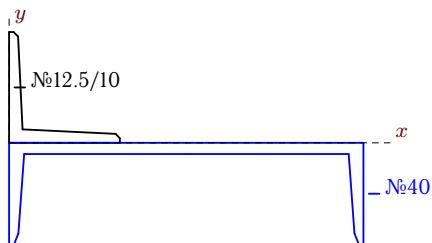


Геометрические характеристики сечений

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

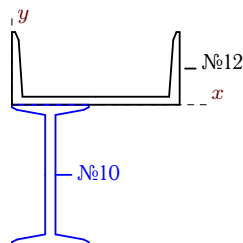
Задача 6.1.

1



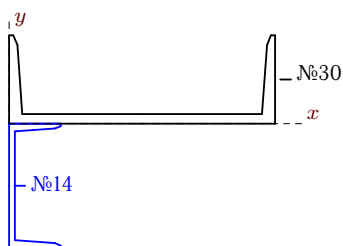
Задача 6.2.

1



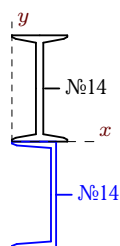
Задача 6.3.

1



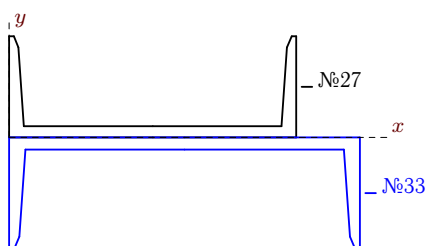
Задача 6.4.

1



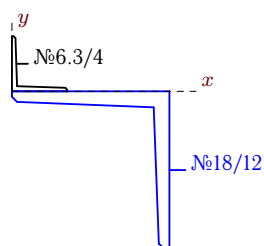
Задача 6.5.

1



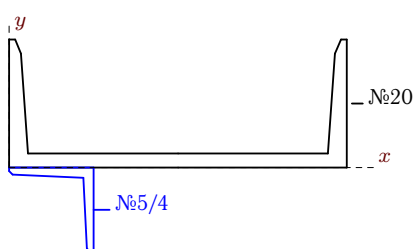
Задача 6.6.

1



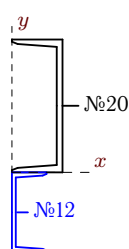
Задача 6.7.

1



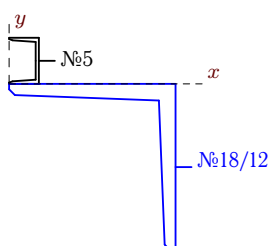
Задача 6.8.

1



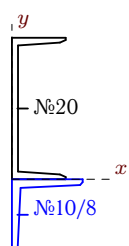
Задача 6.9.

1



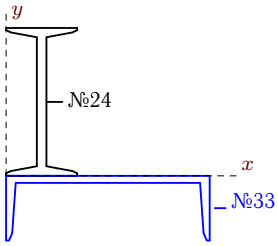
Задача 6.10.

1



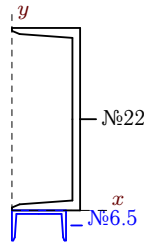
Задача 6.11.

1



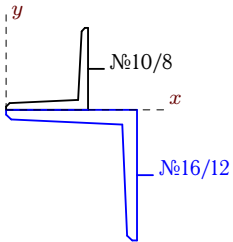
Задача 6.12.

1



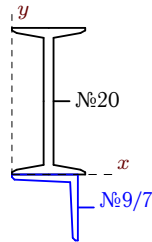
Задача 6.13.

1



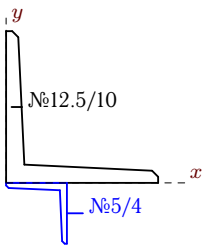
Задача 6.14.

1



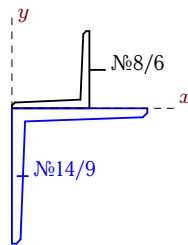
Задача 6.15.

1



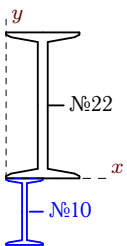
Задача 6.16.

1



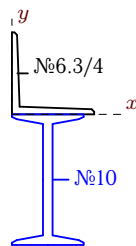
Задача 6.17.

1



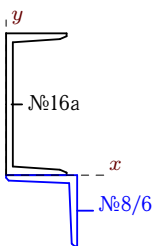
Задача 6.18.

1



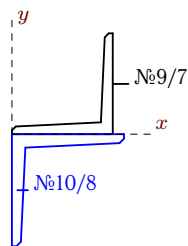
Задача 6.19.

1



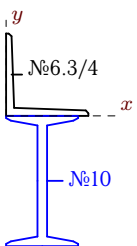
Задача 6.20.

1



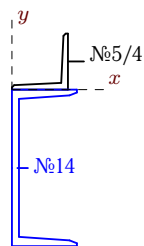
Задача 6.21.

1



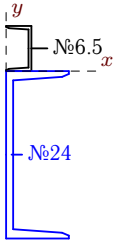
Задача 6.22.

1



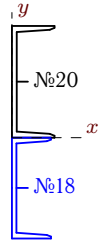
Задача 6.23.

1



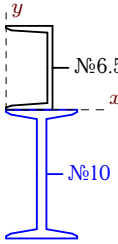
Задача 6.24.

1



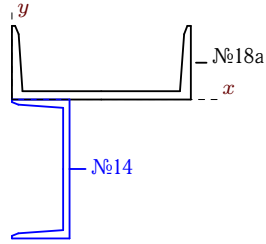
Задача 6.25.

1



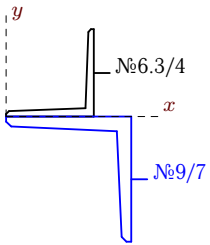
Задача 6.26.

1



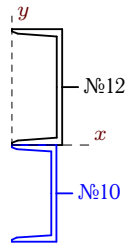
Задача 6.27.

1



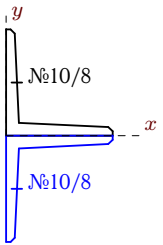
Задача 6.28.

1



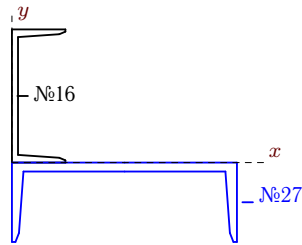
Задача 6.29.

1



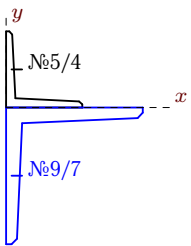
Задача 6.30.

1



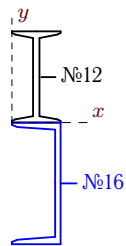
Задача 6.31.

1



Задача 6.32.

1



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	85.80	15.31	-0.99	1671.54	20350.79	-1998.24	20562.16	1460.17	83.96
2	25.30	4.46	-1.56	499.02	388.53	134.08	588.79	298.76	-33.80
3	56.10	11.29	-0.13	1838.68	7856.54	1429.17	8178.70	1516.52	-77.30
4	33.00	3.88	0.38	2675.19	89.20	-55.28	2676.37	88.01	1.22
5	81.70	15.21	-0.41	1184.95	12320.31	-304.12	12328.61	1176.65	88.44
6	47.16	11.91	-4.20	1528.06	1914.73	-1120.51	2858.47	584.33	49.89
7	27.29	9.09	1.58	161.91	1664.98	68.03	1668.05	158.84	-87.41
8	36.70	4.08	4.20	3994.91	279.20	541.37	4072.18	201.93	-8.12
9	48.36	11.70	-3.95	1633.36	1981.33	-1215.74	3035.48	579.22	49.07
10	39.00	2.34	4.90	3188.59	264.33	4.85	3188.59	264.32	-0.10
11	81.30	11.90	3.66	8106.94	10478.16	-3121.80	12631.91	5953.19	55.40
12	34.21	5.39	8.31	2996.83	243.60	196.58	3010.80	229.64	-4.06
13	53.00	10.33	-2.29	1621.20	1269.26	-793.69	2258.20	632.27	38.75
14	39.10	5.48	6.08	3245.28	229.04	-216.55	3260.75	213.57	4.09
15	28.19	3.47	2.78	447.44	369.31	-219.14	630.97	185.77	39.95
16	34.08	4.34	-2.14	765.30	551.02	388.79	1061.44	254.87	-37.30
17	42.60	4.73	6.49	4954.65	240.09	379.27	4984.96	209.77	-4.57
18	16.96	2.44	-3.04	373.97	40.74	-35.89	377.79	36.92	6.08
19	28.88	3.24	4.69	1537.64	227.74	-279.29	1594.70	170.67	11.55
20	27.90	4.42	-0.45	428.70	339.57	277.40	665.09	103.17	-40.44
21	16.96	2.44	-3.04	373.97	40.74	-35.89	377.79	36.92	6.08
22	19.49	2.06	-5.33	718.86	66.45	56.27	723.68	61.63	-4.89
23	38.11	2.41	-8.99	4350.97	216.72	-5.52	4350.98	216.71	0.08
24	44.10	2.01	1.08	6575.11	199.19	27.13	6575.22	199.07	-0.24
25	19.51	2.60	-1.82	560.99	27.30	-14.86	561.41	26.89	1.59
26	37.80	6.99	-1.64	1359.71	1452.69	407.37	1816.21	996.19	-48.26
27	17.26	5.98	-1.27	174.37	126.23	-72.93	227.10	73.50	35.87
28	24.20	3.43	1.05	1202.85	53.10	32.95	1203.79	52.15	-1.64
29	31.20	2.75	0.00	529.95	294.00	0.00	529.95	294.00	90.00
30	53.30	9.53	1.09	2319.35	5859.61	-1464.29	6386.76	1792.20	70.20
31	16.19	2.21	-1.54	147.32	107.02	37.91	170.10	84.24	-31.01
32	32.80	3.97	-1.73	2686.93	107.10	-158.99	2696.69	97.34	3.51