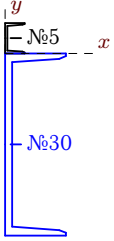


Геометрические характеристики сечений

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

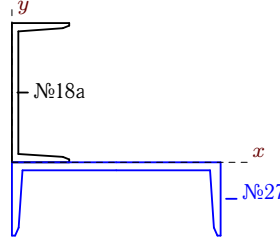
Задача 6.1.

6



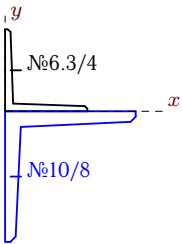
Задача 6.2.

6



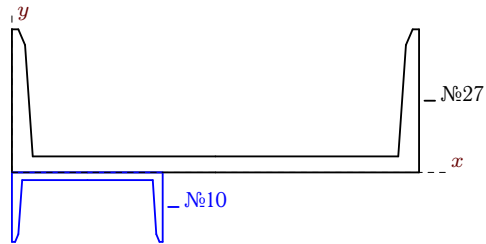
Задача 6.3.

6



Задача 6.4.

6



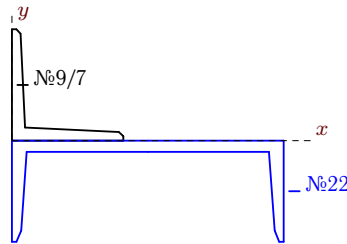
Задача 6.5.

6



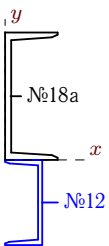
Задача 6.6.

6



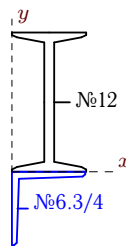
Задача 6.7.

6



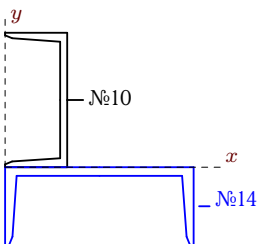
Задача 6.8.

6



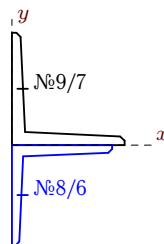
Задача 6.9.

6



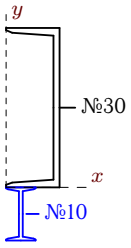
Задача 6.10.

6



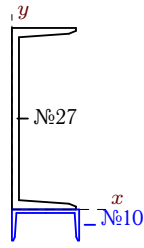
Задача 6.11.

6



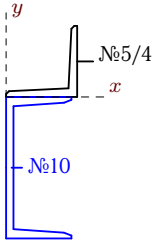
Задача 6.12.

6



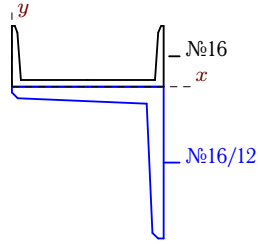
Задача 6.13.

6



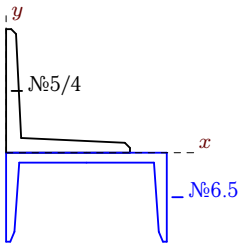
Задача 6.14.

6



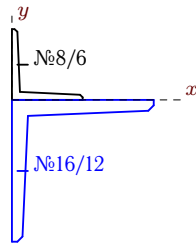
Задача 6.15.

6



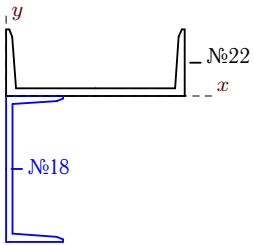
Задача 6.16.

6



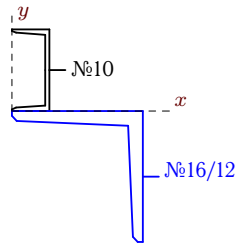
Задача 6.17.

6



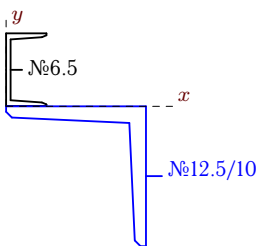
Задача 6.18.

6



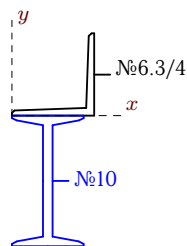
Задача 6.19.

6



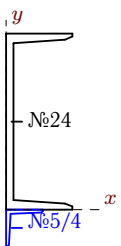
Задача 6.20.

6



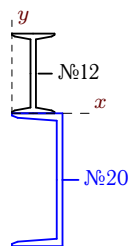
Задача 6.21.

6



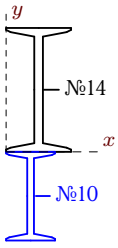
Задача 6.22.

6



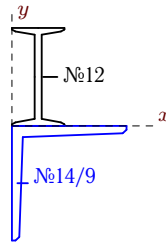
Задача 6.23.

6



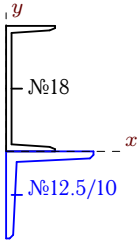
Задача 6.24.

6



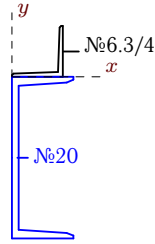
Задача 6.25.

6



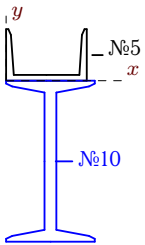
Задача 6.26.

6



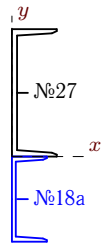
Задача 6.27.

6



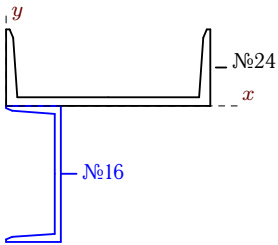
Задача 6.28.

6



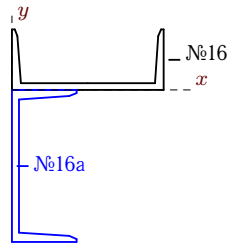
Задача 6.29.

6



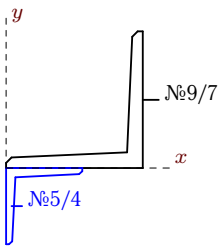
Задача 6.30.

6



Задача 6.31.

6



Задача 6.32.

6



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	46.66	2.34	-12.69	7470.25	342.50	-127.25	7472.52	340.23	1.02	
2	57.40	9.10	1.97	3243.06	6024.97	-1775.45	6889.44	2378.59	64.04	
3	20.56	2.49	-1.68	240.09	170.13	57.29	272.23	137.99	-29.30	
4	46.10	11.49	1.55	409.64	4935.32	276.61	4952.16	392.80	-86.52	
5	42.30	2.92	4.36	5791.37	232.70	-340.31	5812.12	211.94	3.49	
6	39.00	8.31	-0.73	429.74	2817.00	-391.86	2879.68	367.06	80.91	
7	35.50	2.70	3.38	3365.37	155.67	-190.88	3376.68	144.36	3.39	
8	19.66	2.82	4.06	588.21	55.26	54.06	593.64	49.83	-5.73	
9	26.50	5.42	1.07	504.87	606.02	-164.35	727.40	383.49	53.55	
10	21.68	2.35	0.45	266.86	151.72	-15.36	268.88	149.70	7.47	
11	52.50	6.40	10.43	9710.86	552.01	875.73	9793.84	469.03	-5.41	
12	46.10	3.07	9.97	6038.07	489.27	-314.59	6055.85	471.49	3.23	
13	14.79	2.01	-3.32	299.90	43.23	45.26	307.65	35.49	-9.71	
14	55.50	10.43	-2.37	1443.65	1818.95	-809.56	2462.32	800.28	51.53	
15	11.40	2.61	-0.35	35.50	66.77	-17.95	74.94	27.33	65.53	
16	46.78	3.95	-3.07	1294.69	1006.30	395.04	1571.03	729.96	-34.97	
17	47.40	7.04	-2.69	2706.26	3153.11	1184.23	4134.81	1724.56	-50.34	
18	48.30	9.70	-2.27	1831.19	1536.05	-1206.69	2899.30	467.94	41.51	
19	31.81	7.21	-1.87	666.13	718.63	-511.20	1204.25	180.51	46.47	
20	16.96	3.29	-3.04	373.97	48.94	54.67	382.92	39.99	-9.30	
21	34.49	2.30	10.49	3527.07	220.94	53.41	3527.93	220.08	-0.93	
22	38.10	4.63	-3.83	4181.26	189.91	-336.58	4209.44	161.73	4.79	
23	29.40	3.28	2.10	1792.69	65.55	76.70	1796.09	62.15	-2.54	
24	39.40	3.56	-0.13	1697.45	497.00	220.73	1736.74	457.70	-10.10	
25	45.00	2.76	2.28	3182.62	471.49	0.86	3182.62	471.49	-0.02	
26	28.36	2.51	-7.96	2098.17	158.30	132.52	2107.18	149.29	-3.89	
27	18.16	2.67	-2.91	358.07	40.95	-6.27	358.19	40.83	1.13	
28	57.40	2.34	4.80	12242.06	368.57	104.15	12242.97	367.66	-0.50	
29	48.70	9.25	-1.45	2189.83	3586.08	876.94	4008.85	1767.06	-64.26	
30	37.60	4.89	-3.28	1787.82	1163.73	551.95	2109.83	841.72	-30.26	
31	16.19	5.29	1.54	147.32	181.89	119.69	285.53	43.68	-49.11	
32	31.40	3.30	-2.07	2553.65	166.29	-328.44	2598.01	121.93	7.69	