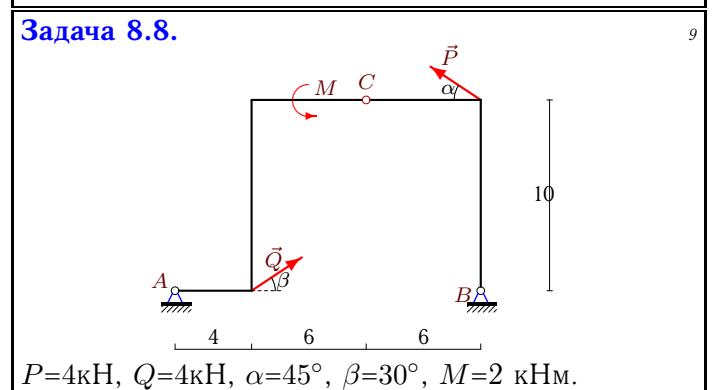
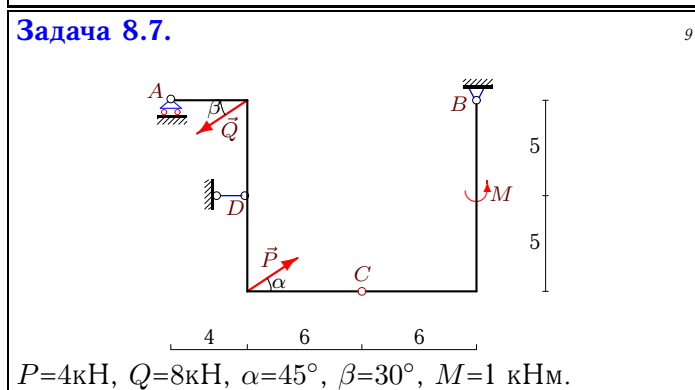
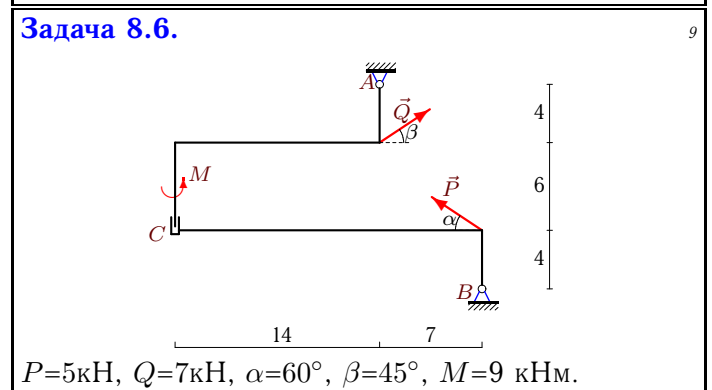
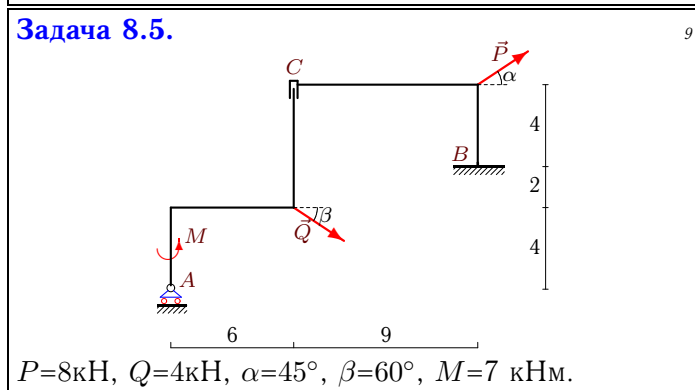
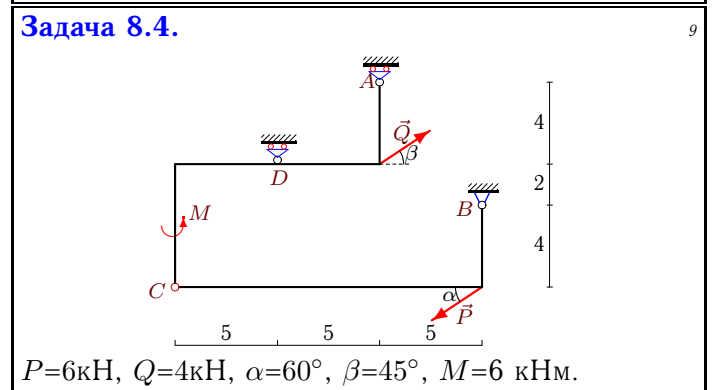
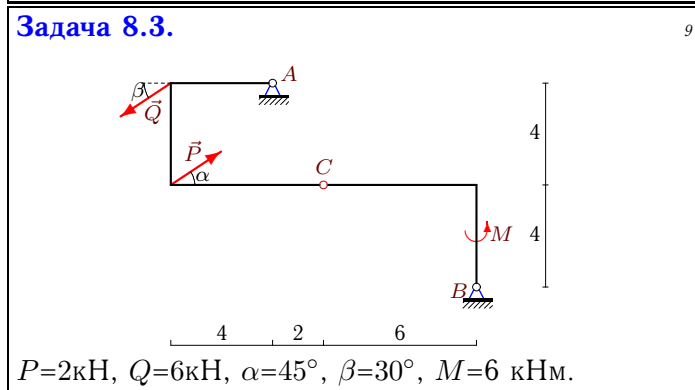
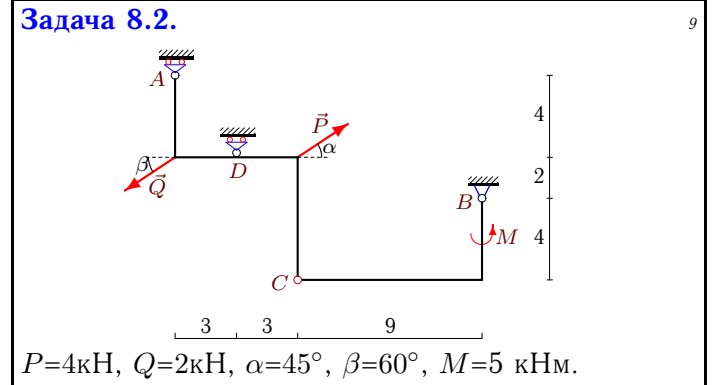
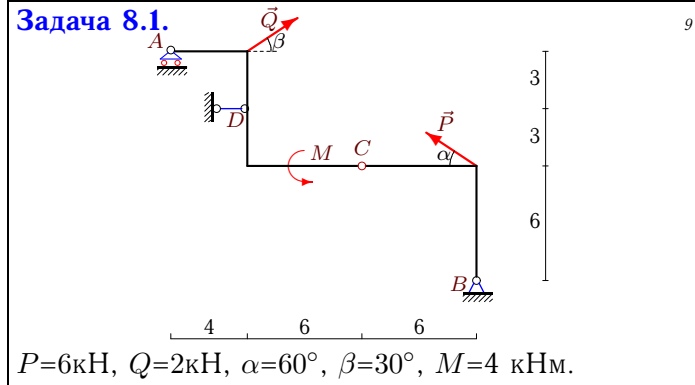


## Составная прямоугольная рама

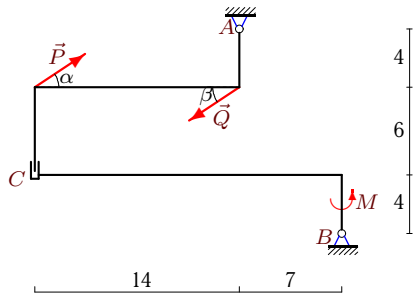
Рама состоит из двух частей, соединенных шарниром или скользящей заделкой. Размеры даны в метрах. Найти реакции опор.

Кирсанов М.Н. **Решebник. Теоретическая механика**/Под ред. А. И. Кириллова.– М.:ФИЗМАТЛИТ, 2008.– 384 с. (с.54.)



**Задача 8.9.**

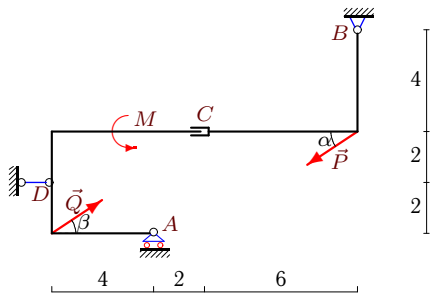
9



$P=3\text{кН}, Q=2\text{кН}, \alpha=60^\circ, \beta=30^\circ, M=6\text{ кНм}.$

**Задача 8.11.**

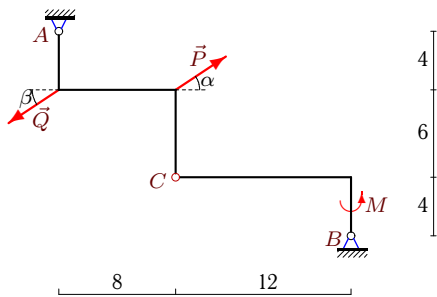
9



$P=7\text{кН}, Q=6\text{кН}, \alpha=45^\circ, \beta=30^\circ, M=6\text{ кНм}.$

**Задача 8.13.**

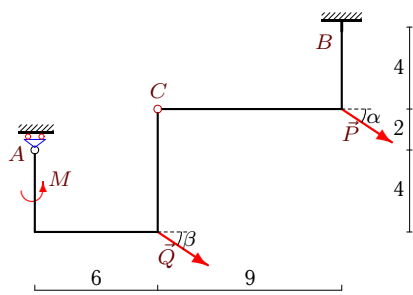
9



$P=2\text{кН}, Q=2\text{кН}, \alpha=45^\circ, \beta=60^\circ, M=1\text{ кНм}.$

**Задача 8.15.**

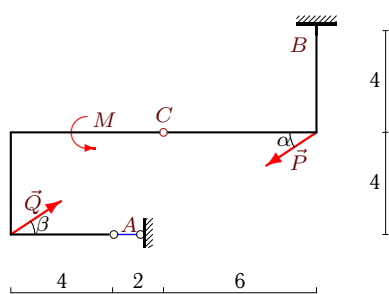
9



$P=7\text{кН}, Q=3\text{кН}, \alpha=60^\circ, \beta=30^\circ, M=7\text{ кНм}.$

**Задача 8.17.**

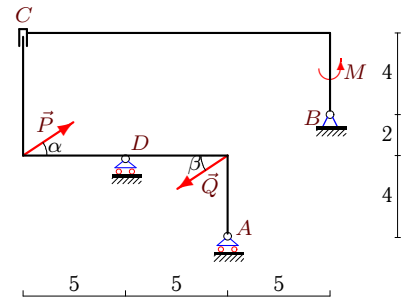
9



$P=8\text{кН}, Q=3\text{кН}, \alpha=45^\circ, \beta=30^\circ, M=6\text{ кНм}.$

**Задача 8.10.**

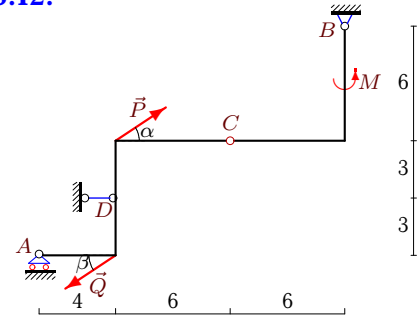
9



$P=5\text{кН}, Q=2\text{кН}, \alpha=30^\circ, \beta=60^\circ, M=9\text{ кНм}.$

**Задача 8.12.**

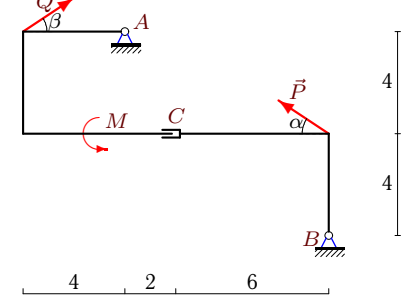
9



$P=4\text{кН}, Q=2\text{кН}, \alpha=60^\circ, \beta=30^\circ, M=8\text{ кНм}.$

**Задача 8.14.**

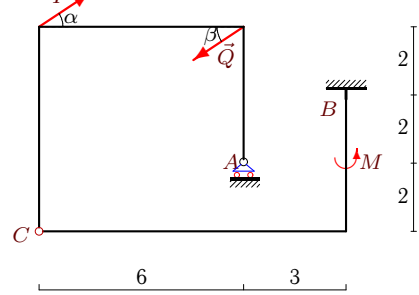
9



$P=5\text{кН}, Q=7\text{кН}, \alpha=45^\circ, \beta=30^\circ, M=8\text{ кНм}.$

**Задача 8.16.**

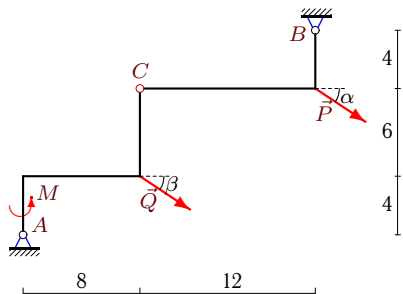
9



$P=6\text{кН}, Q=6\text{кН}, \alpha=30^\circ, \beta=45^\circ, M=8\text{ кНм}.$

**Задача 8.18.**

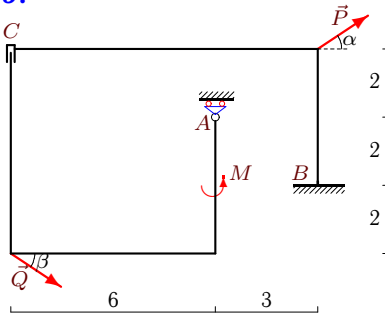
9



$P=3\text{кН}, Q=2\text{кН}, \alpha=45^\circ, \beta=30^\circ, M=1\text{ кНм}.$

**Задача 8.19.**

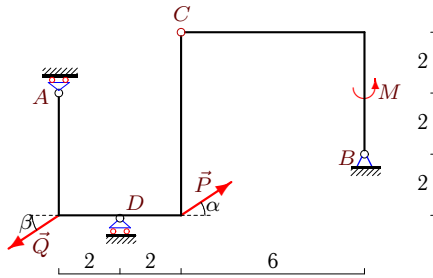
9



$P=8\text{кН}$ ,  $Q=5\text{кН}$ ,  $\alpha=30^\circ$ ,  $\beta=45^\circ$ ,  $M=8\text{ кНм}$ .

**Задача 8.21.**

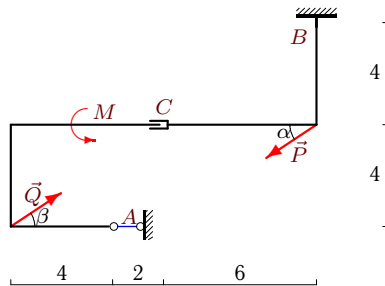
9



$P=4\text{кН}$ ,  $Q=3\text{кН}$ ,  $\alpha=45^\circ$ ,  $\beta=60^\circ$ ,  $M=9\text{ кНм}$ .

**Задача 8.23.**

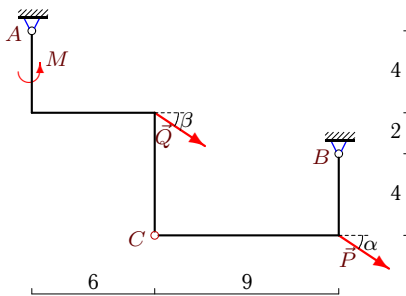
9



$P=9\text{кН}$ ,  $Q=5\text{кН}$ ,  $\alpha=60^\circ$ ,  $\beta=45^\circ$ ,  $M=1\text{ кНм}$ .

**Задача 8.25.**

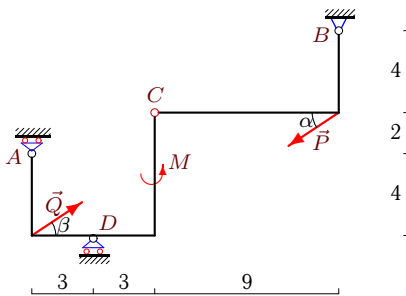
9



$P=3\text{кН}$ ,  $Q=9\text{кН}$ ,  $\alpha=45^\circ$ ,  $\beta=60^\circ$ ,  $M=5\text{ кНм}$ .

**Задача 8.27.**

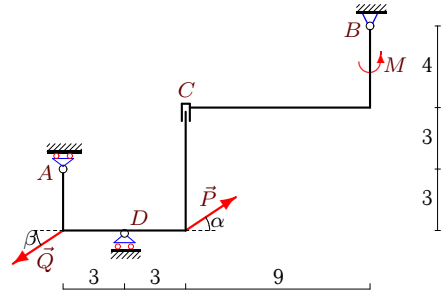
9



$P=6\text{кН}$ ,  $Q=8\text{кН}$ ,  $\alpha=30^\circ$ ,  $\beta=60^\circ$ ,  $M=5\text{ кНм}$ .

**Задача 8.20.**

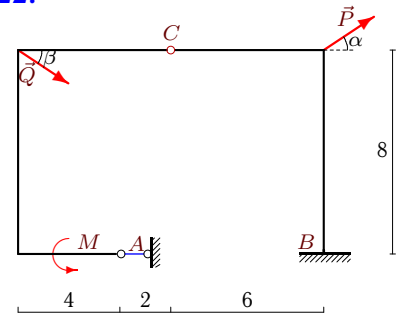
9



$P=5\text{кН}$ ,  $Q=8\text{кН}$ ,  $\alpha=60^\circ$ ,  $\beta=30^\circ$ ,  $M=9\text{ кНм}$ .

**Задача 8.22.**

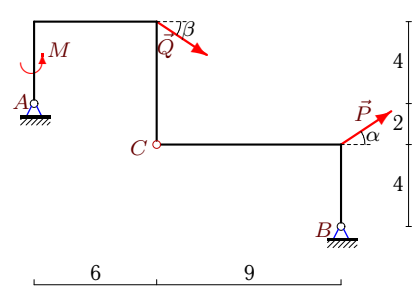
9



$P=7\text{кН}$ ,  $Q=4\text{кН}$ ,  $\alpha=30^\circ$ ,  $\beta=60^\circ$ ,  $M=4\text{ кНм}$ .

**Задача 8.24.**

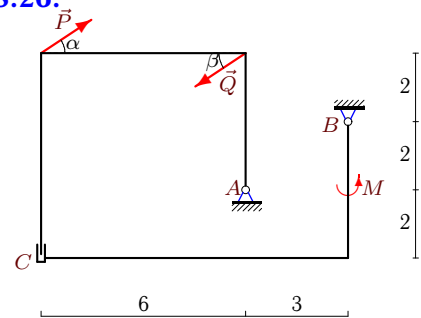
9



$P=3\text{кН}$ ,  $Q=6\text{кН}$ ,  $\alpha=45^\circ$ ,  $\beta=60^\circ$ ,  $M=1\text{ кНм}$ .

**Задача 8.26.**

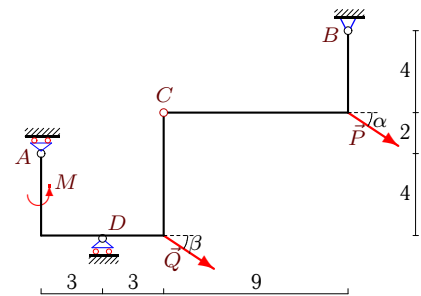
9



$P=3\text{кН}$ ,  $Q=2\text{кН}$ ,  $\alpha=60^\circ$ ,  $\beta=45^\circ$ ,  $M=4\text{ кНм}$ .

**Задача 8.28.**

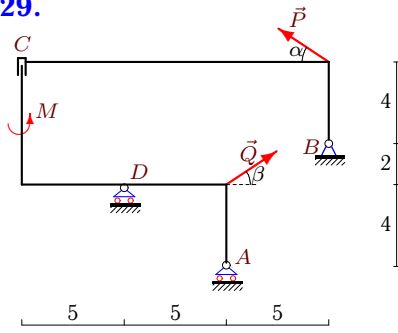
9



$P=5\text{кН}$ ,  $Q=8\text{кН}$ ,  $\alpha=60^\circ$ ,  $\beta=30^\circ$ ,  $M=8\text{ кНм}$ .

**Задача 8.29.**

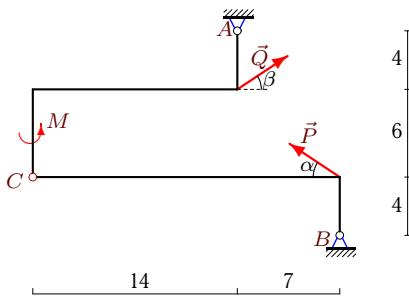
9



$P=7\text{кН}$ ,  $Q=3\text{кН}$ ,  $\alpha=30^\circ$ ,  $\beta=60^\circ$ ,  $M=9\text{кНм}$ .

**Задача 8.31.**

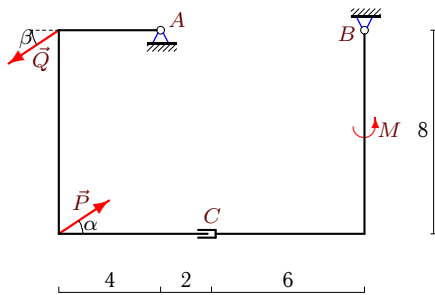
9



$P=4\text{кН}$ ,  $Q=8\text{кН}$ ,  $\alpha=60^\circ$ ,  $\beta=30^\circ$ ,  $M=5\text{кНм}$ .

**Задача 8.33.**

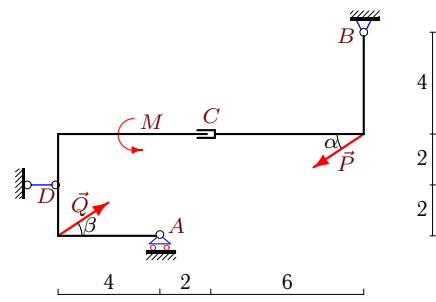
9



$P=3\text{кН}$ ,  $Q=9\text{кН}$ ,  $\alpha=30^\circ$ ,  $\beta=60^\circ$ ,  $M=1\text{кНм}$ .

**Задача 8.30.**

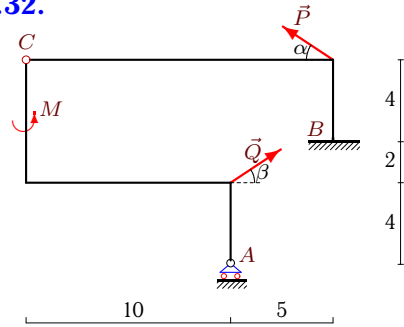
9



$P=7\text{кН}$ ,  $Q=4\text{кН}$ ,  $\alpha=45^\circ$ ,  $\beta=30^\circ$ ,  $M=1\text{кНм}$ .

**Задача 8.32.**

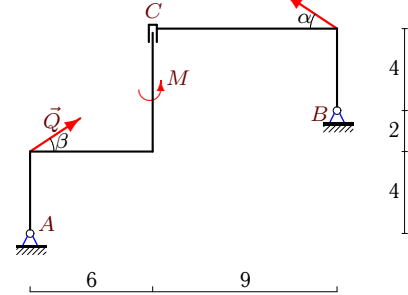
9



$P=8\text{кН}$ ,  $Q=3\text{кН}$ ,  $\alpha=45^\circ$ ,  $\beta=30^\circ$ ,  $M=3\text{кНм}$ .

**Задача 8.34.**

9



$P=5\text{кН}$ ,  $Q=2\text{кН}$ ,  $\alpha=60^\circ$ ,  $\beta=45^\circ$ ,  $M=8\text{кНм}$ .

**Составная прямоугольная рама**

	$X_A$	$Y_A$	$X_B$	$Y_B$	$X_D$	$Y_D$	$M_B$
1	—	-1.885	-0.885	-4.311	2.153	—	—
2	—	-0.465	-1.828	-1.368	—	0.736	—
3	7.532	0.086	-3.750	1.500	—	—	—
4	—	-0.589	0.172	5.242	—	-2.286	—
5	—	3.464	-7.657	-5.657	—	—	32.412
6	-2.178	-4.950	-0.271	-4.330	—	—	—
7	—	4.602	-1.958	-3.431	6.058	—	—
8	-2.071	0.393	1.436	-5.221	—	—	—
9	-2.004	-1.598	2.236	0.000	—	—	—
10	—	1.100	-3.330	0.000	—	-1.868	—
11	—	-4.926	4.950	6.876	-5.196	—	—
12	—	-3.227	2.096	0.763	-2.364	—	—
13	1.264	-0.158	-1.678	0.476	—	—	—
14	-6.062	-2.482	3.536	-4.553	—	—	—
15	—	3.765	-6.098	3.797	—	—	-4.010
16	—	5.196	-0.954	-3.954	—	—	23.768
17	-1.848	—	4.907	4.157	—	—	28.627
18	0.939	2.597	-4.792	0.524	—	—	—
19	—	3.536	-10.464	-4.000	—	—	-8.571
20	—	-3.431	4.428	0.000	—	3.100	—
21	—	8.797	-1.328	-0.614	—	-8.413	—
22	-3.098	—	-4.964	-0.036	—	—	18.928
23	-3.536	—	4.500	4.259	—	—	59.426
24	51.780	-20.093	-56.901	23.168	—	—	—
25	-6.823	7.705	0.201	2.211	—	—	—
26	5.880	-1.184	-5.966	0.000	—	—	—
27	—	3.270	1.196	3.532	—	-10.730	—
28	—	8.333	-9.428	0.140	—	-0.142	—
29	—	-9.848	4.562	-3.500	—	7.250	—
30	—	-4.484	4.950	7.434	-3.464	—	—
31	-3.925	-4.191	-1.004	-3.273	—	—	—
32	—	-3.359	3.059	-3.798	—	—	-40.118
33	1.902	12.164	0.000	-5.870	—	—	—
34	-3.471	-1.414	4.557	-4.330	—	—	—