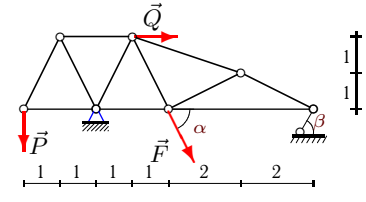
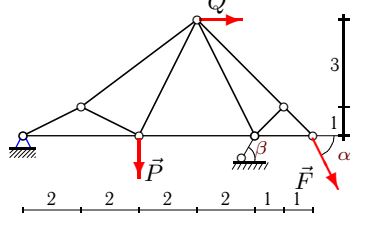
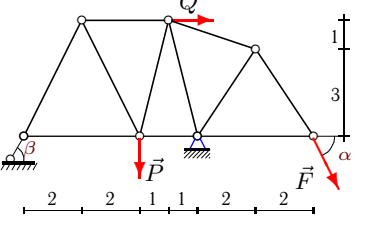
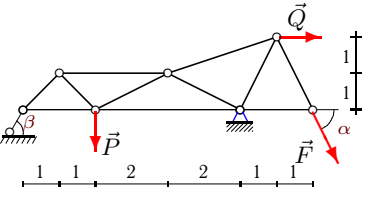
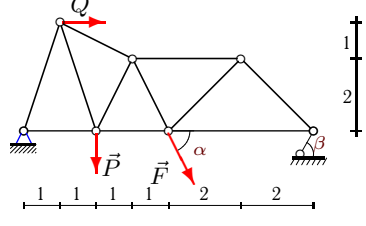
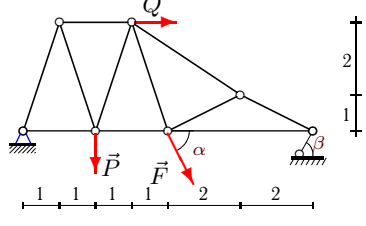
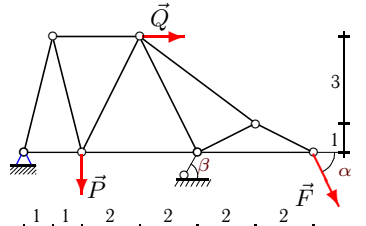
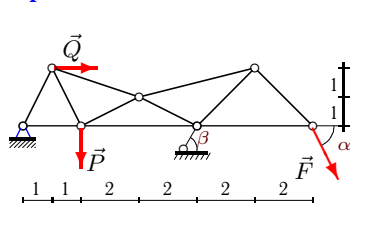
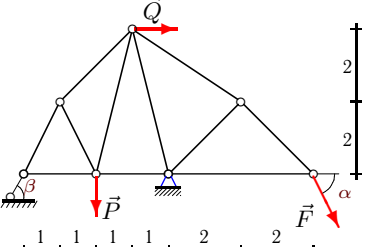
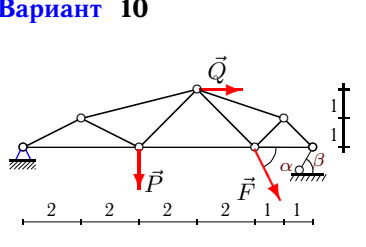
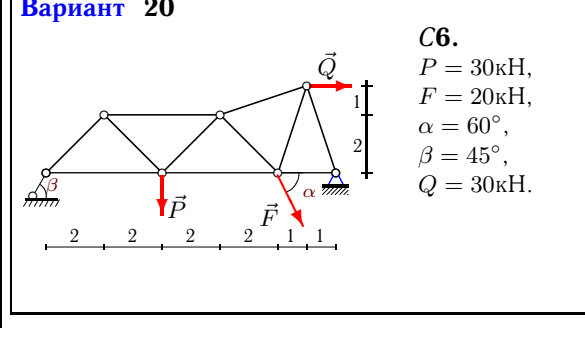
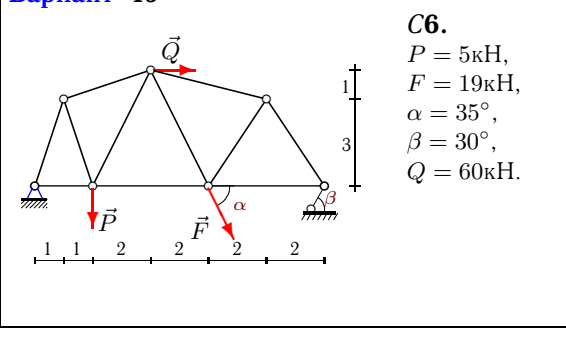
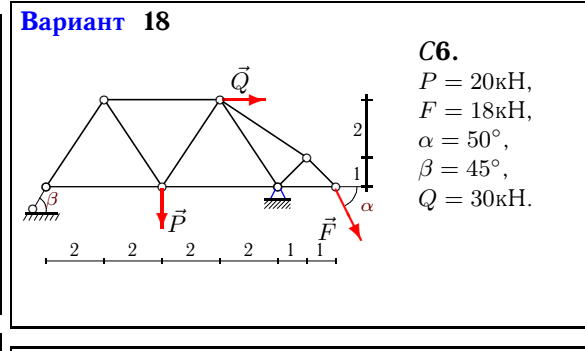
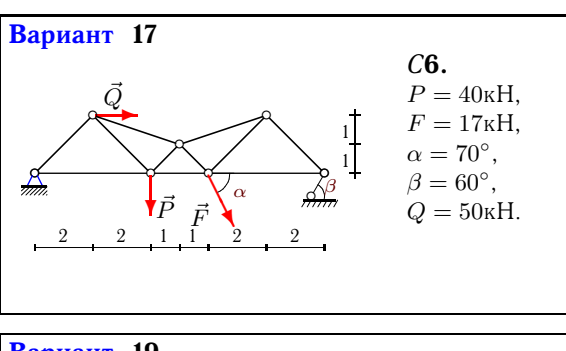
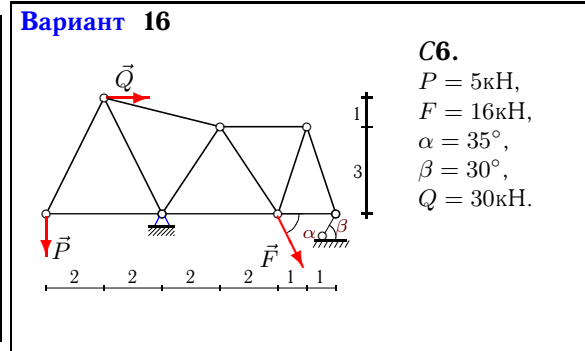
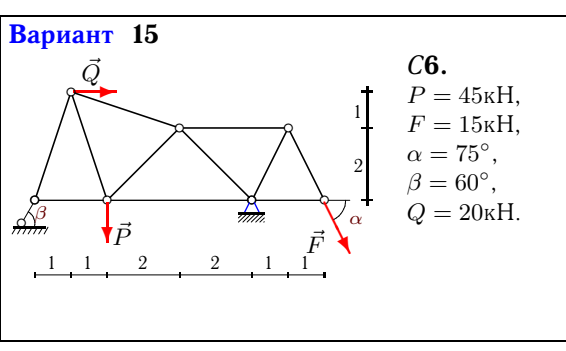
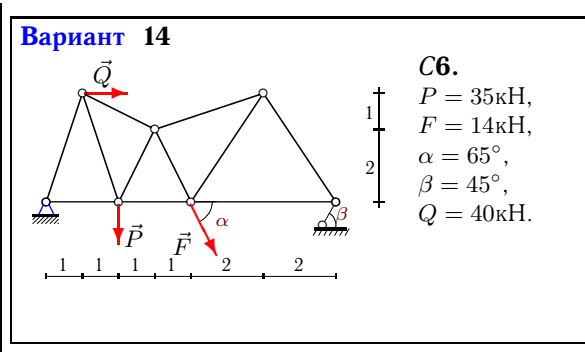
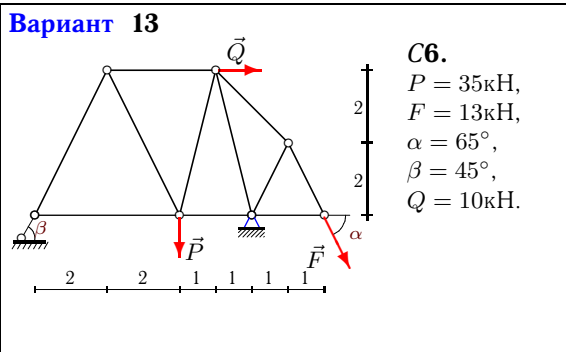
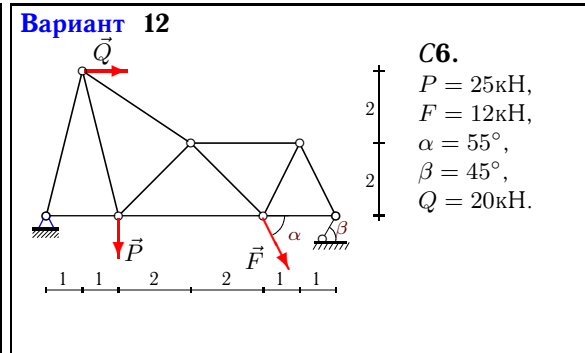
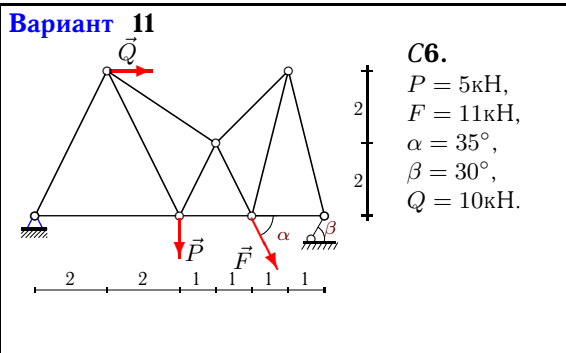
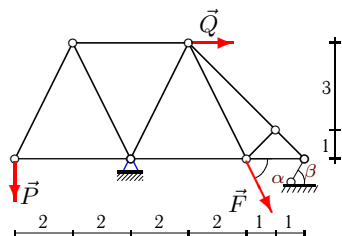


Расчет фермы

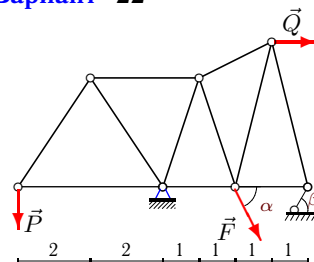
Кирсанов М.Н. Решебник. Теоретическая механика с. 45.

<p>Вариант 1</p>  <p>C6. $P = 20\text{кН}$, $F = 1\text{кН}$, $\alpha = 50^\circ$, $\beta = 45^\circ$, $Q = 40\text{кН}$.</p>	<p>Вариант 2</p>  <p>C6. $P = 45\text{кН}$, $F = 2\text{кН}$, $\alpha = 75^\circ$, $\beta = 60^\circ$, $Q = 30\text{кН}$.</p>
<p>Вариант 3</p>  <p>C6. $P = 25\text{кН}$, $F = 3\text{кН}$, $\alpha = 55^\circ$, $\beta = 45^\circ$, $Q = 50\text{кН}$.</p>	<p>Вариант 4</p>  <p>C6. $P = 25\text{кН}$, $F = 4\text{кН}$, $\alpha = 55^\circ$, $\beta = 45^\circ$, $Q = 20\text{кН}$.</p>
<p>Вариант 5</p>  <p>C6. $P = 20\text{кН}$, $F = 5\text{кН}$, $\alpha = 50^\circ$, $\beta = 45^\circ$, $Q = 40\text{кН}$.</p>	<p>Вариант 6</p>  <p>C6. $P = 10\text{кН}$, $F = 6\text{кН}$, $\alpha = 40^\circ$, $\beta = 30^\circ$, $Q = 40\text{кН}$.</p>
<p>Вариант 7</p>  <p>C6. $P = 20\text{кН}$, $F = 7\text{кН}$, $\alpha = 50^\circ$, $\beta = 45^\circ$, $Q = 60\text{кН}$.</p>	<p>Вариант 8</p>  <p>C6. $P = 35\text{кН}$, $F = 8\text{кН}$, $\alpha = 65^\circ$, $\beta = 45^\circ$, $Q = 60\text{кН}$.</p>
<p>Вариант 9</p>  <p>C6. $P = 25\text{кН}$, $F = 9\text{кН}$, $\alpha = 55^\circ$, $\beta = 45^\circ$, $Q = 40\text{кН}$.</p>	<p>Вариант 10</p>  <p>C6. $P = 10\text{кН}$, $F = 10\text{кН}$, $\alpha = 40^\circ$, $\beta = 30^\circ$, $Q = 30\text{кН}$.</p>

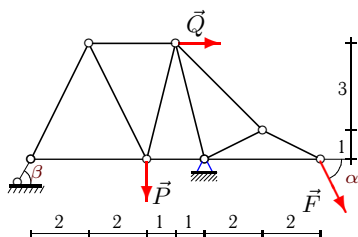


Вариант 21

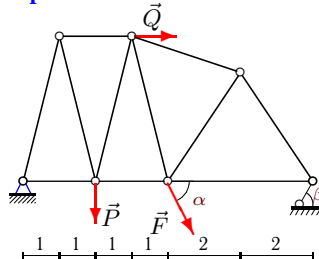
C6.
 $P = 45\text{кН}$,
 $F = 21\text{кН}$,
 $\alpha = 75^\circ$,
 $\beta = 60^\circ$,
 $Q = 30\text{кН}$.

Вариант 22

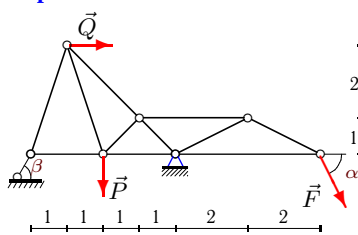
C6.
 $P = 35\text{кН}$,
 $F = 22\text{кН}$,
 $\alpha = 65^\circ$,
 $\beta = 45^\circ$,
 $Q = 10\text{кН}$.

Вариант 23

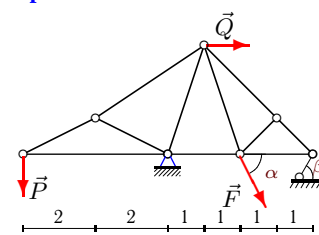
C6.
 $P = 15\text{кН}$,
 $F = 23\text{кН}$,
 $\alpha = 45^\circ$,
 $\beta = 30^\circ$,
 $Q = 50\text{кН}$.

Вариант 24

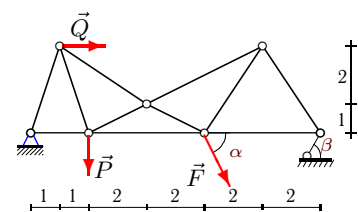
C6.
 $P = 15\text{кН}$,
 $F = 24\text{кН}$,
 $\alpha = 45^\circ$,
 $\beta = 30^\circ$,
 $Q = 40\text{кН}$.

Вариант 25

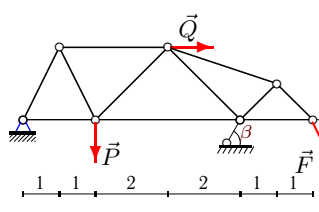
C6.
 $P = 40\text{кН}$,
 $F = 25\text{кН}$,
 $\alpha = 70^\circ$,
 $\beta = 60^\circ$,
 $Q = 40\text{кН}$.

Вариант 26

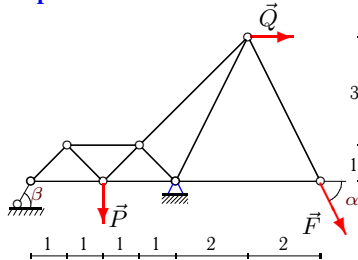
C6.
 $P = 45\text{кН}$,
 $F = 26\text{кН}$,
 $\alpha = 75^\circ$,
 $\beta = 60^\circ$,
 $Q = 10\text{кН}$.

Вариант 27

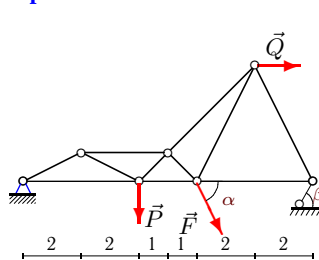
C6.
 $P = 15\text{кН}$,
 $F = 27\text{кН}$,
 $\alpha = 45^\circ$,
 $\beta = 30^\circ$,
 $Q = 60\text{кН}$.

Вариант 28

C6.
 $P = 10\text{кН}$,
 $F = 28\text{кН}$,
 $\alpha = 40^\circ$,
 $\beta = 30^\circ$,
 $Q = 20\text{кН}$.

Вариант 29

C6.
 $P = 15\text{кН}$,
 $F = 29\text{кН}$,
 $\alpha = 45^\circ$,
 $\beta = 30^\circ$,
 $Q = 40\text{кН}$.

Вариант 30

C6.
 $P = 15\text{кН}$,
 $F = 30\text{кН}$,
 $\alpha = 45^\circ$,
 $\beta = 30^\circ$,
 $Q = 50\text{кН}$.

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	-47.565	13.844	9.789	-10.000	24.487	20.766	22.361	20.000	-17.511	-15.478	-22.361	6.883	-0.691	3.096
2	-53.562	7.017	46.090	67.597	41.588	-1.414	-15.691	-14.034	2.732	2.732	-3.138	51.881	-44.626	0.000
3	-25.082	54.096	-37.672	13.319	-12.910	0.082	29.783	26.638	2.826	2.953	-29.783	53.228	-54.149	-1.879
4	-31.202	19.369	12.598	0.000	-23.277	0.656	-12.598	-17.816	29.443	3.663	12.598	35.983	-15.164	-14.073
5	-65.129	1.915	30.993	65.767	78.002	43.830	-2.019	-55.379	-43.830	-30.993	28.124	-7.470	-20.220	30.993
6	-78.247	-5.572	38.857	76.390	69.342	72.508	5.873	3.714	-40.029	-43.443	-5.873	16.414	6.991	-6.206
7	-120.103	-30.242	78.636	112.543	79.862	-6.225	31.172	15.121	10.725	11.990	-31.172	56.172	-63.366	2.398
8	-107.132	-1.500	61.873	106.382	91.130	-3.870	1.677	-73.997	19.930	10.254	24.484	29.293	-70.809	-17.090
9	-10.290	67.245	-49.317	17.436	2.468	-2.210	38.988	32.878	10.633	10.426	-12.996	37.751	-67.794	-2.085
10	-63.888	1.286	30.285	66.459	57.744	41.370	-2.875	-3.534	-23.942	-21.414	0.958	13.536	-1.617	10.707
11	-40.197	-0.923	24.464	39.736	45.390	24.244	1.032	-16.364	-11.532	-12.608	9.117	-3.527	-15.739	21.014
12	-50.505	11.207	33.407	53.307	67.920	35.434	-11.552	-36.926	-23.622	-26.411	32.666	-9.462	-19.506	26.411
13	-16.567	45.709	1.517	-0.536	-8.482	-0.397	-1.199	-1.073	11.108	13.173	1.199	34.971	-43.068	-4.391
14	-76.011	17.594	42.560	81.876	104.902	50.157	-18.546	-69.402	-54.381	-36.169	51.262	-15.241	-38.687	56.836
15	-32.641	44.319	17.517	-3.702	-13.418	-3.362	-15.991	-35.710	14.489	16.199	27.894	26.215	-42.185	-16.199
16	-82.571	-8.608	45.570	-2.500	76.832	47.059	5.590	-29.451	-15.190	-24.017	2.396	7.770	-16.354	24.017
17	-76.359	20.390	41.090	96.749	188.309	56.130	-28.836	-143.535	-112.529	-50.325	93.027	-36.458	-78.057	100.649
18	-36.873	38.486	-6.643	1.566	-18.031	-2.219	5.645	6.263	19.886	19.500	-5.645	29.682	-42.940	-3.900
19	-130.191	-15.641	63.078	124.977	112.050	75.653	16.487	9.892	-37.154	-37.905	-13.189	19.580	-13.002	27.075
20	-52.464	34.856	17.627	0.000	-5.072	-40.845	-17.627	-24.928	8.019	-36.742	17.627	24.800	-21.213	34.069
21	-37.469	61.761	4.068	-22.500	0.850	5.557	50.312	45.000	-4.982	-4.982	-50.312	-18.740	22.679	-0.000
22	-4.267	69.969	-21.256	-23.333	-30.743	-18.788	42.065	46.667	22.380	15.493	-42.065	-36.861	47.411	-25.810
23	1.591	70.439	-78.351	48.266	15.135	-16.263	43.800	39.176	30.667	36.366	-43.800	55.843	-78.195	12.122
24	-112.804	-0.265	64.471	112.738	108.855	77.323	0.273	0.132	-37.068	-38.742	-0.273	15.735	-3.652	24.654
25	-29.214	96.985	-38.674	8.173	-41.140	-38.434	35.304	-37.488	93.969	52.530	-7.362	66.446	-103.934	-52.530
26	-2.328	95.057	-28.802	-90.000	-40.986	-39.344	100.623	92.714	35.275	35.275	14.375	-106.975	26.473	0.000
27	-135.306	1.637	64.910	135.851	231.853	77.851	-1.725	-94.400	-72.572	-39.006	56.922	-87.208	-102.453	78.012
28	-100.334	-5.999	67.995	97.335	78.336	3.451	6.707	5.999	28.457	25.453	-6.707	22.626	-35.353	-12.727
29	31.303	88.512	-106.012	38.803	-82.209	10.253	74.962	106.012	171.137	22.927	-74.962	96.175	74.962	-158.222
30	-138.292	-2.515	77.456	133.262	110.718	86.443	5.623	10.059	31.882	-43.299	-5.623	24.770	7.113	18.094