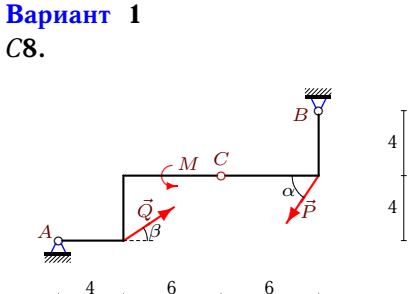
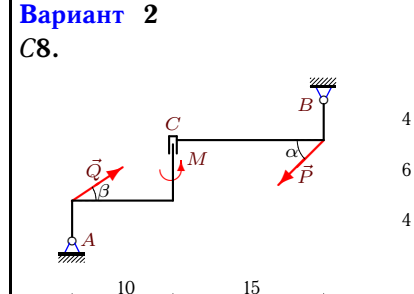
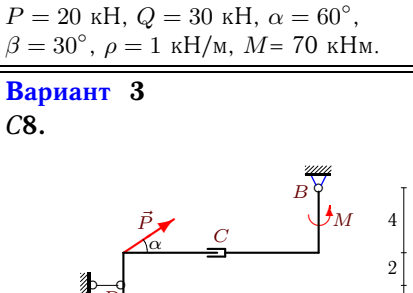
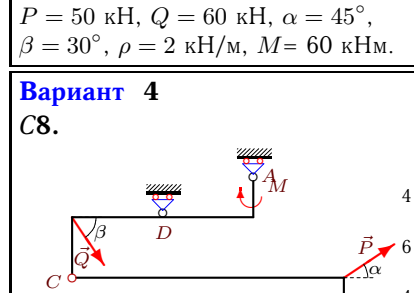
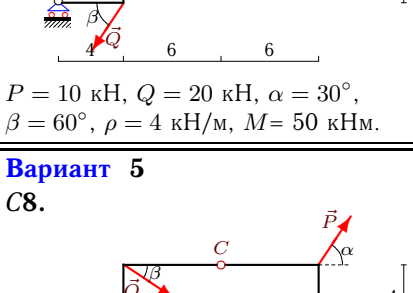
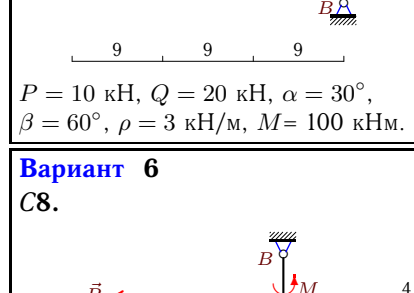
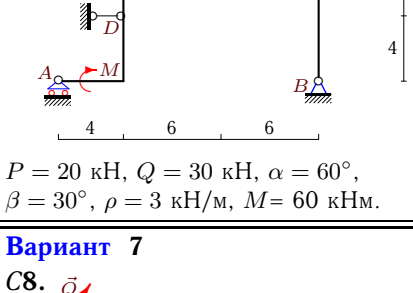
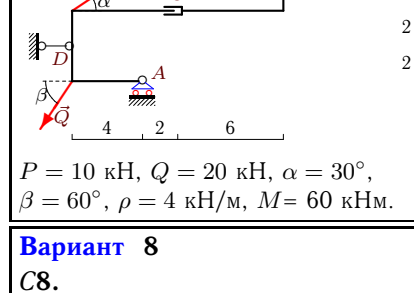
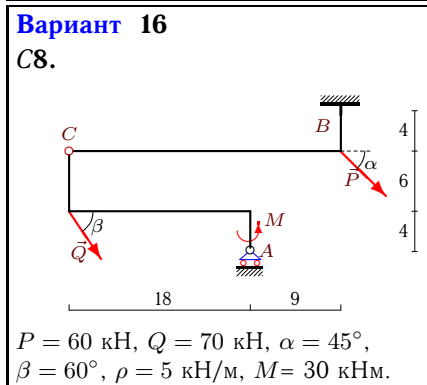
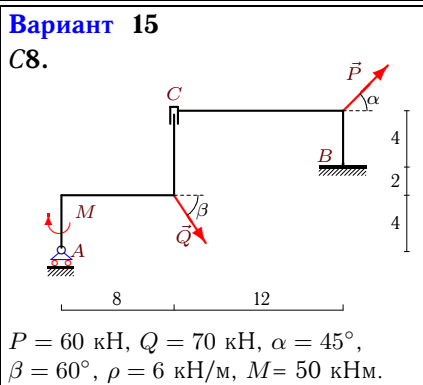
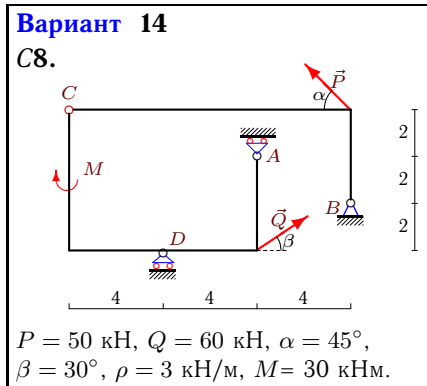
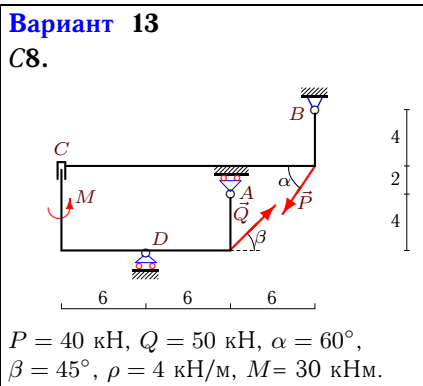
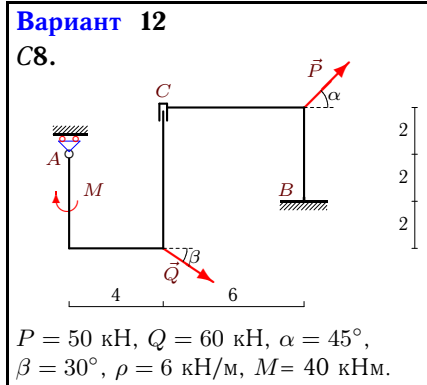
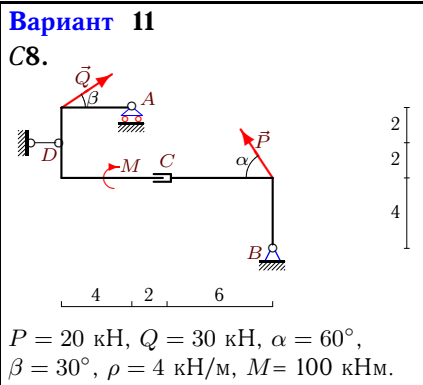
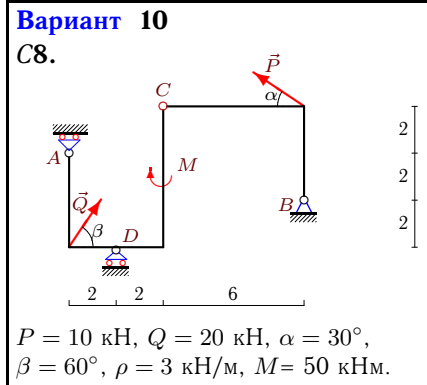
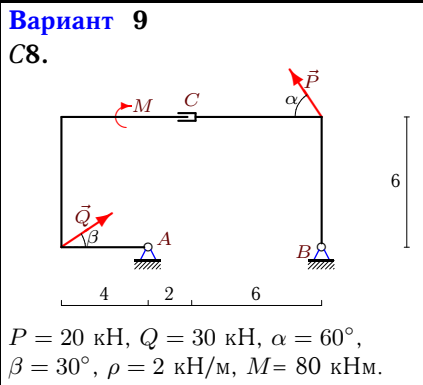


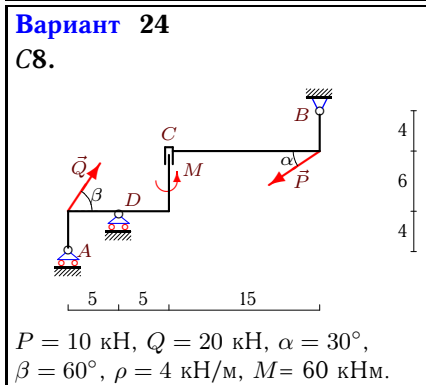
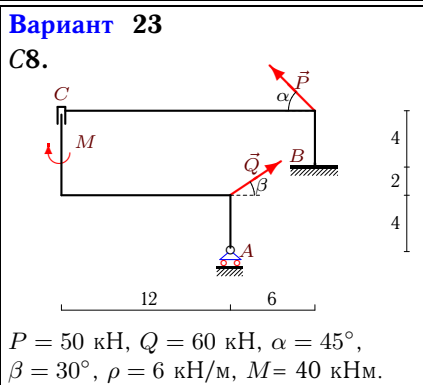
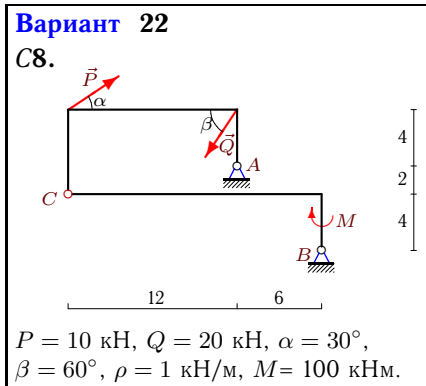
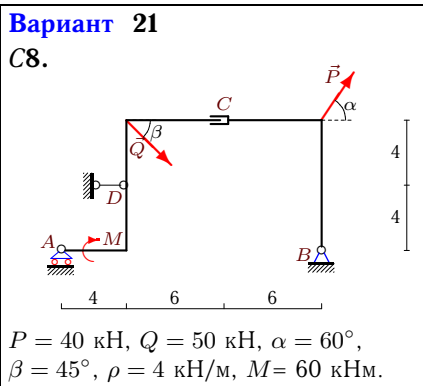
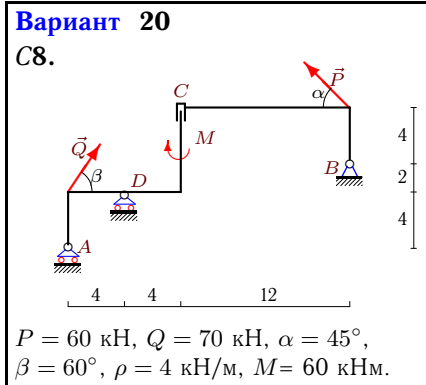
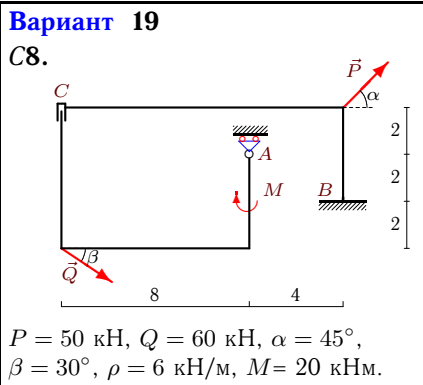
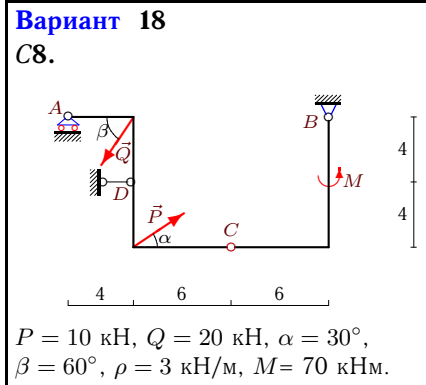
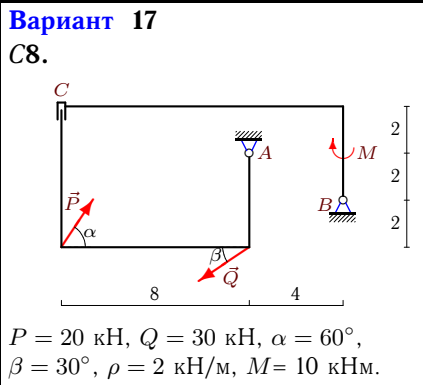
## Расчет составной конструкции

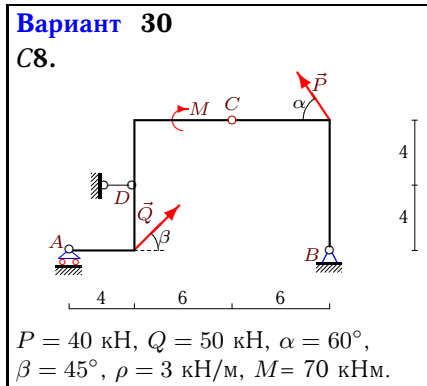
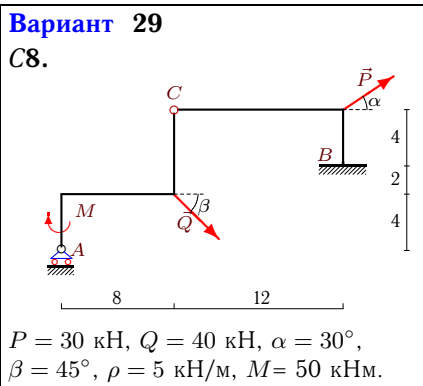
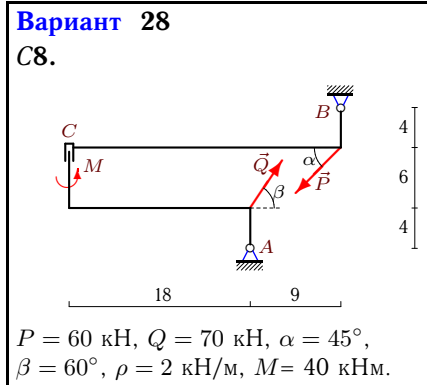
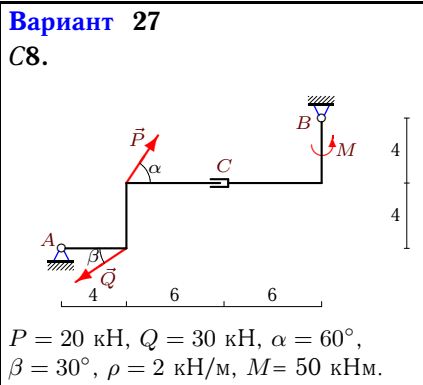
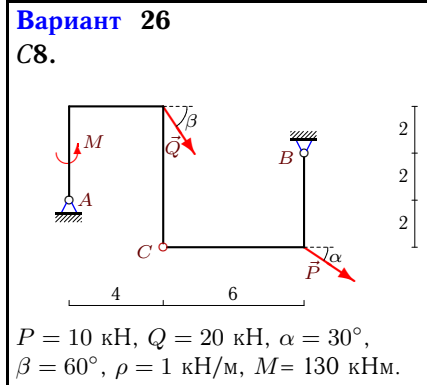
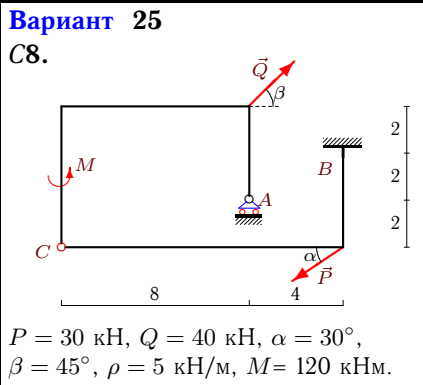
Рама состоит из двух частей, соединенных шарниром или скользящей заделкой. Дан погонный вес рамы  $\rho$ , размеры в метрах и нагрузки. Найти реакции опор.

*Кирсанов М.Н. Решебник. Теоретическая механика с. 54.*

<p><b>Вариант 1</b> С8.</p>  <p><math>P = 20 \text{ кН}, Q = 30 \text{ кН}, \alpha = 60^\circ,</math> <math>\beta = 30^\circ, \rho = 1 \text{ кН/м}, M = 70 \text{ кНм}.</math></p>	<p><b>Вариант 2</b> С8.</p>  <p><math>P = 50 \text{ кН}, Q = 60 \text{ кН}, \alpha = 45^\circ,</math> <math>\beta = 30^\circ, \rho = 2 \text{ кН/м}, M = 60 \text{ кНм}.</math></p>
<p><b>Вариант 3</b> С8.</p>  <p><math>P = 10 \text{ кН}, Q = 20 \text{ кН}, \alpha = 30^\circ,</math> <math>\beta = 60^\circ, \rho = 4 \text{ кН/м}, M = 50 \text{ кНм}.</math></p>	<p><b>Вариант 4</b> С8.</p>  <p><math>P = 10 \text{ кН}, Q = 20 \text{ кН}, \alpha = 30^\circ,</math> <math>\beta = 60^\circ, \rho = 3 \text{ кН/м}, M = 100 \text{ кНм}.</math></p>
<p><b>Вариант 5</b> С8.</p>  <p><math>P = 20 \text{ кН}, Q = 30 \text{ кН}, \alpha = 60^\circ,</math> <math>\beta = 30^\circ, \rho = 3 \text{ кН/м}, M = 60 \text{ кНм}.</math></p>	<p><b>Вариант 6</b> С8.</p>  <p><math>P = 10 \text{ кН}, Q = 20 \text{ кН}, \alpha = 30^\circ,</math> <math>\beta = 60^\circ, \rho = 4 \text{ кН/м}, M = 60 \text{ кНм}.</math></p>
<p><b>Вариант 7</b> С8.</p>  <p><math>P = 60 \text{ кН}, Q = 70 \text{ кН}, \alpha = 45^\circ,</math> <math>\beta = 60^\circ, \rho = 3 \text{ кН/м}, M = 140 \text{ кНм}.</math></p>	<p><b>Вариант 8</b> С8.</p>  <p><math>P = 40 \text{ кН}, Q = 50 \text{ кН}, \alpha = 60^\circ,</math> <math>\beta = 45^\circ, \rho = 2 \text{ кН/м}, M = 70 \text{ кНм}.</math></p>







Ответы

	$X_A$	$Y_A$	$X_B$	$Y_B$	$X_D$	$Y_D$	$M_B$
1	11.77	20.5	-27.75	5.82	—	—	—
2	-31.66	10	15.05	73.36	—	—	—
3	—	54.03	0	54.29	1.34	—	—
4	—	-43.28	-18.66	50.26	—	182.33	—
5	—	31.85	-34.61	61.83	-1.37	—	—
6	—	101.32	0	7	1.34	—	—
7	—	-174.6	7.43	-14.9	—	188.45	—
8	-35.36	-5.14	20	52.43	—	—	—
9	-25.98	21	10	2.68	—	—	—
10	—	-26.43	-1.34	16.9	—	59.21	—
11	—	43.5	10	20.17	-25.98	—	—
12	—	114	-87.32	24.64	—	—	281.5
13	—	-201.95	-15.36	122.64	—	254.6	—
14	—	-118.9	-16.6	0.18	—	155.37	—
15	—	168.62	-77.43	53.57	—	—	682.68
16	—	51.67	-77.43	346.38	—	—	-6154
17	61.74	33.68	-45.76	32	—	—	—
18	—	54.12	24.65	54.2	-23.31	—	—
19	—	138	-87.32	60.64	—	—	-1094.5
20	—	48.3	7.43	21.57	—	-36.93	—
21	—	59.93	-20	68.79	-35.36	—	—
22	29.35	31.54	-28	24.78	—	—	—
23	—	102	-16.6	96.64	—	—	-2041.34
24	—	89.75	-1.34	81	—	-27.07	—
25	—	17.93	-2.3	138.79	—	—	-894.66
26	-19.94	33.47	1.28	12.85	—	—	—
27	15.98	20.88	0	24.8	—	—	—
28	-106.38	-4.62	113.8	104.43	—	—	—
29	—	54.96	-54.27	128.32	—	—	-902.8
30	—	24.32	-2.49	1.68	-12.87	—	—