

## Динамические реакции вала

Кирсанов М.Н. **Решебник. Теоретическая механика** с. 272.

**Вариант 1**

$a = 40 \text{ см}, b = 50 \text{ см},$   
 $c = 45 \text{ см}, R = 45 \text{ см},$   
 $m_1 = 35 \text{ кг}, m_2 = 18 \text{ кг},$   
 $\alpha = 0.11 \text{ рад}, L = 30 \text{ см},$   
 $M_z = 0.6 \text{ Нм}, t = 6 \text{ с}.$

**Вариант 2**

$a = 40 \text{ см}, b = 60 \text{ см},$   
 $c = 50 \text{ см}, R = 45 \text{ см},$   
 $m_1 = 35 \text{ кг}, m_2 = 18 \text{ кг},$   
 $\alpha = 0.11 \text{ рад}, L = 30 \text{ см},$   
 $M_z = 0.6 \text{ Нм}, t = 6 \text{ с}.$

**Вариант 3**

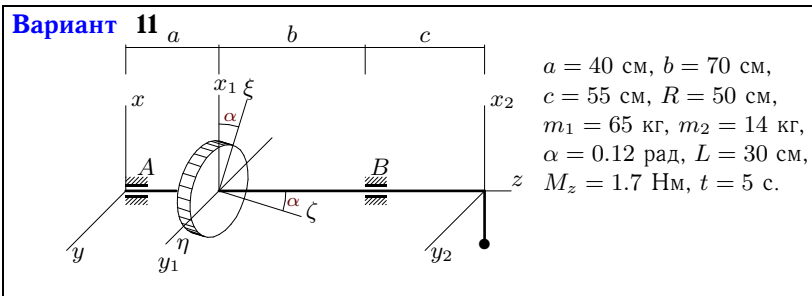
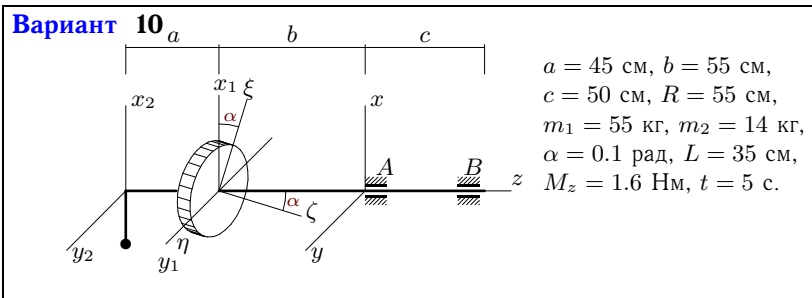
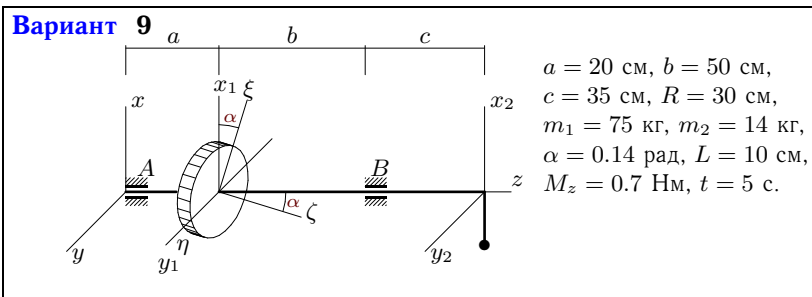
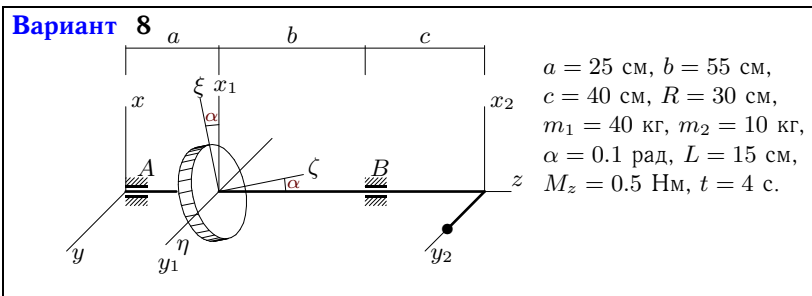
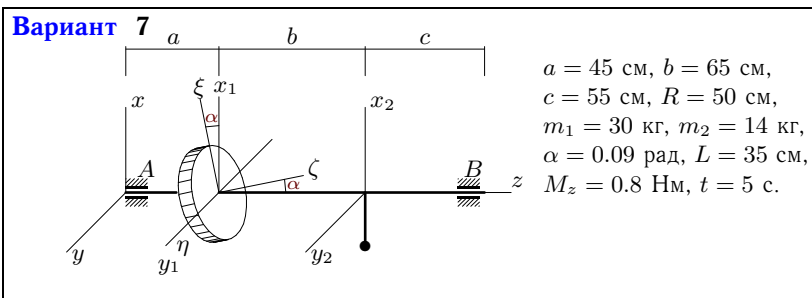
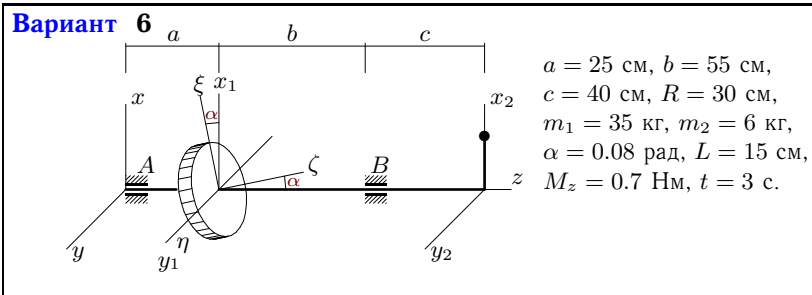
$a = 35 \text{ см}, b = 55 \text{ см},$   
 $c = 45 \text{ см}, R = 45 \text{ см},$   
 $m_1 = 50 \text{ кг}, m_2 = 10 \text{ кг},$   
 $\alpha = 0.08 \text{ рад}, L = 25 \text{ см},$   
 $M_z = 1.3 \text{ Нм}, t = 4 \text{ с}.$

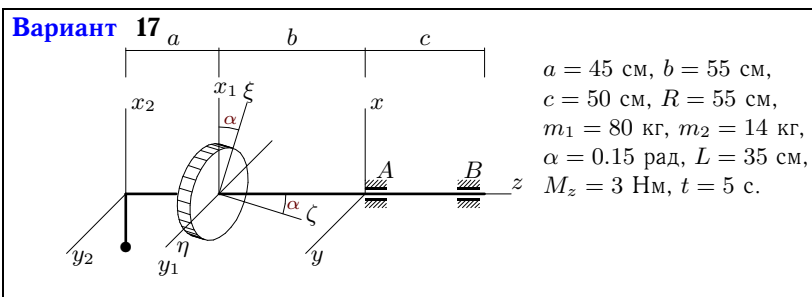
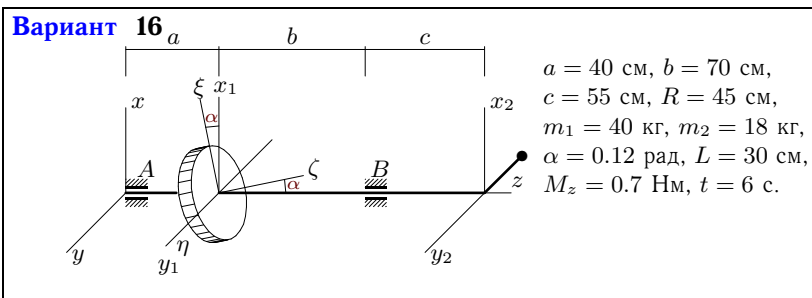
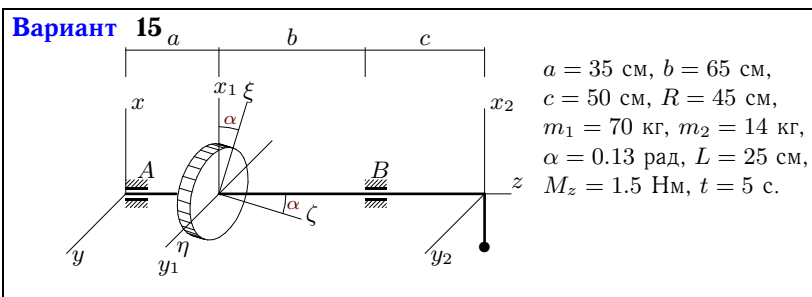
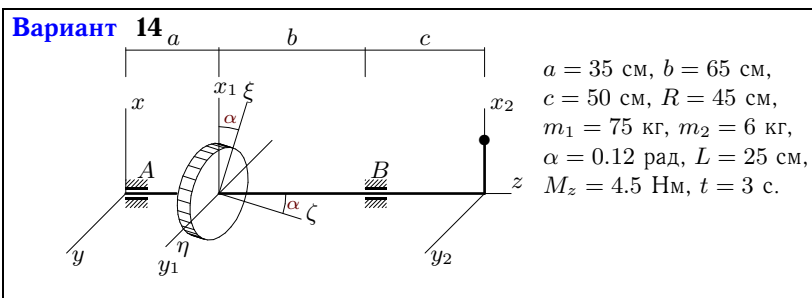
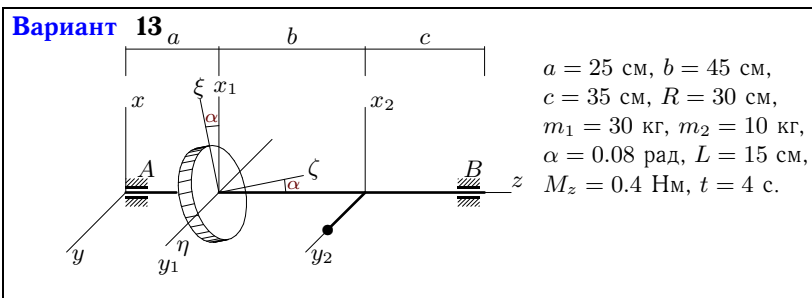
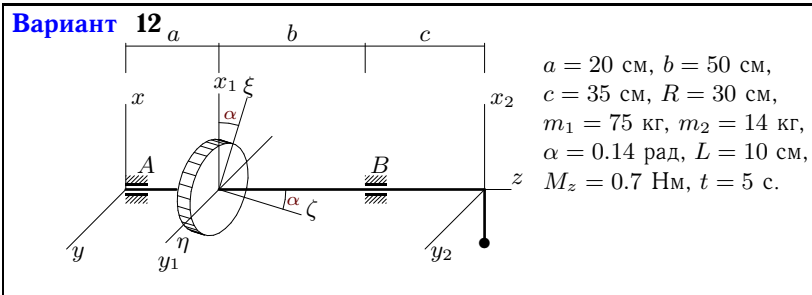
**Вариант 4**

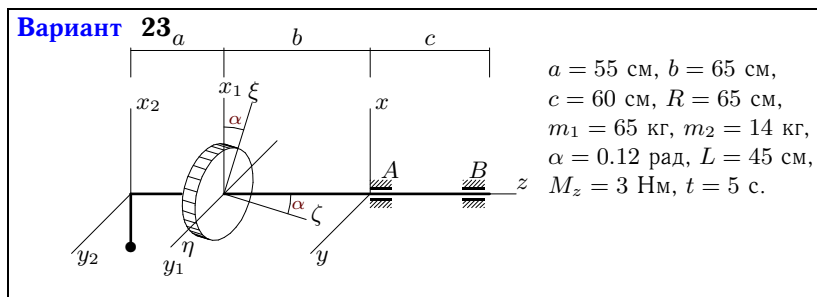
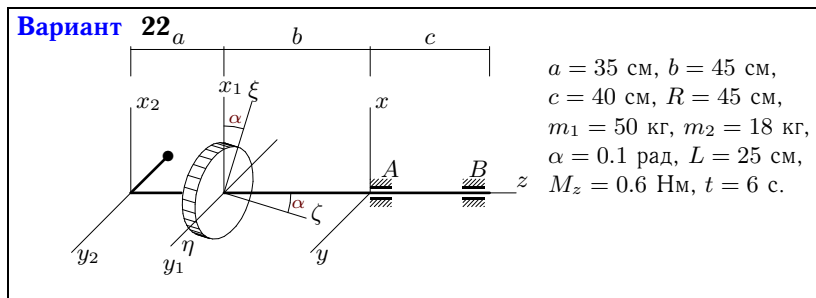
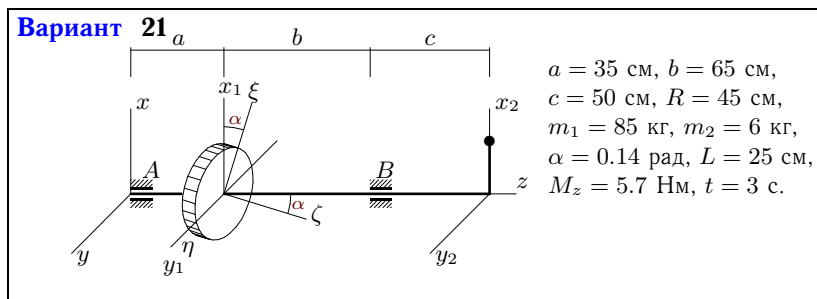
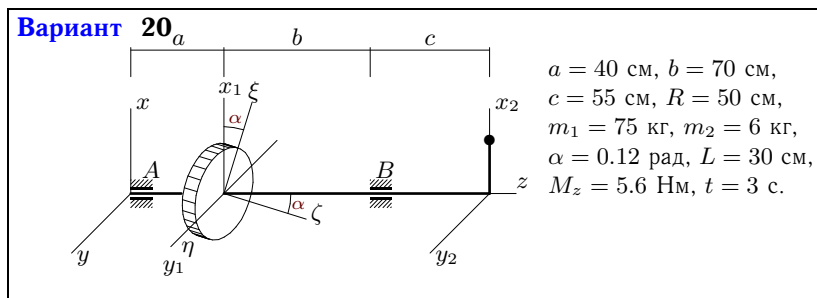
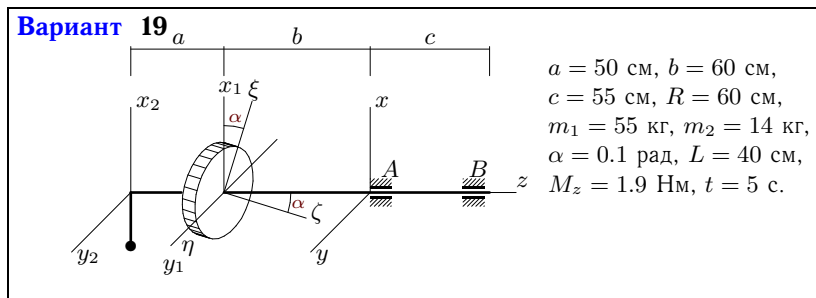
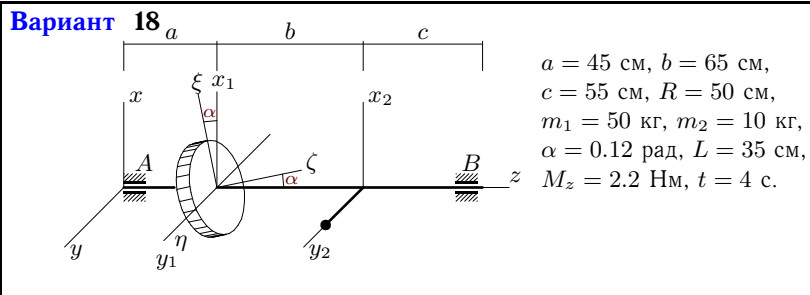
$a = 35 \text{ см}, b = 45 \text{ см},$   
 $c = 40 \text{ см}, R = 40 \text{ см},$   
 $m_1 = 60 \text{ кг}, m_2 = 14 \text{ кг},$   
 $\alpha = 0.15 \text{ рад}, L = 25 \text{ см},$   
 $M_z = 1.2 \text{ Нм}, t = 5 \text{ с}.$

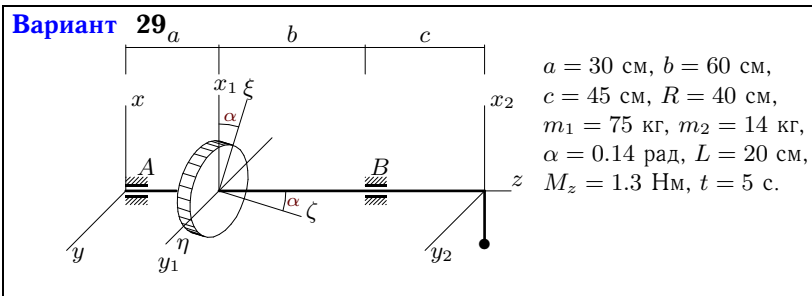
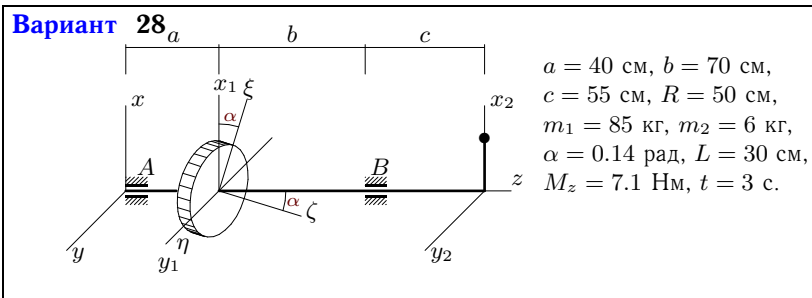
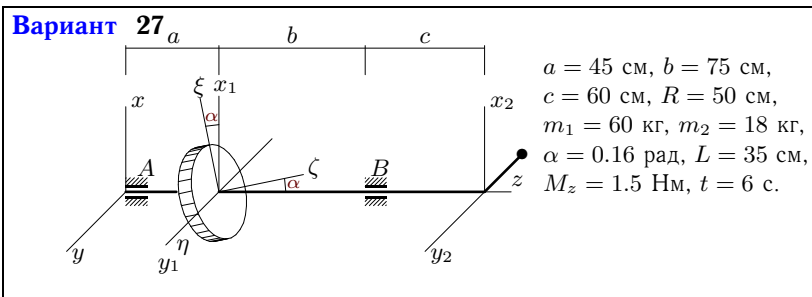
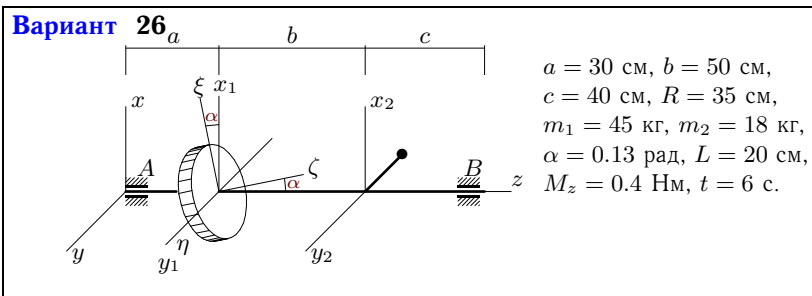
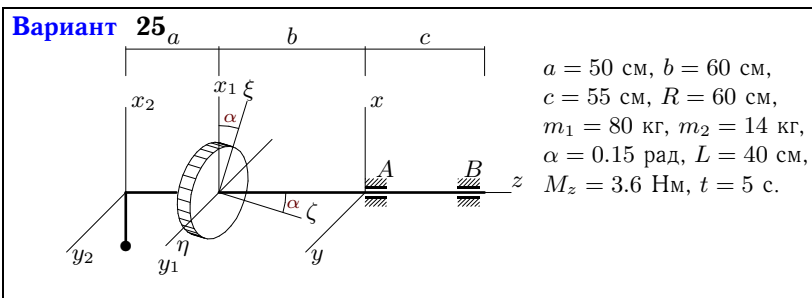
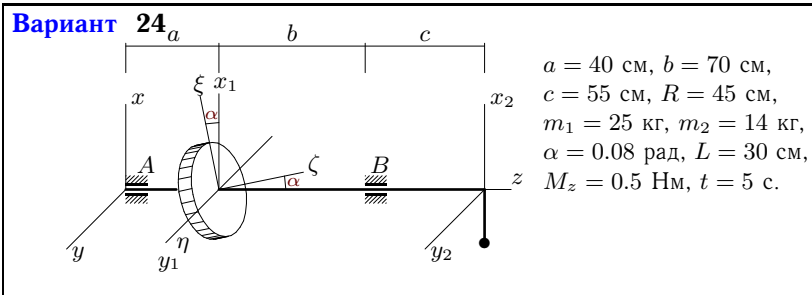
**Вариант 5**

$a = 45 \text{ см}, b = 65 \text{ см},$   
 $c = 55 \text{ см}, R = 50 \text{ см},$   
 $m_1 = 60 \text{ кг}, m_2 = 10 \text{ кг},$   
 $\alpha = 0.14 \text{ рад}, L = 35 \text{ см},$   
 $M_z = 2.9 \text{ Нм}, t = 4 \text{ с}.$

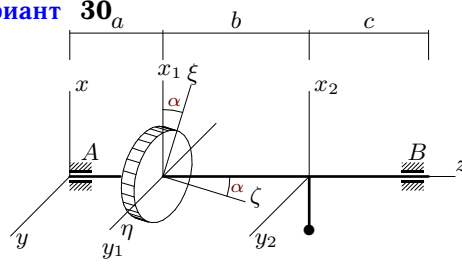








**Вариант 30**



$a = 45$  см,  $b = 65$  см,  
 $c = 55$  см,  $R = 55$  см,  
 $m_1 = 50$  кг,  $m_2 = 14$  кг,  
 $\alpha = 0.09$  рад,  $L = 35$  см,  
 $M_z = 1.3$  Нм,  $t = 5$  с.

Отвeты

	$\varepsilon$	$\omega$	$x_c$	$y_c$	$z_c$	$X_A$	$Y_A$	$X_B$	$Y_B$
1	0.116	0.697	0.000	-10.189	-63.585	1.672	7.924	-1.044	-5.300
2	0.116	0.697	0.000	-10.189	60.377	0.146	0.890	0.481	1.735
3	0.229	0.914	0.000	4.167	44.167	-0.065	-0.731	-0.506	-1.359
4	0.211	1.057	-4.730	0.000	-51.622	10.731	-2.030	-6.819	1.290
5	0.332	1.330	0.000	5.000	54.286	-0.950	-1.956	-0.213	-4.230
6	0.409	1.228	2.195	0.000	38.902	0.560	-0.152	-1.917	0.520
7	0.146	0.732	-11.136	0.000	65.682	0.820	-0.224	1.805	-0.493
8	0.247	0.988	0.000	3.000	44.000	0.075	0.759	-0.446	-2.223
9	0.199	0.996	-1.573	0.000	33.371	-0.359	0.072	1.747	-0.351
10	0.159	0.797	-7.101	0.000	-64.130	9.874	-2.477	-6.759	1.695
11	0.181	0.906	-5.316	0.000	62.152	-1.359	0.300	4.804	-1.061
12	0.199	0.996	-1.573	0.000	33.371	-0.359	0.072	1.747	-0.351
13	0.254	1.016	0.000	3.750	36.250	-0.180	-0.503	-0.201	-1.045
14	0.565	1.694	1.852	0.000	43.519	3.460	-0.681	-7.765	1.528
15	0.188	0.942	-4.167	0.000	54.167	-1.144	0.243	4.249	-0.902
16	0.123	0.741	0.000	-9.310	78.793	-0.455	-1.454	1.121	4.417
17	0.217	1.086	-5.213	0.000	-61.702	19.470	-3.586	-13.693	2.522
18	0.294	1.177	0.000	5.833	55.833	-0.658	-1.550	-0.372	-3.301
19	0.157	0.783	-8.116	0.000	-70.145	10.839	-2.770	-7.410	1.894
20	0.565	1.694	2.222	0.000	49.259	4.052	-0.797	-9.220	1.814
21	0.635	1.904	1.648	0.000	42.582	4.903	-0.858	-10.340	1.810
22	0.097	0.582	0.000	-6.618	-54.265	1.523	4.509	-1.087	-2.985
23	0.181	0.905	-7.975	0.000	-74.747	16.621	-3.671	-11.456	2.530
24	0.132	0.659	-10.769	0.000	84.872	-0.953	0.289	2.779	-0.843
25	0.216	1.082	-5.957	0.000	-67.447	21.956	-4.059	-15.403	2.848
26	0.115	0.690	0.000	-5.714	44.286	0.067	0.589	0.347	1.127
27	0.155	0.927	0.000	-8.077	76.154	-0.917	-2.632	1.891	8.050
28	0.636	1.908	1.978	0.000	48.242	5.736	-1.002	-12.287	2.147
29	0.198	0.991	-3.146	0.000	46.517	-0.916	0.185	3.665	-0.740
30	0.140	0.701	-7.656	0.000	59.219	0.903	-0.258	1.502	-0.429