1

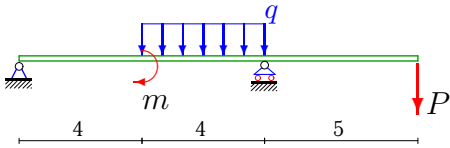
Задача 24.12



$P = 7 \text{ кН}, m = 10 \text{ кНм}, q = 24 \text{ кН/м}.$

24.1

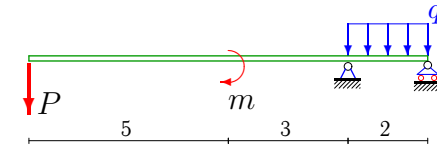
Задача 24.13



$P = 11 \text{ кН}, m = 20 \text{ кНм}, q = 12 \text{ кН/м}.$

24.1

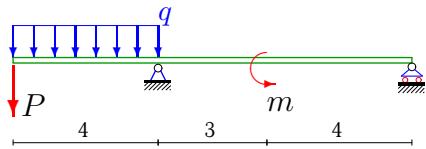
Задача 24.14



$P = 6 \text{ кН}, m = 20 \text{ кНм}, q = 12 \text{ кН/м}.$

24.1

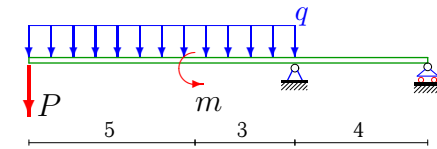
Задача 24.15



$P = 13 \text{ кН}, m = 10 \text{ кНм}, q = 24 \text{ кН/м}.$

24.1

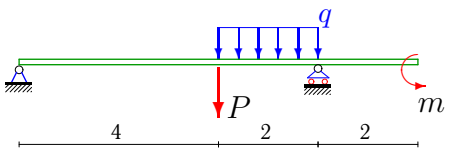
Задача 24.16



$P = 21 \text{ кН}, m = 10 \text{ кНм}, q = 24 \text{ кН/м}.$

24.1

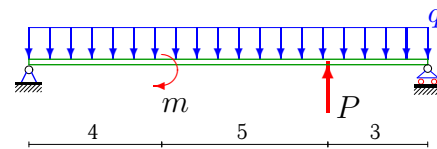
Задача 24.17



$P = 16 \text{ кН}, m = 10 \text{ кНм}, q = 24 \text{ кН/м}.$

24.1

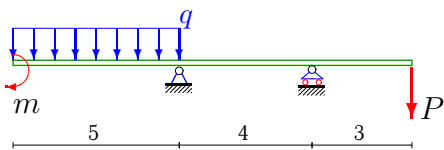
Задача 24.18



$P = 5 \text{ кН}, m = 20 \text{ кНм}, q = 12 \text{ кН/м}.$

24.1

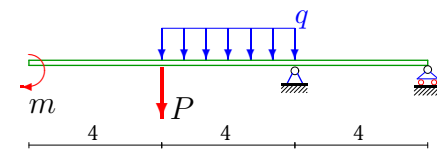
Задача 24.19



$P = 21 \text{ кН}, m = 40 \text{ кНм}, q = 4 \text{ кН/м}.$

24.1

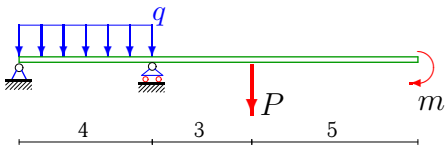
Задача 24.20



$P = 17 \text{ кН}, m = 20 \text{ кНм}, q = 12 \text{ кН/м}.$

24.1

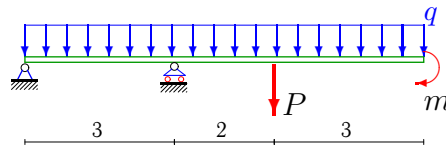
Задача 24.21



$P = 16 \text{ кН}, m = 10 \text{ кНм}, q = 16 \text{ кН/м}.$

24.1

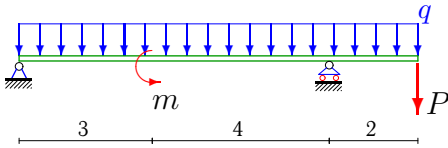
Задача 24.22



$P = 6 \text{ кН}, m = 40 \text{ кНм}, q = 4 \text{ кН/м}.$

24.1

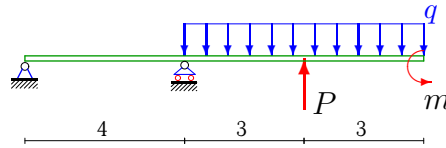
Задача 24.23



$P = 14 \text{ кН}, m = 30 \text{ кНм}, q = 32 \text{ кН/м}.$

24.1

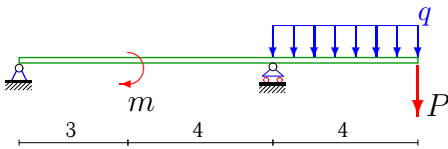
Задача 24.24



$P = 2 \text{ кН}, m = 30 \text{ кНм}, q = 32 \text{ кН/м}.$

24.1

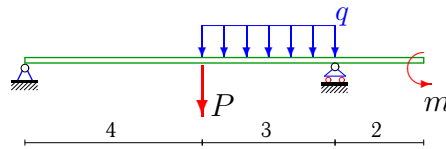
Задача 24.25



$P = 2 \text{ кН}, m = 40 \text{ кНм}, q = 4 \text{ кН/м}.$

24.1

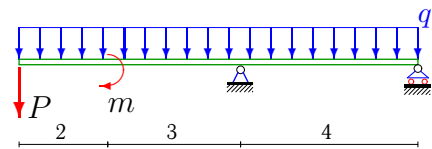
Задача 24.26



$P = 20 \text{ кН}, m = 21 \text{ кНм}, q = 20 \text{ кН/м}.$

24.1

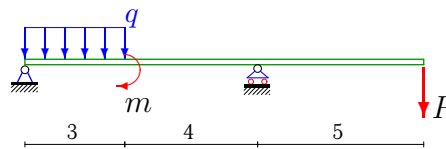
Задача 24.27



$P = 16 \text{ кН}, m = 30 \text{ кНм}, q = 8 \text{ кН/м}.$

24.1

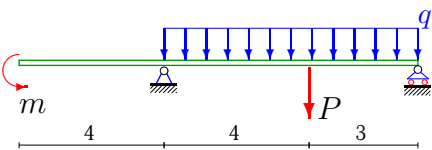
Задача 24.28



$P = 18 \text{ кН}, m = 20 \text{ кНм}, q = 12 \text{ кН/м}.$

24.1

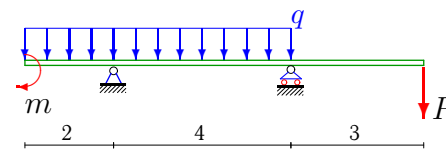
Задача 24.29



$P = 14 \text{ кН}, m = 22 \text{ кНм}, q = 20 \text{ кН/м}.$

24.1

Задача 24.30



$P = 10 \text{ кН}, m = 30 \text{ кНм}, q = 8 \text{ кН/м}.$

24.1

Балка

	R_A	R_B	$\max M $	x_*	$EI\Delta y$
1	-27.67	66.67	83.00	3.00	-487.50
2	59.83	142.17	343.10	7.14	-2617.64
3	29	20	35.04	2.42	-87.11
4	22.92	28.08	126.98	6.24	-1638.61
5	52.67	157.33	98.00	6.00	-157.50
6	188.25	-17.25	229.00	8.00	-2747.50
7	18	14	30.00	6.00	-162.00
8	115.2	1.8	105.00	5.00	-1097.00
9	36.17	136.83	274.17	4.00	-2806.17
10	64.44	133.56	247.74	8.29	-1809.26
11	85.33	65.67	89.84	7.26	477.33
12	420.5	-139.5	750.00	8.00	-8026.67
13	2.63	56.38	55.00	8.00	-438.33
14	32	-2	30.00	0.00	-751.33
15	145.29	-36.29	244.00	4.00	-3321.71
16	449.5	-236.5	946.00	8.00	-26157.67
17	15	49	60.00	4.00	-175.11
18	69.08	69.92	218.85	5.76	-2279.75
19	6.75	34.25	63.00	9.00	-461.00
20	101	-36	144.00	8.00	-1354.67
21	17.5	62.5	58.00	4.00	-293.00
22	-28	66	102.00	3.00	-367.00
23	103.14	198.86	165.43	0.00	352.57
24	-135	325	540.00	4.00	-3843.00
25	-11.43	29.43	40.00	7.00	-460.19
26	24.43	55.57	98.20	4.22	-447.43
27	109.5	-21.5	150.00	5.00	-1870.00
28	12.57	41.43	90.00	7.00	-1461.55
29	79.14	74.86	134.59	7.96	-643.14
30	21	37	30.00	0.00	-118.00