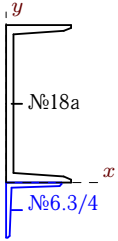


Геометрические характеристики сечений

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

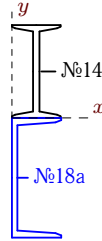
Задача 6.1.

5



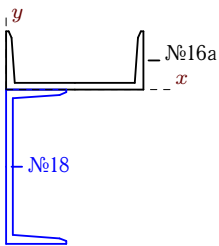
Задача 6.2.

5



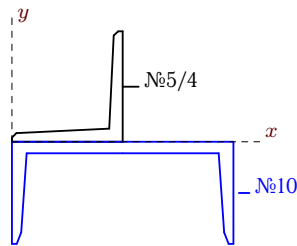
Задача 6.3.

5



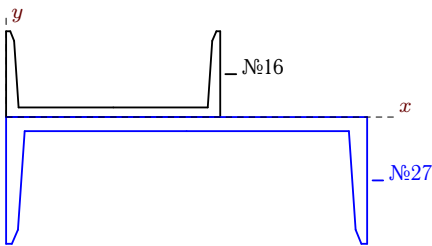
Задача 6.4.

5



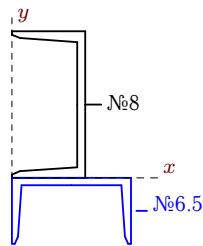
Задача 6.5.

5



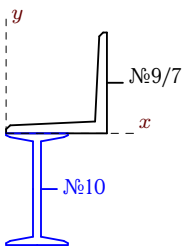
Задача 6.6.

5



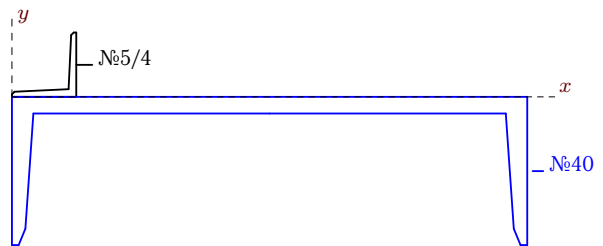
Задача 6.7.

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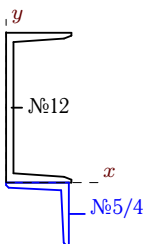
Задача 6.8.

5



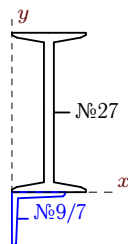
Задача 6.9.

5



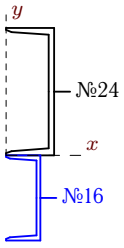
Задача 6.10.

5



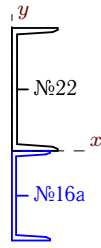
Задача 6.11.

5



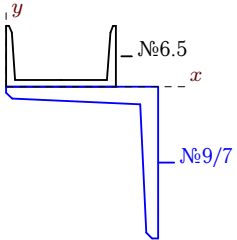
Задача 6.12.

5



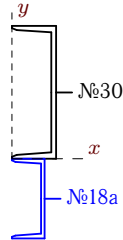
Задача 6.13.

5



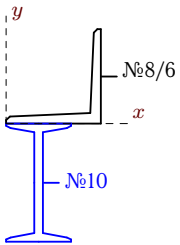
Задача 6.14.

5



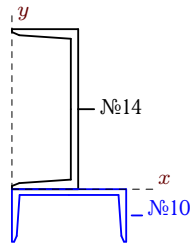
Задача 6.15.

5



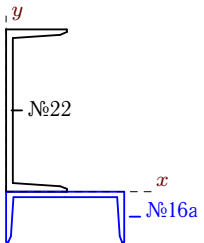
Задача 6.16.

5



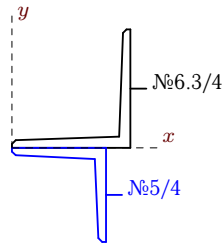
Задача 6.17.

5



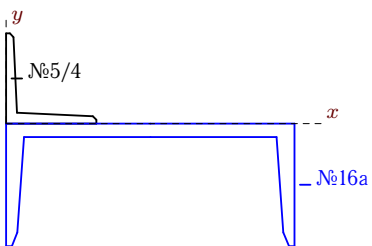
Задача 6.18.

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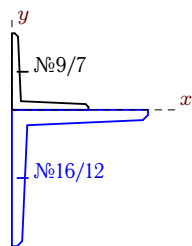
Задача 6.19.

5



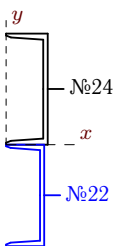
Задача 6.20.

5



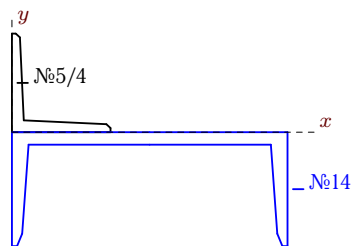
Задача 6.21.

5



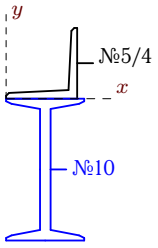
Задача 6.22.

5



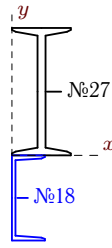
Задача 6.23.

5



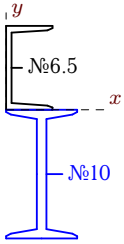
Задача 6.24.

5



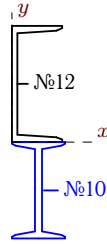
Задача 6.25.

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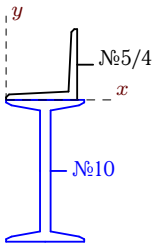
Задача 6.26.

5



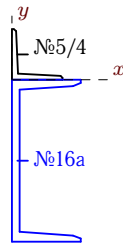
Задача 6.27.

5



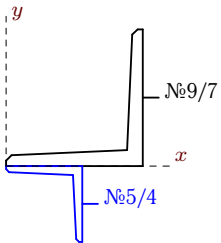
Задача 6.28.

5



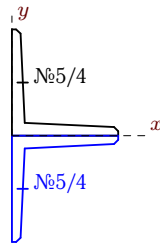
Задача 6.29.

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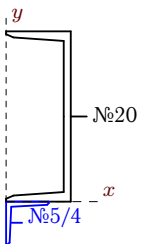
Задача 6.30.

5



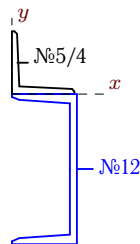
Задача 6.31.

5



Задача 6.32.

5



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	27.16	2.05	7.05	1672.20	124.68	30.07	1672.78	124.10	-1.11
2	39.60	2.80	-1.97	4259.16	169.44	237.23	4272.88	155.72	-3.31
3	40.20	4.88	-3.66	2383.77	1277.74	669.34	2698.99	962.52	-25.22
4	14.79	4.64	-0.70	52.41	188.67	-5.77	188.91	52.16	87.58
5	53.30	11.63	-1.02	543.25	5268.59	-280.73	5285.21	526.63	86.61
6	16.49	2.95	1.61	210.39	62.68	-12.00	211.36	61.71	4.61
7	24.30	4.66	-1.22	631.24	198.99	227.21	728.70	101.53	-23.22
8	65.39	19.03	-2.50	713.61	16210.82	-242.11	16214.61	709.83	89.11
9	17.19	2.01	4.33	477.13	53.43	-51.59	483.32	47.24	6.84
10	52.50	5.36	9.76	7506.35	488.87	624.25	7561.45	433.77	-5.04
11	48.70	5.84	4.57	8196.16	315.89	450.37	8221.81	290.23	-3.26
12	46.20	2.12	2.98	7001.28	230.30	44.97	7001.58	230.00	-0.38
13	19.81	5.29	-1.06	167.18	193.07	-112.44	293.31	66.94	48.28
14	62.70	6.70	6.50	15259.67	502.04	760.58	15298.77	462.94	-2.94
15	21.38	4.09	-1.85	527.17	124.20	149.23	576.41	74.95	-18.26
16	26.50	4.49	3.53	968.48	224.26	-47.12	971.45	221.29	3.61
17	46.20	4.65	5.51	4093.34	1351.80	-848.25	4334.57	1110.57	15.87
18	8.85	4.17	0.34	48.66	30.25	12.24	54.76	24.14	-26.52
19	23.39	6.90	-1.44	125.06	974.33	-77.96	981.43	117.96	84.80
20	49.70	3.91	-2.69	1442.88	1041.42	359.39	1653.80	830.50	-30.41
21	57.30	6.31	1.28	12552.82	363.96	193.49	12555.89	360.89	-0.91
22	19.49	5.88	-1.06	83.57	598.55	-58.76	605.17	76.95	83.57
23	15.89	2.96	-3.44	326.79	29.33	21.70	328.36	27.76	-4.15
24	60.90	4.79	5.85	13017.42	599.82	1325.07	13157.24	460.00	-6.02
25	19.51	2.17	-1.82	560.99	37.13	-57.54	567.24	30.89	6.20
26	25.30	2.11	0.78	1265.30	58.34	-83.96	1271.12	52.52	3.96
27	15.89	2.96	-3.44	326.79	29.33	21.70	328.36	27.76	-4.15
28	23.39	1.90	-6.44	1117.55	89.26	-24.25	1118.12	88.69	1.35
29	16.19	5.83	1.54	147.32	128.54	83.42	221.87	53.98	-41.79
30	7.78	1.38	0.00	33.24	18.42	0.00	33.24	18.42	90.00
31	27.29	4.94	8.38	1961.17	179.66	162.92	1975.95	164.88	-5.18
32	17.19	3.14	-4.33	477.13	56.06	-56.03	484.46	48.73	7.45