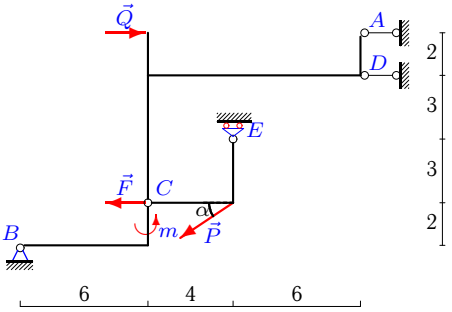
Составная конструкция 3 тел

Определить реакции опор конструкции (в кН), состоящей из трех тел, соединенных в точке C шарниром. Размеры указаны в метрах.

Кирсанов М.Н. **Решебник. Теоретическая механика**/Под ред. А. И. Кириллова.– М.:ФИЗМАТЛИТ, 2002.– 384 с. (с. 67.)

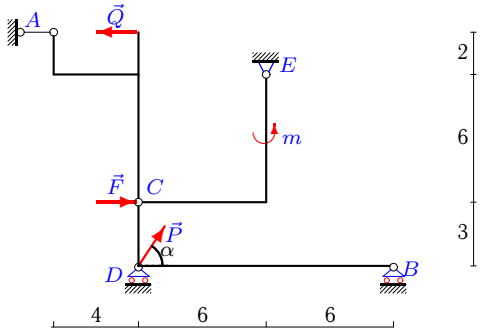
Задача 16.1



$P = 6$ кН, $Q = 3$ кН, $F = 8$ кН, $m = 3$ кНм, $\alpha = 30°$.

16.2

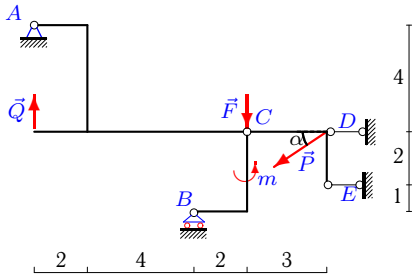
Задача 16.2



$P = 4$ кН, $Q = 9$ кН, $F = 4$ кН, $m = 4$ кНм, $\alpha = 60°$.

16.2

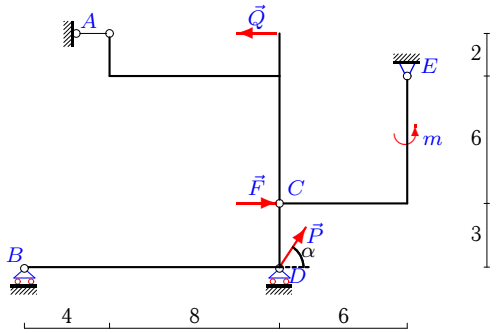
Задача 16.3



$P = 5$ кН, $Q = 4$ кН, $F = 7$ кН, $m = 5$ кНм, $\alpha = 30°$.

16.2

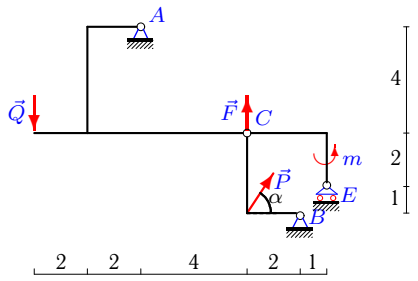
Задача 16.4



$P = 9$ кН, $Q = 7$ кН, $F = 4$ кН, $m = 3$ кНм, $\alpha = 60°$.

16.2

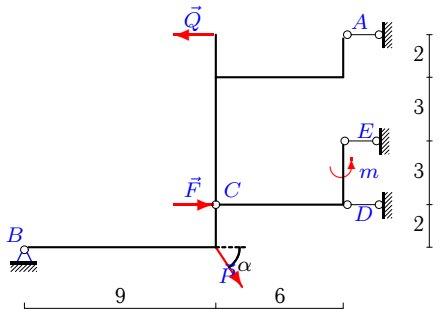
Задача 16.5



$P = 4$ кН, $Q = 9$ кН, $F = 3$ кН, $m = 6$ кНм, $\alpha = 60°$.

16.2

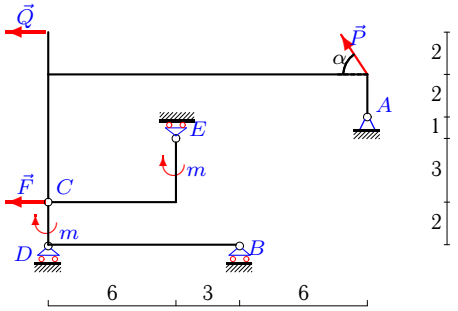
Задача 16.6



$P = 3$ кН, $Q = 9$ кН, $F = 5$ кН, $m = 3$ кНм, $\alpha = 60°$.

16.2

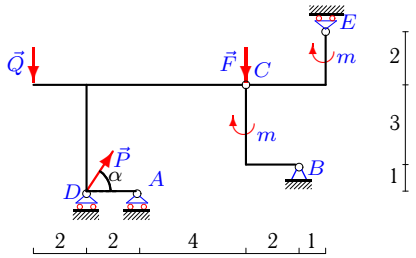
Задача 16.7



$P = 2$ кН, $Q = 9$ кН, $F = 9$ кН,
$m = 4$ кНм, $\alpha = 60°$.

16.2

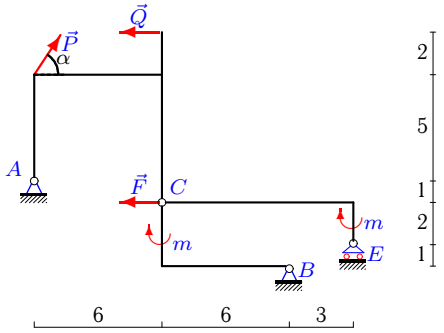
Задача 16.8



$P = 8$ кН, $Q = 8$ кН, $F = 8$ кН,
$m = 4$ кНм, $\alpha = 60°$.

16.2

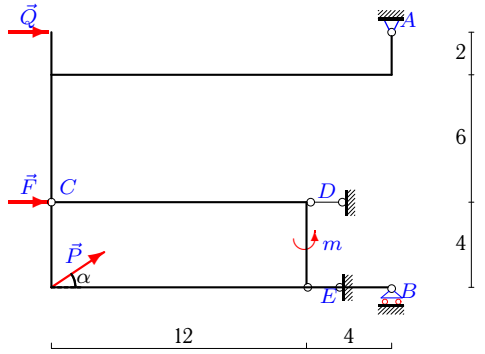
Задача 16.9



$P = 9$ кН, $Q = 4$ кН, $F = 3$ кН,
$m = 6$ кНм, $\alpha = 60°$.

16.2

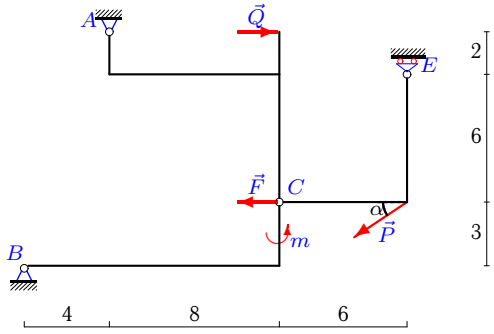
Задача 16.10



$P = 1$ кН, $Q = 9$ кН, $F = 7$ кН,
$m = 6$ кНм, $\alpha = 30°$.

16.2

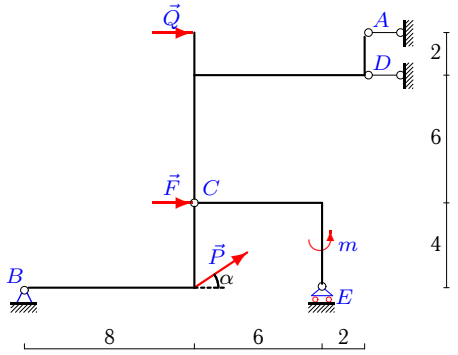
Задача 16.11



$P = 4$ кН, $Q = 8$ кН, $F = 3$ кН,
$m = 3$ кНм, $\alpha = 30°$.

16.2

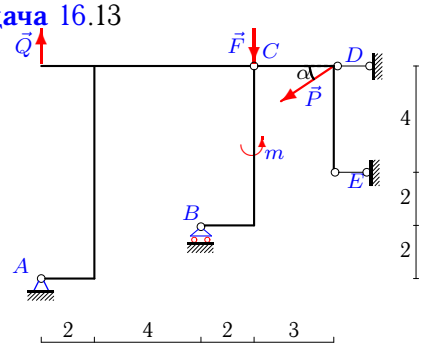
Задача 16.12



$P = 3$ кН, $Q = 5$ кН, $F = 8$ кН,
$m = 5$ кНм, $\alpha = 30°$.

16.2

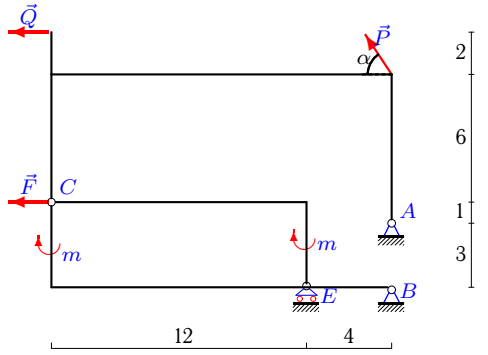
Задача 16.13



$P = 5$ кН, $Q = 3$ кН, $F = 7$ кН,
$m = 5$ кНм, $\alpha = 30°$.

16.2

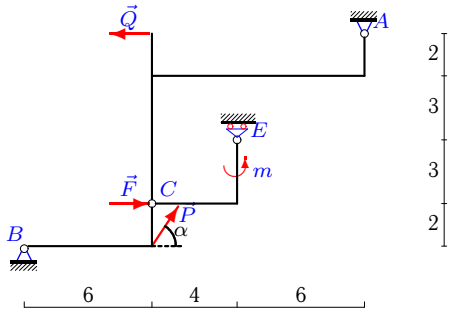
Задача 16.14



$P = 1$ кН, $Q = 8$ кН, $F = 3$ кН,
$m = 6$ кНм, $\alpha = 60°$.

16.2

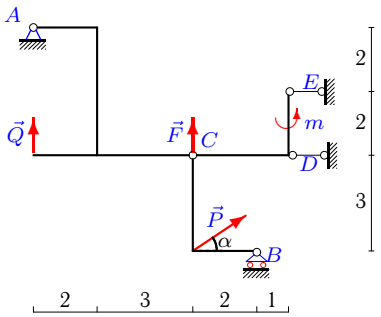
Задача 16.15



$P = 9$ кН, $Q = 7$ кН, $F = 3$ кН,
$m = 3$ кНм, $\alpha = 60°$.

16.2

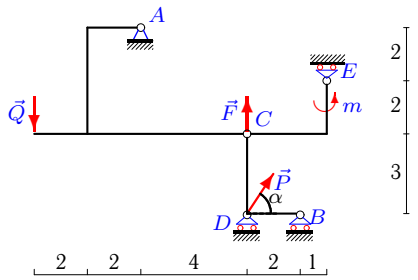
Задача 16.16



$P = 1$ кН, $Q = 2$ кН, $F = 7$ кН,
$m = 4$ кНм, $\alpha = 30°$.

16.2

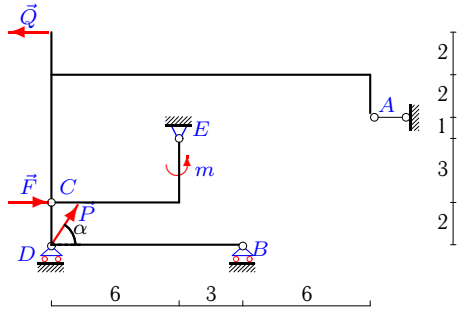
Задача 16.17



$P = 1$ кН, $Q = 1$ кН, $F = 9$ кН,
$m = 4$ кНм, $\alpha = 60°$.

16.2

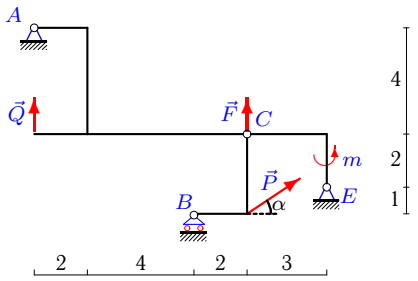
Задача 16.18



$P = 4$ кН, $Q = 5$ кН, $F = 4$ кН,
$m = 4$ кНм, $\alpha = 60°$.

16.2

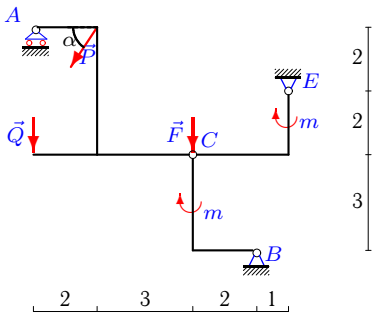
Задача 16.19



$P = 8$ кН, $Q = 2$ кН, $F = 2$ кН,
$m = 5$ кНм, $\alpha = 30°$.

16.2

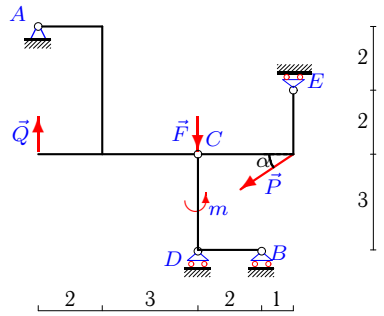
Задача 16.20



$P = 1$ кН, $Q = 5$ кН, $F = 1$ кН,
$m = 4$ кНм, $\alpha = 60°$.

16.2

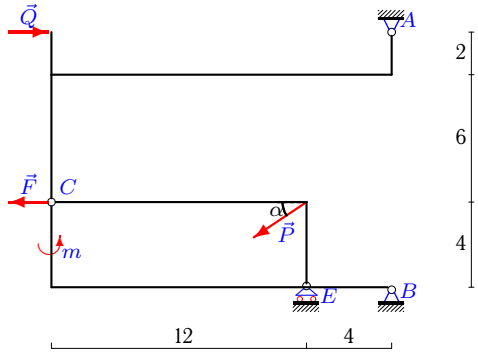
Задача 16.21



$P = 6$ кН, $Q = 2$ кН, $F = 9$ кН,
$m = 4$ кНм, $\alpha = 30°$.

16.2

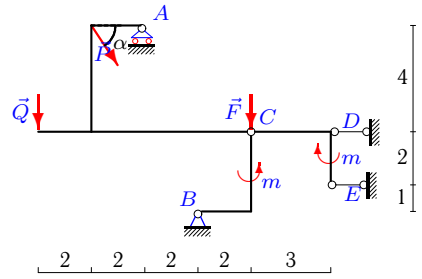
Задача 16.22



$P = 9$ кН, $Q = 7$ кН, $F = 3$ кН,
$m = 6$ кНм, $\alpha = 30°$.

16.2

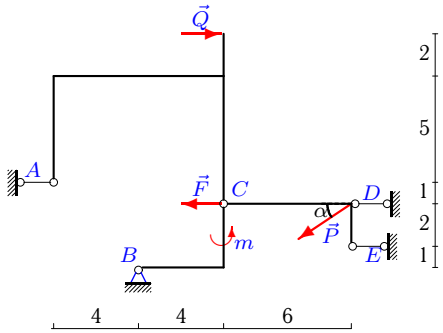
Задача 16.23



$P = 1$ кН, $Q = 4$ кН, $F = 5$ кН,
$m = 5$ кНм, $\alpha = 60°$.

16.2

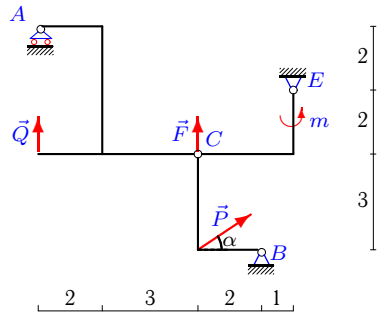
Задача 16.24



$P = 8$ кН, $Q = 9$ кН, $F = 5$ кН,
$m = 5$ кНм, $\alpha = 30°$.

16.2

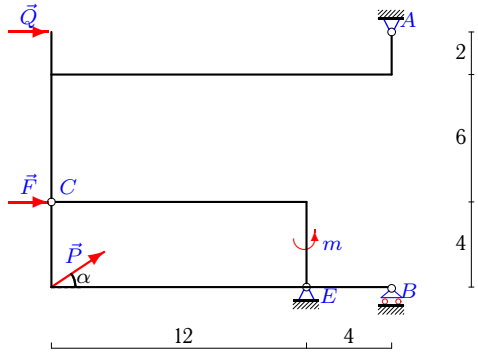
Задача 16.25



$P = 6$ кН, $Q = 8$ кН, $F = 1$ кН,
$m = 4$ кНм, $\alpha = 30°$.

16.2

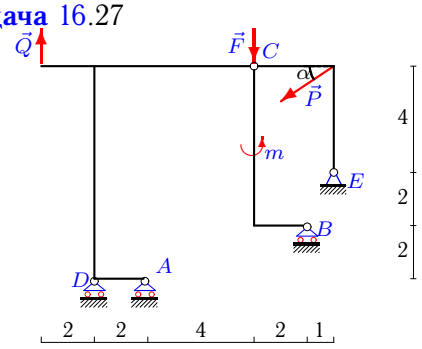
Задача 16.26



$P = 8$ кН, $Q = 9$ кН, $F = 2$ кН,
$m = 6$ кНм, $\alpha = 30°$.

16.2

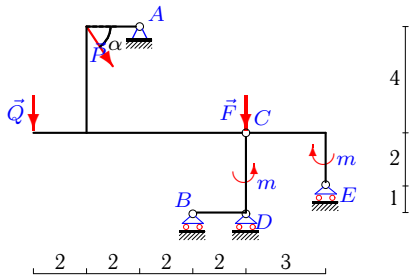
Задача 16.27



$P = 3$ кН, $Q = 6$ кН, $F = 6$ кН,
$m = 6$ кНм, $\alpha = 30°$.

16.2

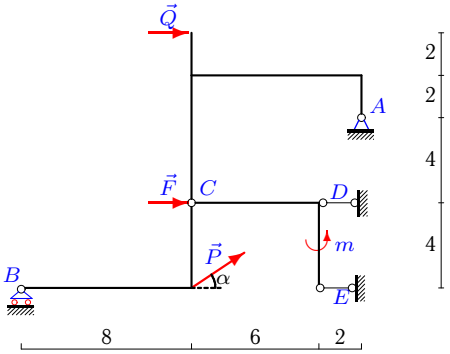
Задача 16.28



$P = 6$ кН, $Q = 3$ кН, $F = 9$ кН,
$m = 5$ кНм, $\alpha = 60°$.

16.2

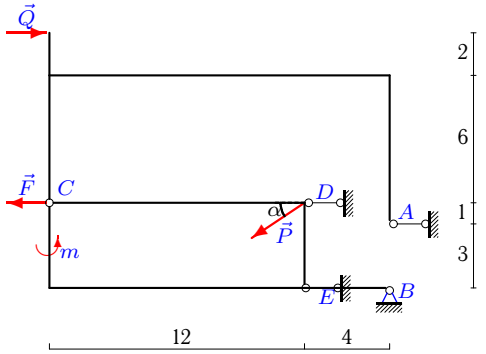
Задача 16.29



$P = 5$ кН, $Q = 9$ кН, $F = 7$ кН,
$m = 5$ кНм, $\alpha = 30°$.

16.2

Задача 16.30



$P = 6$ кН, $Q = 3$ кН, $F = 5$ кН,
$m = 6$ кНм, $\alpha = 30°$.

16.2

Составная конструкция 3 тел

№	X_A	Y_A	X_B	Y_B	X_E	Y_E	X_D	Y_D
1	−47.088	–	−1.500	0.000	–	3.000	58.784	–
2	9.000	–	–	−0.500	−6.000	−6.666	–	3.702
3	−14.000	3.000	–	2.500	3.750	–	14.580	–
4	7.000	–	–	1.125	−8.500	−9.000	–	0.080
5	−26.928	44.928	24.928	−40.392	–	−2.000	–	–
6	9.000	–	10.191	2.598	1.000	–	−17.691	–
7	19.000	−1.865	–	0.444	–	0.666	–	−0.977
8	–	−20.000	−4.000	8.000	–	1.333	–	19.738
9	−3.750	−6.335	6.250	−2.125	–	0.666	–	–
10	−9.567	−0.283	–	−0.216	−1.500	–	−5.799	–
11	−6.507	−1.492	4.971	1.492	–	2.000	–	–
12	15.000	–	−3.931	−0.666	–	−0.833	−26.666	–
13	7.000	4.000	–	2.500	1.875	–	−4.544	–
14	33.000	−7.116	−21.500	5.750	–	0.500	–	–
15	−5.951	−10.361	5.451	3.317	–	−0.750	–	–
16	7.751	−8.201	–	−1.299	2.000	–	−10.617	–
17	−0.500	2.500	–	−0.750	–	−1.333	–	−9.282
18	10.000	–	–	−0.444	−11.000	−6.166	–	3.147
19	−116.066	56.033	–	10.392	109.138	−74.425	–	–
20	–	5.919	1.255	0.116	−0.755	0.829	–	–
21	5.196	−6.156	–	−2.000	–	3.000	–	15.156
22	−2.901	2.049	6.696	−2.049	–	4.500	–	–
23	–	8.799	−0.955	1.067	2.500	–	−2.044	–
24	−72.000	–	3.666	4.000	12.000	–	59.261	–
25	–	−8.000	−3.965	−1.846	−1.230	−2.153	–	–
26	−14.692	−2.846	–	−1.732	−3.235	0.578	–	–
27	–	43.392	–	−3.000	2.598	−1.964	–	−36.928
28	−3.000	13.794	–	2.500	–	1.666	–	−0.764
29	−27.330	−4.665	–	2.165	−1.250	–	8.250	–
30	24.000	–	−13.500	3.000	9.000	–	−12.303	–