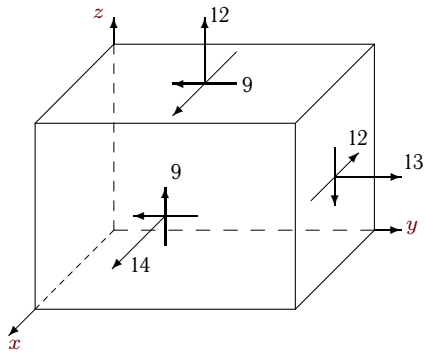
Трехмерное напряженное состояние

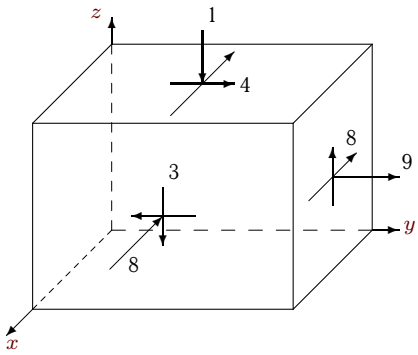
Найти главные нормальные и касательные напряжения. Вычислить октаэдрическое напряжение.

Задача 5.1



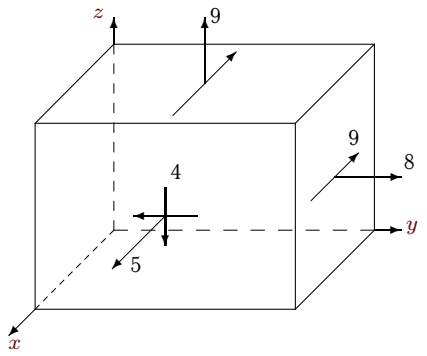
5.1

Задача 5.2



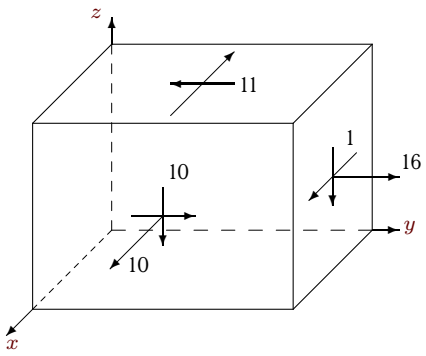
5.1

Задача 5.3



5.1

Задача 5.4



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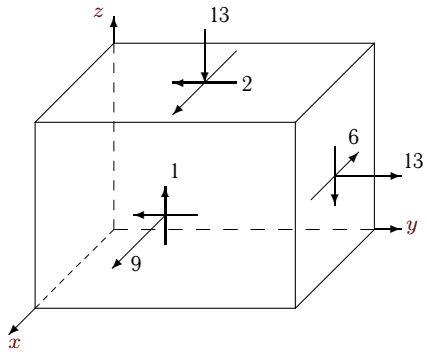
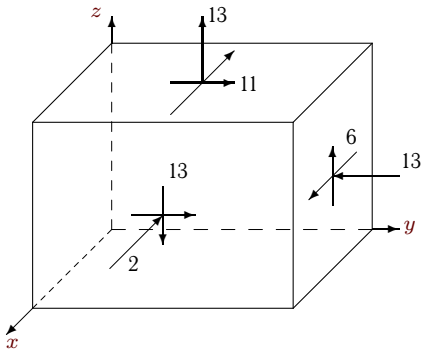
Задача 5.5



5.1

Задача 5.6



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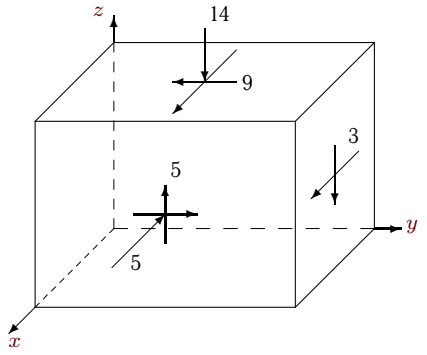
Задача 5.7



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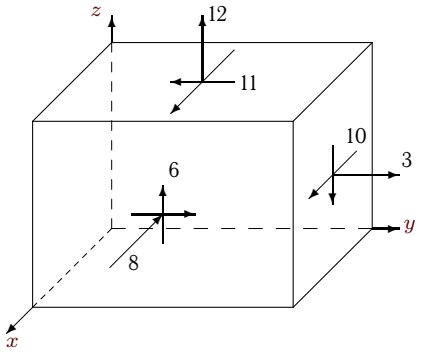
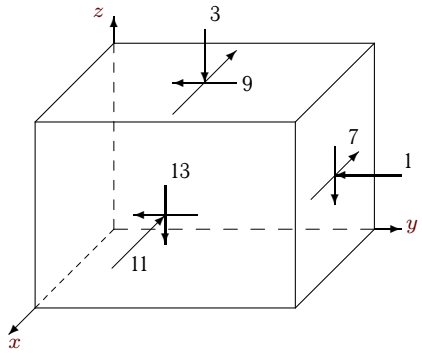
Задача 5.8



5.1

Задача 5.9



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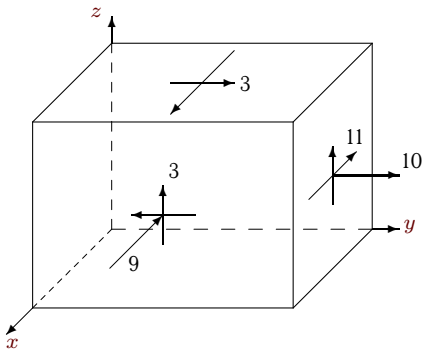
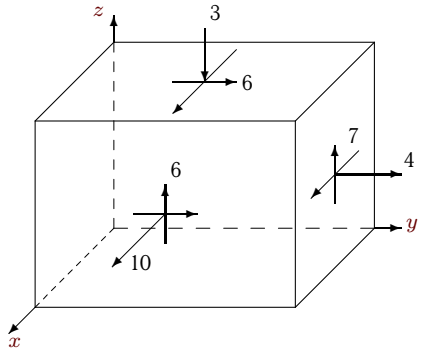
Задача 5.10



5.1

Задача 5.11



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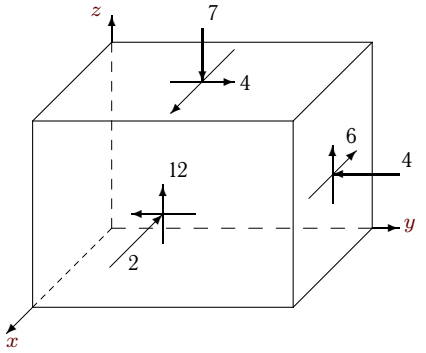
Задача 5.12



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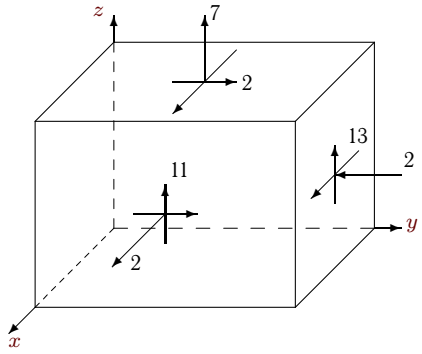
Задача 5.13



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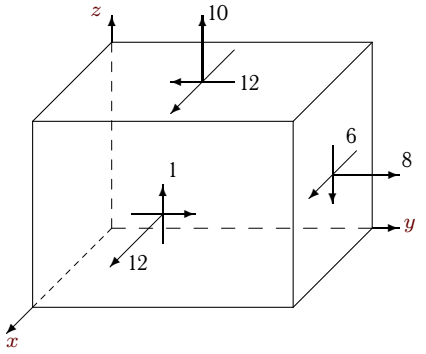
Задача 5.14



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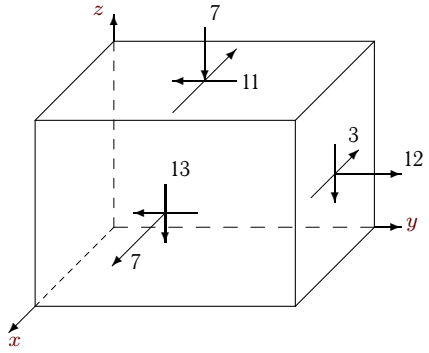

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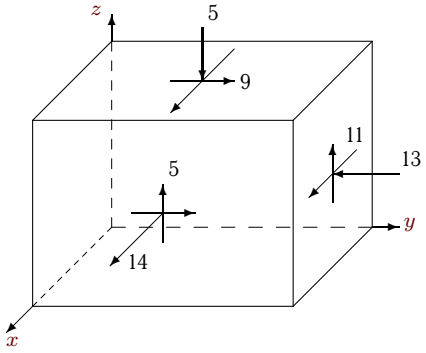
Задача 5.16



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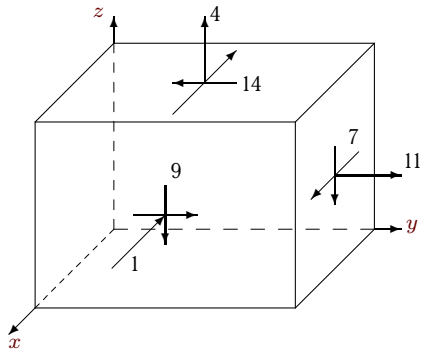
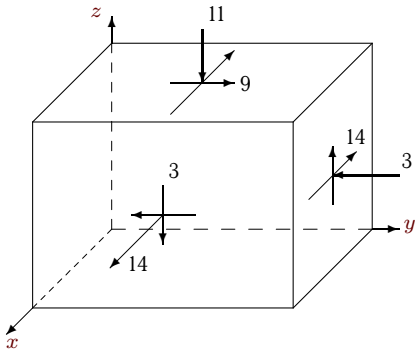
Задача 5.17



5.1

Задача 5.18



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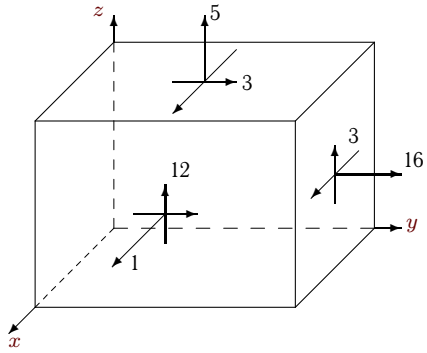
Задача 5.19



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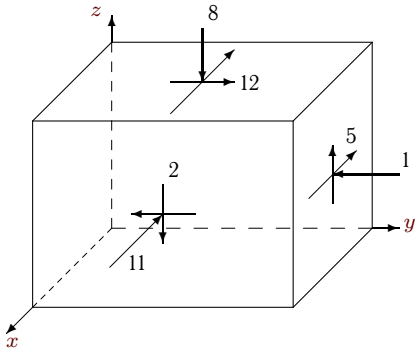
Задача 5.20



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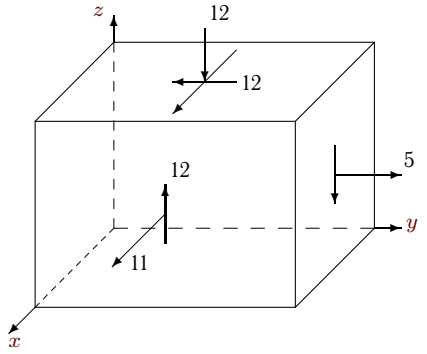
Задача 5.21



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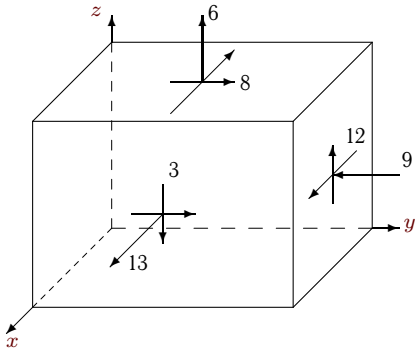

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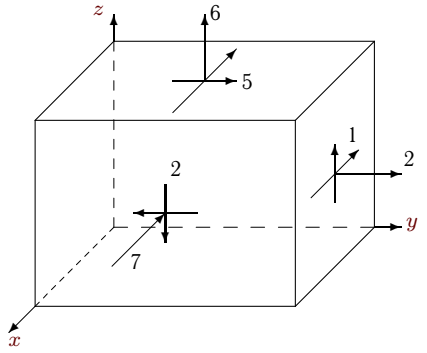

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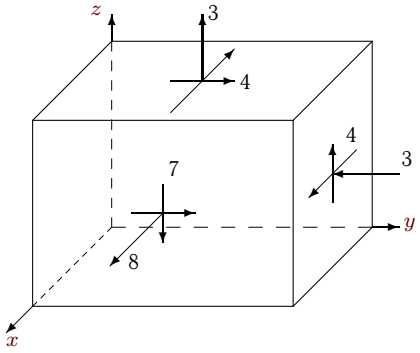
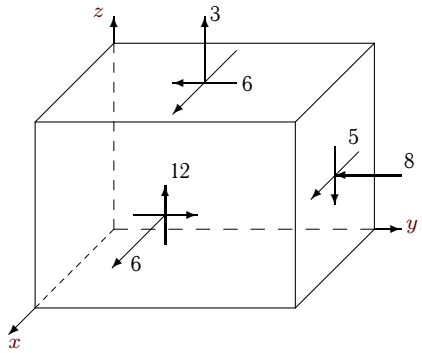
Задача 5.24



5.1

Задача 5.25



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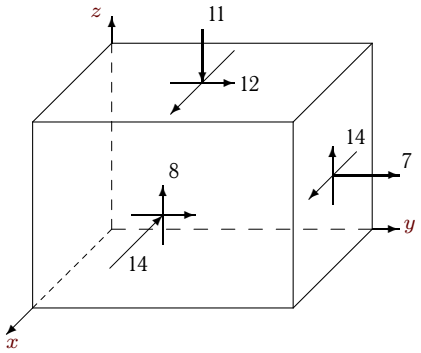

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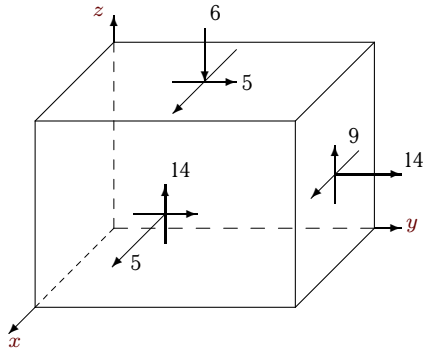

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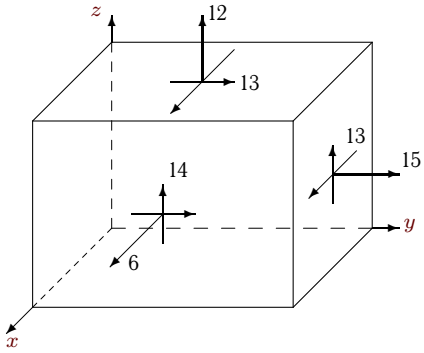

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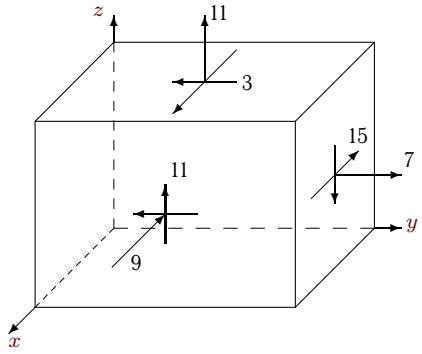

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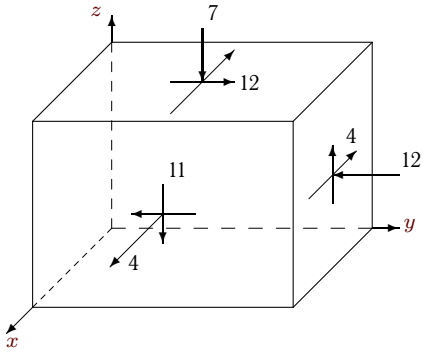
Задача 5.30



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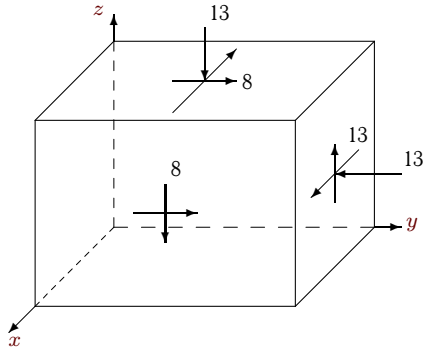
Задача 5.31



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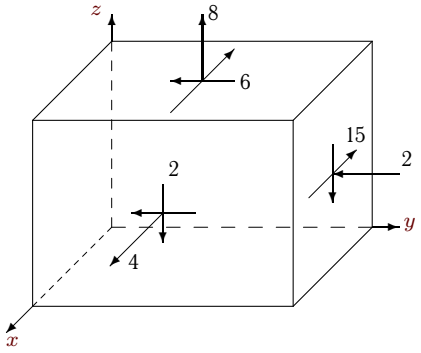
Задача 5.32



5.1

Трехмерное напряженное состояние

	J_1	J_2	J_3	σ_1	σ_2	σ_3	τ_1	τ_2	τ_3	τ_{okt}
1	-39	200	-213	33.163	4.366	1.471	1.45	15.85	14.4	14.3062
2	0	-162	-375	13.757	-2.400	-11.357	4.48	12.56	8.08	10.3923
3	-22	60	497	16.568	8.829	-3.397	6.11	9.98	3.87	8.2192
4	-26	-62	2590	24.118	11.346	-9.465	10.4	16.8	6.39	13.8404
5	-9	-210	1078	17.484	4.683	-13.167	8.92	15.33	6.4	12.5698
6	2	-495	-593	21.872	-1.196	-22.676	10.74	22.27	11.53	18.1904
7	19	-45	-261	4.433	-2.862	-20.571	8.85	12.5	3.65	10.4987
8	-7	-341	1948	19.401	5.583	-17.984	11.78	18.7	6.9	15.4344
9	15	-252	464	8.408	2.159	-25.567	13.86	16.99	3.12	14.7648
10	-1	-229	207	15.184	0.904	-15.087	8	15.14	7.14	12.3648
11	-11	-123	-27	17.940	-0.224	-6.716	3.25	12.33	9.08	10.4350
12	13	-146	-228	8.199	-1.405	-19.794	9.2	14	4.8	11.6142
13	-7	-298	405	20.545	1.326	-14.871	8.1	17.7	9.61	14.4760
14	-30	115	1280	22.242	12.399	-4.641	8.52	13.44	4.92	11.1056
15	-12	-348	4258	18.303	12.423	-18.726	15.57	18.51	2.94	16.2481
16	4	-414	-1696	20.387	-4.101	-20.287	8.1	20.34	12.24	16.7199
17	-14	-297	-829	26.426	-3.524	-8.902	2.69	17.66	14.97	15.5421
18	0	-449	-2267	23.367	-5.400	-17.967	6.28	20.67	14.38	17.3013
19	-22	-61	2062	19.834	11.337	-9.171	10.25	14.5	4.25	12.1747
20	20	-66	-1940	9.335	-11.965	-17.370	2.7	13.35	10.65	11.5277
21	-4	-425	2964	18.356	7.416	-21.773	14.6	20.06	5.47	16.9378
22	-10	-310	2893	18.301	9.090	-17.391	13.24	17.85	4.6	15.1291
23	-1	-74	-97	9.680	-1.371	-7.309	2.97	8.5	5.53	7.0396
24	-8	-90	325	13.000	3.090	-8.090	5.59	10.55	4.95	8.6152
25	-1	-259	3	16.596	0.012	-15.607	7.81	16.1	8.3	13.1487
26	18	-425	-7490	20.515	-16.862	-21.652	2.4	21.08	18.69	18.8503
27	-13	-346	1543	24.538	4.037	-15.575	9.8	20.06	10.25	16.3775
28	-33	-192	170	37.942	0.783	-5.725	3.25	21.83	18.58	19.2354
29	-9	-440	2944	22.678	6.450	-20.128	13.29	21.4	8.11	17.6446
30	15	-273	-2380	14.670	-7.230	-22.439	7.6	18.55	10.95	15.2315
31	26	-128	-1365	8.425	-5.626	-28.799	11.59	18.61	7.03	15.3478
32	-10	-257	2360	16.948	8.827	-15.775	12.3	16.36	4.06	13.9124