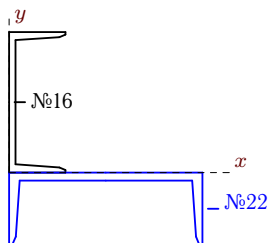


Геометрические характеристики сечений

Найти максимальный и минимальный моменты инерции составной фигуры и угол наклона главной оси инерции к оси x . Ось x горизонтальная, направлена направо, ось y — вертикальная вверх. Используются двутавры ГОСТ 8239-89, швеллеры ГОСТ 8240-89 и уголки ГОСТ 8509-86

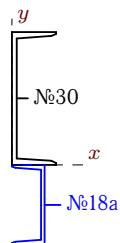
Задача 6.1.

4



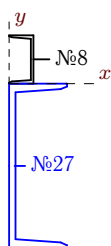
Задача 6.2.

4



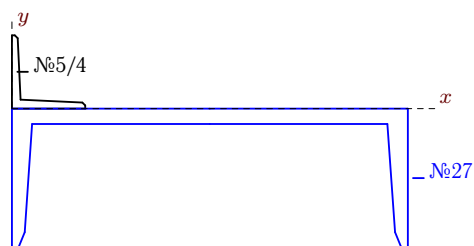
Задача 6.3.

4



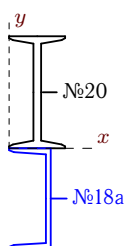
Задача 6.4.

4



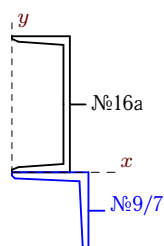
Задача 6.5.

4



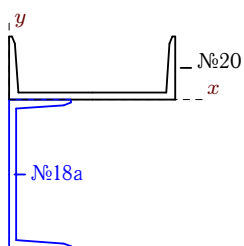
Задача 6.6.

4



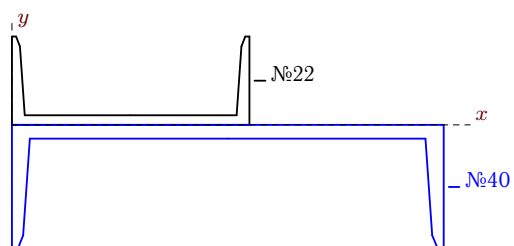
Задача 6.7.

4



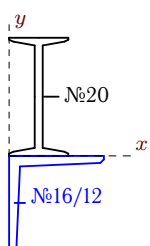
Задача 6.8.

4



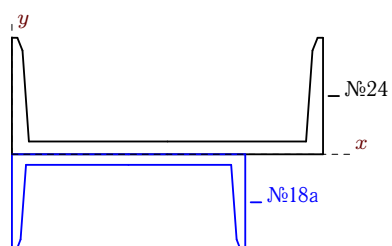
Задача 6.9.

4



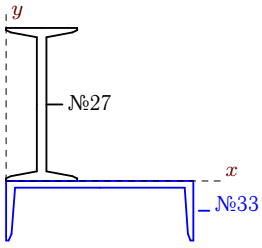
Задача 6.10.

4



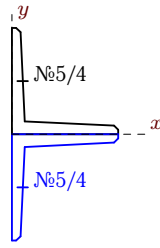
Задача 6.11.

4



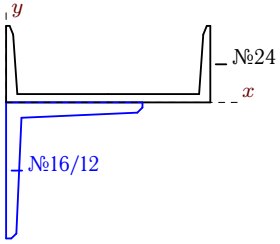
Задача 6.12.

4



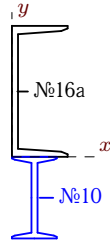
Задача 6.13.

4



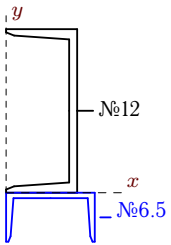
Задача 6.14.

4



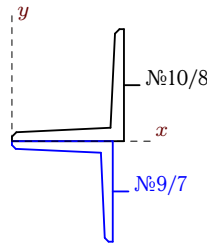
Задача 6.15.

4



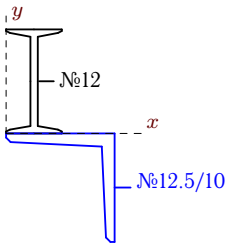
Задача 6.16.

4



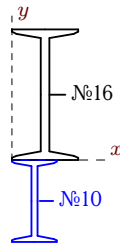
Задача 6.17.

4



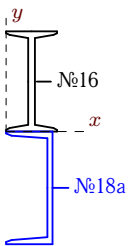
Задача 6.18.

4



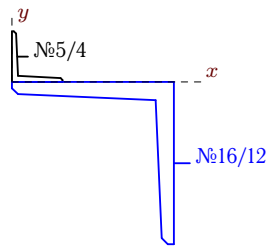
Задача 6.19.

4



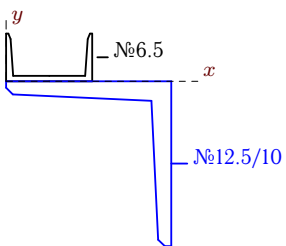
Задача 6.20.

4



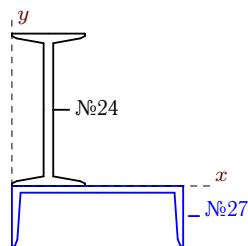
Задача 6.21.

4



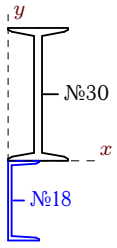
Задача 6.22.

4



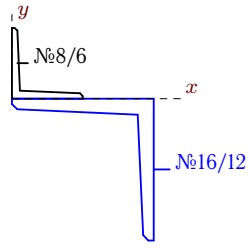
Задача 6.23.

4



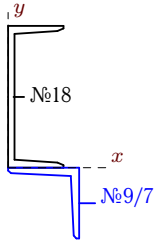
Задача 6.24.

4



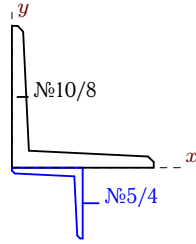
Задача 6.25.

4



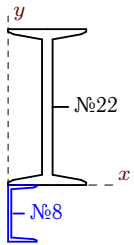
Задача 6.26.

4



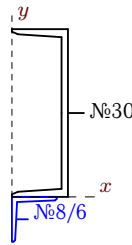
Задача 6.27.

4



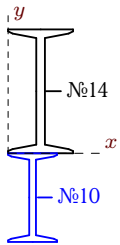
Задача 6.28.

4



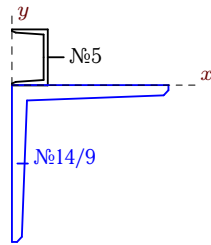
Задача 6.29.

4



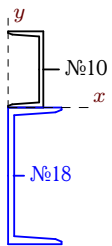
Задача 6.30.

4



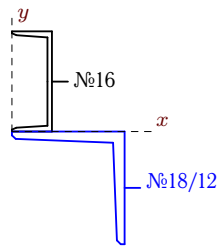
Задача 6.31.

4



Задача 6.32.

4



Геометрические характеристики сечений

	F	x_c	y_c	J_x	J_y	J_{xy}	J_{max}	J_{min}	α_x
	см ²	см		см ⁴					градусы
1	44.80	7.28	1.92	2022.51	3086.34	-1013.27	3698.82	1410.02	58.85
2	62.70	3.49	6.50	15259.67	540.44	-946.42	15320.28	479.84	3.66
3	44.18	2.51	-9.94	6440.54	275.15	27.55	6440.66	275.02	-0.26
4	39.09	12.29	-2.09	323.13	4683.77	-168.84	4690.29	316.60	87.79
5	49.00	5.12	1.39	7413.28	220.89	-62.29	7413.82	220.35	0.50
6	31.80	5.47	3.95	1744.11	195.67	-192.32	1767.64	172.15	6.98
7	45.60	6.17	-3.32	2699.04	2330.59	992.49	3524.26	1505.37	-39.74
8	88.20	17.28	-1.25	1251.02	18838.01	-831.08	18877.19	1211.83	87.30
9	64.20	4.64	1.62	5985.91	1033.81	674.04	6076.01	943.70	-7.61
10	52.80	10.74	0.51	579.36	4205.79	175.62	4214.28	570.87	-87.23
11	86.70	11.75	4.87	11001.77	10505.21	-3555.82	14317.97	7189.01	43.00
12	7.78	1.38	0.00	33.24	18.42	0.00	33.24	18.42	90.00
13	68.00	7.81	-1.33	1901.51	4787.66	1409.20	5361.59	1327.58	-67.84
14	31.50	2.29	3.05	2276.43	100.88	-72.43	2278.84	98.47	1.90
15	20.81	3.51	3.39	564.29	80.61	14.25	564.71	80.19	-1.69
16	27.90	6.93	0.45	428.70	244.87	56.15	444.49	229.07	-15.71
17	39.00	6.85	0.11	1527.94	701.35	-717.35	1942.53	286.76	30.03
18	32.20	3.57	3.16	2343.22	89.22	127.22	2350.38	82.06	-3.22
19	42.40	4.69	-0.90	5119.58	179.34	-219.35	5129.30	169.62	2.54
20	41.29	10.65	-3.85	1039.52	1290.96	-750.37	1926.07	404.41	49.76
21	31.81	7.68	-2.34	494.89	601.59	-367.06	919.16	177.33	49.13
22	70.00	9.65	4.72	7386.05	5409.06	-1962.43	8594.88	4200.23	31.63
23	67.20	5.27	7.61	16420.43	754.39	1653.52	16593.05	581.77	-5.96
24	46.78	9.72	-3.07	1294.69	1635.45	-1035.23	2514.22	415.92	49.67
25	33.00	3.65	4.72	2199.35	342.85	-461.90	2307.92	234.28	13.23
26	19.49	2.92	1.93	209.32	158.57	-102.58	289.61	78.27	38.05
27	39.58	4.55	7.60	4201.48	291.68	436.34	4249.59	243.58	-6.29
28	49.88	6.49	11.77	8117.52	597.13	725.97	8186.96	527.69	-5.46
29	29.40	3.28	2.10	1792.69	65.55	76.70	1796.09	62.15	-2.54
30	30.86	3.43	-2.53	683.25	486.54	219.12	825.08	344.71	-32.91
31	31.60	2.36	-4.17	2663.48	117.03	121.95	2669.30	111.20	-2.74
32	60.30	10.56	-1.02	4168.65	2297.65	-2165.49	5592.07	874.22	33.32