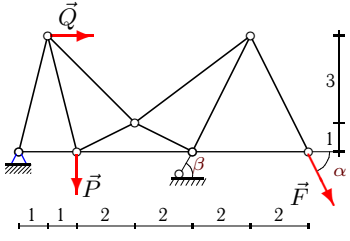
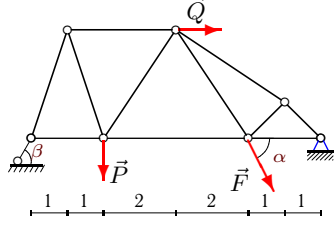
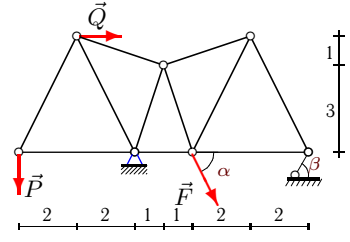
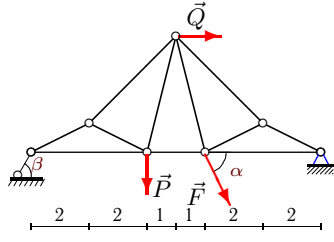
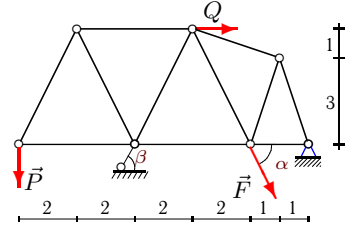
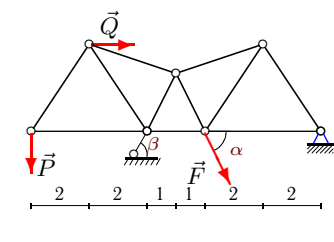
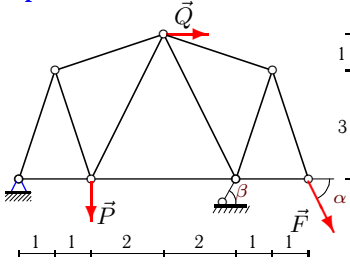
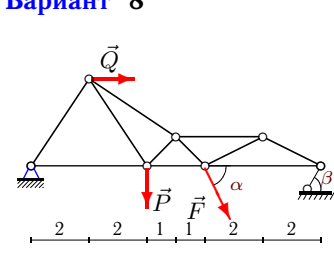
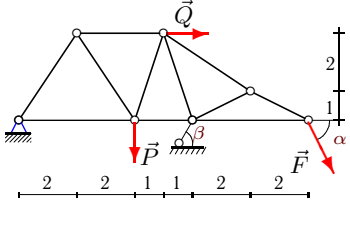
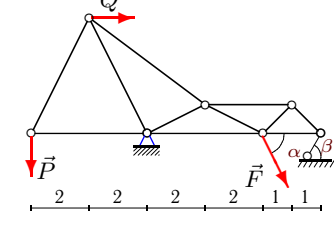
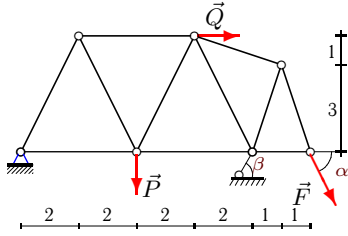


## Расчет фермы

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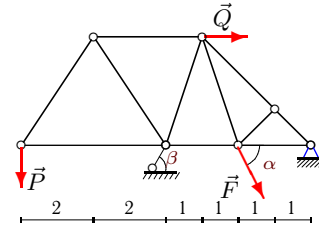
<p><b>Вариант 1</b></p>  <p><b>С6.</b>  <math>P = 5\text{кН}</math>,  <math>F = 1\text{кН}</math>,  <math>\alpha = 35^\circ</math>,  <math>\beta = 30^\circ</math>,  <math>Q = 60\text{кН}</math>.</p>	<p><b>Вариант 2</b></p>  <p><b>С6.</b>  <math>P = 15\text{кН}</math>,  <math>F = 2\text{кН}</math>,  <math>\alpha = 45^\circ</math>,  <math>\beta = 30^\circ</math>,  <math>Q = 20\text{кН}</math>.</p>
<p><b>Вариант 3</b></p>  <p><b>С6.</b>  <math>P = 10\text{кН}</math>,  <math>F = 3\text{кН}</math>,  <math>\alpha = 40^\circ</math>,  <math>\beta = 30^\circ</math>,  <math>Q = 50\text{кН}</math>.</p>	<p><b>Вариант 4</b></p>  <p><b>С6.</b>  <math>P = 30\text{кН}</math>,  <math>F = 4\text{кН}</math>,  <math>\alpha = 60^\circ</math>,  <math>\beta = 45^\circ</math>,  <math>Q = 50\text{кН}</math>.</p>
<p><b>Вариант 5</b></p>  <p><b>С6.</b>  <math>P = 15\text{кН}</math>,  <math>F = 5\text{кН}</math>,  <math>\alpha = 45^\circ</math>,  <math>\beta = 30^\circ</math>,  <math>Q = 30\text{кН}</math>.</p>	<p><b>Вариант 6</b></p>  <p><b>С6.</b>  <math>P = 40\text{кН}</math>,  <math>F = 6\text{кН}</math>,  <math>\alpha = 70^\circ</math>,  <math>\beta = 60^\circ</math>,  <math>Q = 50\text{кН}</math>.</p>
<p><b>Вариант 7</b></p>  <p><b>С6.</b>  <math>P = 10\text{кН}</math>,  <math>F = 7\text{кН}</math>,  <math>\alpha = 40^\circ</math>,  <math>\beta = 30^\circ</math>,  <math>Q = 20\text{кН}</math>.</p>	<p><b>Вариант 8</b></p>  <p><b>С6.</b>  <math>P = 35\text{кН}</math>,  <math>F = 8\text{кН}</math>,  <math>\alpha = 65^\circ</math>,  <math>\beta = 45^\circ</math>,  <math>Q = 50\text{кН}</math>.</p>
<p><b>Вариант 9</b></p>  <p><b>С6.</b>  <math>P = 30\text{кН}</math>,  <math>F = 9\text{кН}</math>,  <math>\alpha = 60^\circ</math>,  <math>\beta = 45^\circ</math>,  <math>Q = 50\text{кН}</math>.</p>	<p><b>Вариант 10</b></p>  <p><b>С6.</b>  <math>P = 30\text{кН}</math>,  <math>F = 10\text{кН}</math>,  <math>\alpha = 60^\circ</math>,  <math>\beta = 45^\circ</math>,  <math>Q = 30\text{кН}</math>.</p>

**Вариант 11**



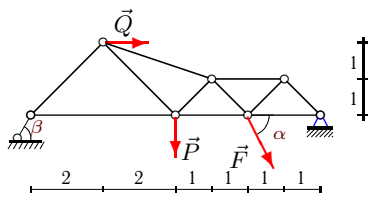
**C6.**  
 $P = 35\text{кН}$ ,  
 $F = 11\text{кН}$ ,  
 $\alpha = 65^\circ$ ,  
 $\beta = 45^\circ$ ,  
 $Q = 30\text{кН}$ .

**Вариант 12**



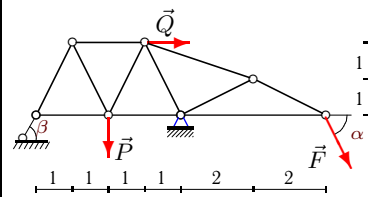
**C6.**  
 $P = 15\text{кН}$ ,  
 $F = 12\text{кН}$ ,  
 $\alpha = 45^\circ$ ,  
 $\beta = 30^\circ$ ,  
 $Q = 10\text{кН}$ .

**Вариант 13**



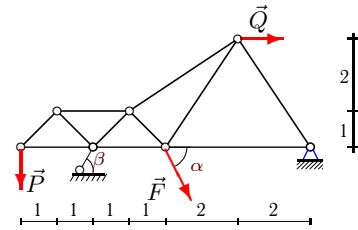
**C6.**  
 $P = 5\text{кН}$ ,  
 $F = 13\text{кН}$ ,  
 $\alpha = 35^\circ$ ,  
 $\beta = 30^\circ$ ,  
 $Q = 10\text{кН}$ .

**Вариант 14**



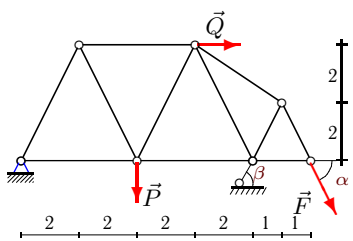
**C6.**  
 $P = 25\text{кН}$ ,  
 $F = 14\text{кН}$ ,  
 $\alpha = 55^\circ$ ,  
 $\beta = 45^\circ$ ,  
 $Q = 40\text{кН}$ .

**Вариант 15**



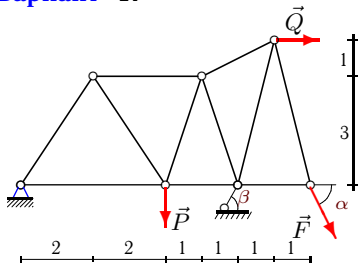
**C6.**  
 $P = 5\text{кН}$ ,  
 $F = 15\text{кН}$ ,  
 $\alpha = 35^\circ$ ,  
 $\beta = 30^\circ$ ,  
 $Q = 40\text{кН}$ .

**Вариант 16**



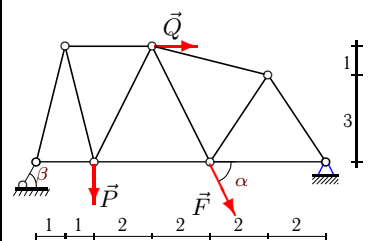
**C6.**  
 $P = 35\text{кН}$ ,  
 $F = 16\text{кН}$ ,  
 $\alpha = 65^\circ$ ,  
 $\beta = 45^\circ$ ,  
 $Q = 30\text{кН}$ .

**Вариант 17**



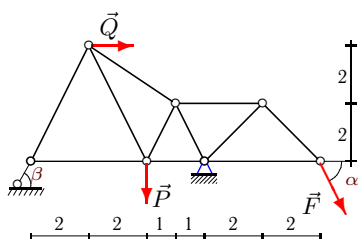
**C6.**  
 $P = 5\text{кН}$ ,  
 $F = 17\text{кН}$ ,  
 $\alpha = 35^\circ$ ,  
 $\beta = 30^\circ$ ,  
 $Q = 10\text{кН}$ .

**Вариант 18**



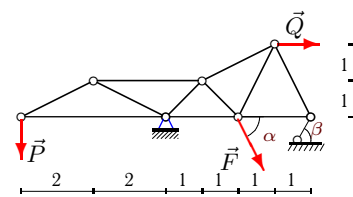
**C6.**  
 $P = 30\text{кН}$ ,  
 $F = 18\text{кН}$ ,  
 $\alpha = 60^\circ$ ,  
 $\beta = 45^\circ$ ,  
 $Q = 60\text{кН}$ .

**Вариант 19**

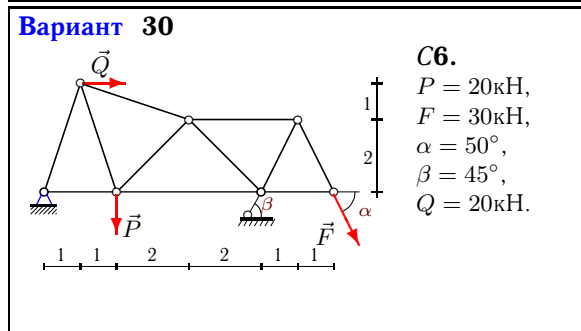
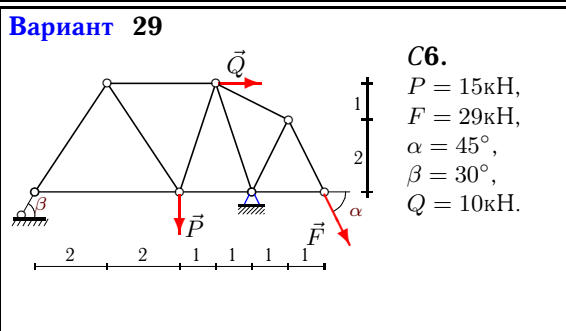
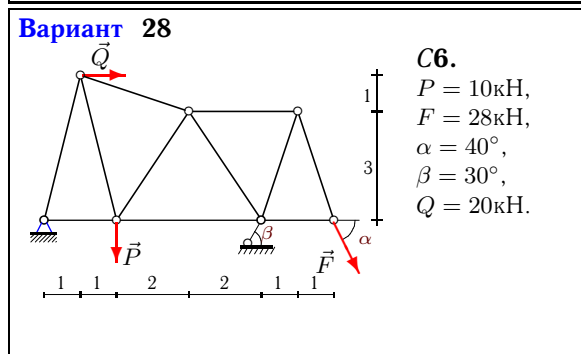
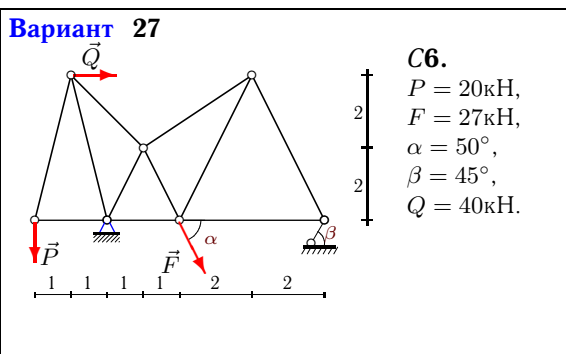
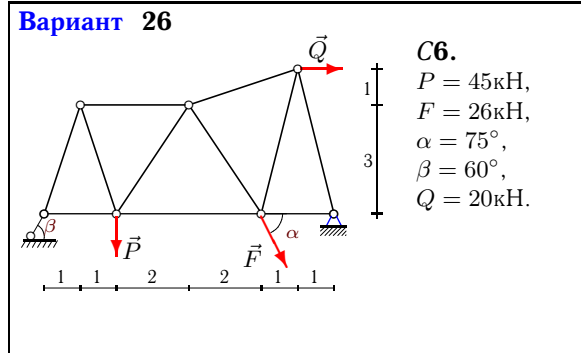
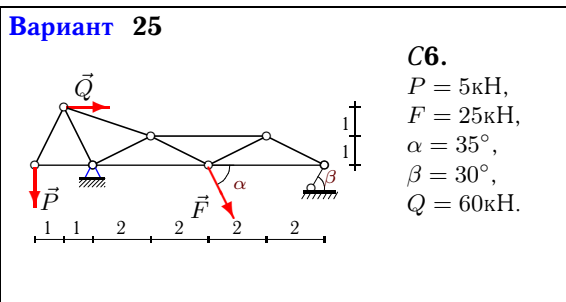
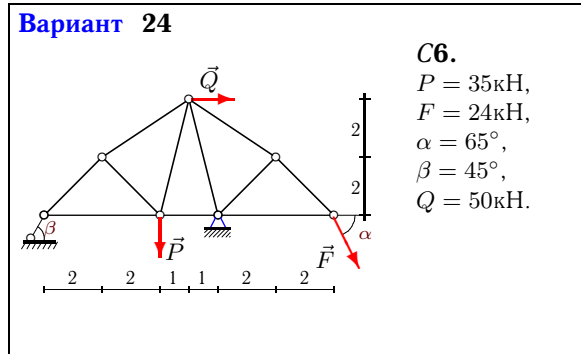
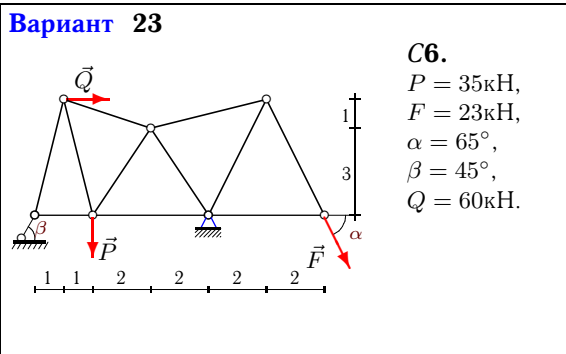
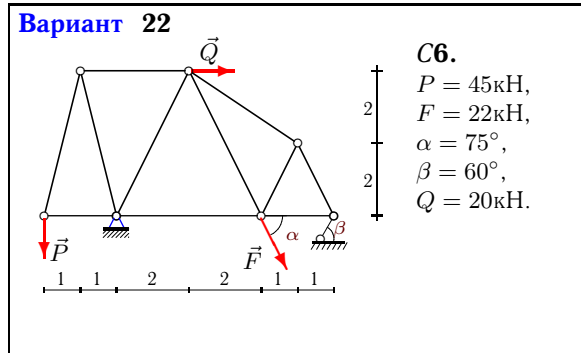
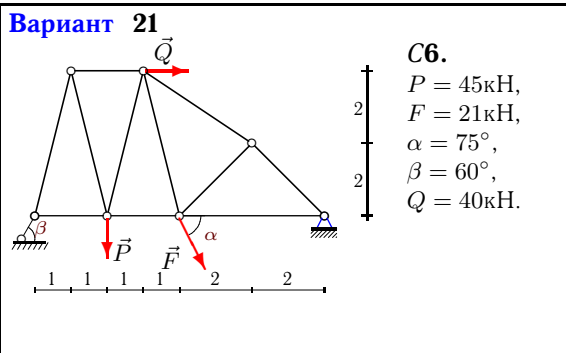


**C6.**  
 $P = 10\text{кН}$ ,  
 $F = 19\text{кН}$ ,  
 $\alpha = 40^\circ$ ,  
 $\beta = 30^\circ$ ,  
 $Q = 50\text{кН}$ .

**Вариант 20**



**C6.**  
 $P = 35\text{кН}$ ,  
 $F = 20\text{кН}$ ,  
 $\alpha = 65^\circ$ ,  
 $\beta = 45^\circ$ ,  
 $Q = 10\text{кН}$ .



Ответы

	$X_A$	$Y_A$	$R_B$	$U_1$	$U_2$	$U_3$	$O_1$	$O_2$	$O_3$	$O_4$	$D_1$	$D_2$	$D_3$	$D_4$
1	-134.644	-37.049	85.245	125.381	156.448	0.532	38.189	-78.207	1.147	0.641	18.813	-29.631	-92.485	-1.411
2	-28.522	12.311	8.207	-5.740	-11.636	-16.211	-4.326	-2.736	-17.755	-17.410	4.326	13.096	-1.259	3.482
3	-99.599	-15.381	54.619	-5.000	94.472	60.956	11.180	-50.596	-34.544	-30.533	6.708	9.889	-38.269	42.746
4	-51.386	34.078	-0.869	-0.614	-7.654	16.771	1.374	1.158	-64.259	-76.202	0.458	30.712	15.280	-25.401
5	-44.237	12.357	12.357	-7.500	-30.112	-40.118	16.771	15.000	-7.815	-13.025	-16.771	9.863	-7.100	10.420
6	-78.279	0.213	52.453	-26.667	-78.514	-78.137	48.074	4.518	-0.384	-0.256	-49.791	-4.469	5.930	0.402
7	-64.621	-8.167	45.332	61.899	51.455	3.862	8.608	5.165	2.846	4.743	-6.887	18.485	-21.317	-3.794
8	-86.731	8.900	47.164	92.665	196.232	100.051	-10.697	-133.839	-133.401	-74.573	99.922	-68.081	-36.911	74.573
9	-112.490	-20.196	82.011	99.026	68.830	-11.088	24.273	26.928	16.059	17.428	-24.273	52.911	-62.301	2.490
10	-40.774	32.887	8.165	-15.000	16.547	11.547	33.541	0.000	-11.547	-8.165	-33.541	-6.455	6.455	8.165
11	-79.611	0.008	63.585	79.614	62.122	1.326	-0.009	-0.008	6.305	10.509	0.009	39.123	-41.352	-8.407
12	-64.805	-3.257	53.485	-10.000	-62.405	-68.062	18.028	20.000	4.607	4.607	-18.028	-12.378	8.944	0.000
13	-23.878	10.592	3.728	-1.365	11.092	-13.285	-2.636	-21.706	-21.185	-14.980	12.344	-5.273	-4.435	14.980
14	-29.062	55.436	-26.825	9.484	-21.984	-14.906	21.207	18.968	29.012	25.644	-21.207	49.158	-59.415	-5.129
15	-39.128	21.201	-15.195	-5.000	-9.438	-24.994	7.071	10.000	25.380	-25.481	-7.071	17.816	2.094	8.561
16	-87.388	-1.125	71.596	86.825	68.200	-0.489	1.258	1.125	13.071	16.213	-1.258	40.389	-48.495	-8.106
17	-63.765	-8.250	46.002	58.264	48.347	11.488	9.916	11.000	19.007	10.051	-9.916	13.967	-5.007	-18.813
18	-75.235	39.353	8.818	-4.677	-15.000	-49.000	-6.427	-3.118	-46.359	-47.297	6.427	26.570	-13.999	33.783
19	1.509	60.355	-76.284	46.993	15.709	2.342	42.644	-21.377	24.426	17.272	-29.386	40.567	-53.824	-17.272
20	2.485	74.063	-29.609	-70.000	-103.421	-31.405	78.262	140.000	46.118	23.408	-78.262	-55.244	84.411	-46.467
21	-59.229	41.392	27.588	-7.821	-7.125	-17.837	-24.628	-11.946	-59.697	-58.537	24.628	21.757	12.375	11.707
22	-32.911	53.750	14.434	-11.250	14.786	13.467	46.385	22.500	-11.268	-13.976	-46.385	-9.783	16.771	6.988
23	-39.157	86.408	-43.223	22.923	-13.521	-0.702	31.504	-51.422	24.556	23.306	-14.742	59.254	-71.639	-29.964
24	-23.975	92.919	-51.149	-0.000	-17.792	-11.609	51.149	52.162	31.370	30.761	-10.230	43.533	-91.295	-6.152
25	-116.713	-1.580	41.839	-2.500	153.552	78.073	5.590	-69.570	-83.679	-46.778	19.007	-34.480	-14.714	46.778
26	-44.066	40.086	34.674	-7.327	-7.299	-34.045	-31.653	-20.019	-0.049	-41.319	31.653	17.993	-18.012	41.335
27	-84.250	13.789	38.034	-5.000	101.144	40.342	20.616	-56.569	-48.485	-30.069	20.616	-37.777	-37.013	60.138
28	-111.881	-12.666	81.328	108.715	94.993	15.450	13.056	-15.716	11.999	18.972	-7.933	21.268	-27.241	-18.972
29	-18.667	42.341	-13.671	7.282	-4.553	10.253	8.215	9.114	18.341	22.927	-8.215	23.016	-31.663	-13.756
30	-86.592	-4.327	66.904	85.150	67.938	7.793	4.561	-20.296	22.981	25.694	2.204	25.327	-34.404	-25.694