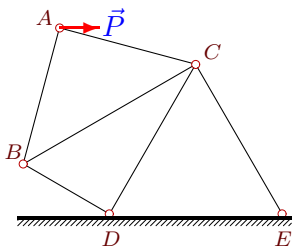


Плоская конструкция из 6 стержней

Кирсанов М.Н. **Решebник. Теоретическая механика**/Под ред. А. И. Кириллова.—
М.: ФИЗМАТЛИТ, 2008. — 384 с. (с.14.)

Задача S-1.1.

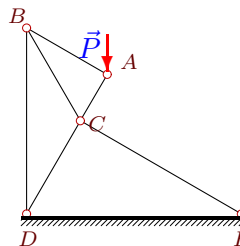
Каргин Н



$P=10$ кН,
 $\angle ACB=45^\circ$,
 $\angle ABC=45^\circ$,
 $\angle BDC=90^\circ$,
 $\angle BCD=30^\circ$,
 $\angle CDE=60^\circ$,
 $\angle CED=60^\circ$.

Задача S-1.2.

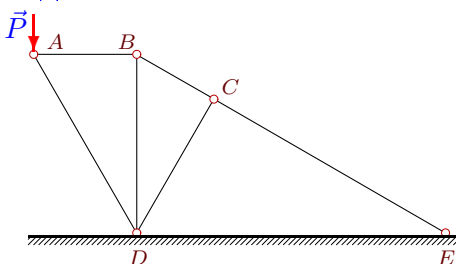
Персианова Д. С.



$P=15$ кН,
 $\angle ACB=60^\circ$,
 $\angle ABC=30^\circ$,
 $\angle BDC=30^\circ$,
 $\angle BCD=120^\circ$,
 $\angle CDE=60^\circ$,
 $\angle CED=30^\circ$.

Задача S-1.3.

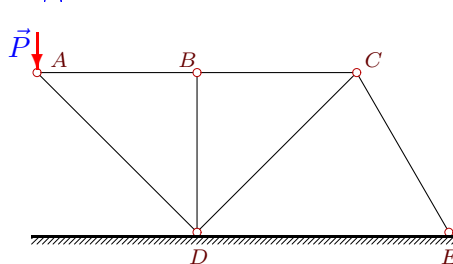
Курманов



$P=8$ кН,
 $\angle ABD=90^\circ$,
 $\angle ADB=30^\circ$,
 $\angle BDC=30^\circ$,
 $\angle BCD=90^\circ$,
 $\angle CDE=60^\circ$,
 $\angle CED=30^\circ$.

Задача S-1.4.

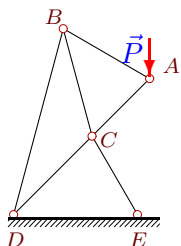
Можяев В.Н.



$P=9$ кН,
 $\angle ABD=90^\circ$,
 $\angle ADB=45^\circ$,
 $\angle BDC=45^\circ$,
 $\angle BCD=45^\circ$,
 $\angle CDE=45^\circ$,
 $\angle CED=60^\circ$.

Задача S-1.5.

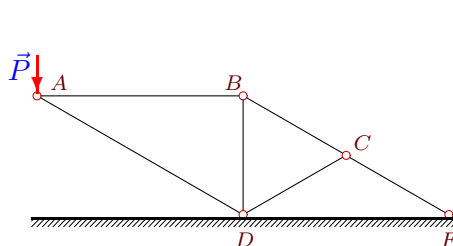
Захаров Н.Н.



$P=23$ кН,
 $\angle ACB=60^\circ$,
 $\angle ABC=45^\circ$,
 $\angle BDC=30^\circ$,
 $\angle BCD=120^\circ$,
 $\angle CDE=45^\circ$,
 $\angle CED=60^\circ$.

Задача S-1.6.

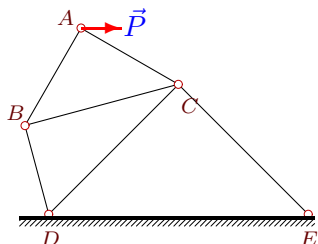
Мижеров А.



$P=17$ кН,
 $\angle ABD=90^\circ$,
 $\angle ADB=60^\circ$,
 $\angle BDC=60^\circ$,
 $\angle BCD=60^\circ$,
 $\angle CDE=30^\circ$,
 $\angle CED=30^\circ$.

Задача S-1.7.

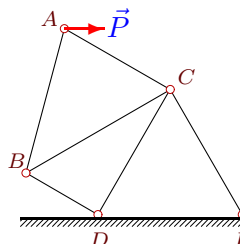
Мякота К.



$P=28$ кН,
 $\angle ACB=45^\circ$,
 $\angle ABC=45^\circ$,
 $\angle BDC=60^\circ$,
 $\angle BCD=30^\circ$,
 $\angle CDE=45^\circ$,
 $\angle CED=45^\circ$.

Задача S-1.8.

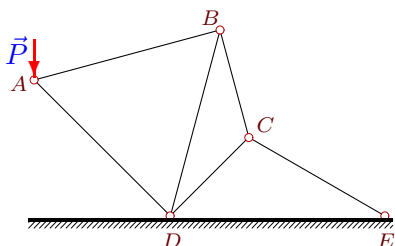
Никоноров В.



$P=5$ кН,
 $\angle ACB=60^\circ$,
 $\angle ABC=45^\circ$,
 $\angle BDC=90^\circ$,
 $\angle BCD=30^\circ$,
 $\angle CDE=60^\circ$,
 $\angle CED=60^\circ$.

Задача S-1.9.

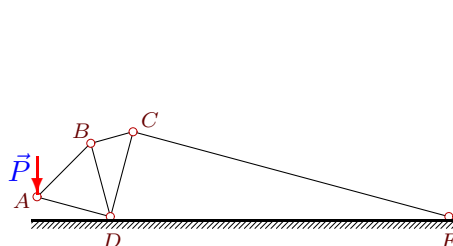
Никитин К.



$P=6$ кН,
 $\angle ABD=60^\circ$,
 $\angle ADB=60^\circ$,
 $\angle BDC=30^\circ$,
 $\angle BCD=120^\circ$,
 $\angle CDE=45^\circ$,
 $\angle CED=30^\circ$.

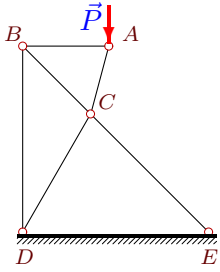
Задача S-1.10.

Семенов Д.



$P=30$ кН,
 $\angle ABD=60^\circ$,
 $\angle ADB=60^\circ$,
 $\angle BDC=30^\circ$,
 $\angle BCD=60^\circ$,
 $\angle CDE=75^\circ$,
 $\angle CED=15^\circ$.

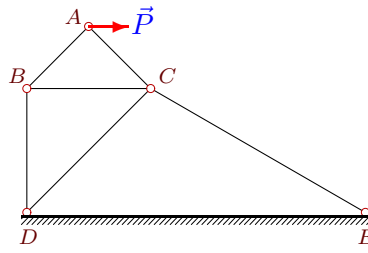
Задача S-1.11.



Морозов А. И.

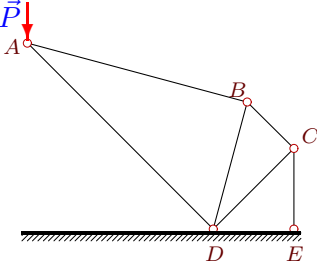
$P=21$ кН,
 $\angle ACB=60^\circ$,
 $\angle ABC=45^\circ$,
 $\angle BDC=30^\circ$,
 $\angle BCD=105^\circ$,
 $\angle CDE=60^\circ$,
 $\angle CED=45^\circ$.

Задача S-1.12.



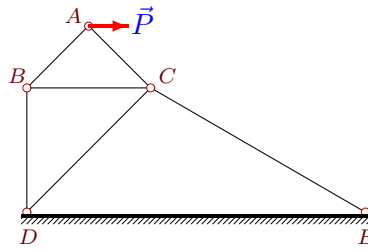
$P=4$ кН,
 $\angle ACB=45^\circ$,
 $\angle ABC=45^\circ$,
 $\angle BDC=45^\circ$,
 $\angle BCD=45^\circ$,
 $\angle CDE=45^\circ$,
 $\angle CED=30^\circ$.

Задача S-1.13.



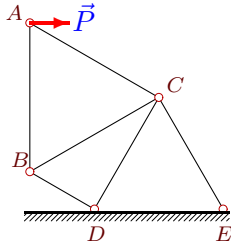
$P=31$ кН,
 $\angle ABD=90^\circ$,
 $\angle ADB=60^\circ$,
 $\angle BDC=30^\circ$,
 $\angle BCD=90^\circ$,
 $\angle CDE=45^\circ$,
 $\angle CED=90^\circ$.

Задача S-1.14.



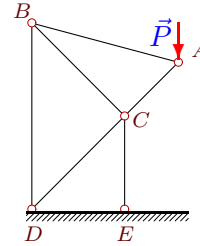
$P=32$ кН,
 $\angle ACB=45^\circ$,
 $\angle ABC=45^\circ$,
 $\angle BDC=45^\circ$,
 $\angle BCD=45^\circ$,
 $\angle CDE=45^\circ$,
 $\angle CED=30^\circ$.

Задача S-1.15.



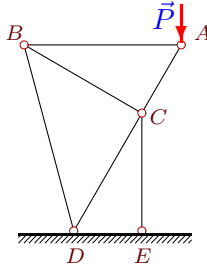
$P=15$ кН,
 $\angle ACB=60^\circ$,
 $\angle ABC=60^\circ$,
 $\angle BDC=90^\circ$,
 $\angle BCD=30^\circ$,
 $\angle CDE=60^\circ$,
 $\angle CED=60^\circ$.

Задача S-1.16.



$P=9$ кН,
 $\angle ACB=90^\circ$,
 $\angle ABC=30^\circ$,
 $\angle BDC=45^\circ$,
 $\angle BCD=90^\circ$,
 $\angle CDE=45^\circ$,
 $\angle CED=90^\circ$.

Задача S-1.17.



$P=1$ кН,
 $\angle ACB=90^\circ$,
 $\angle ABC=30^\circ$,
 $\angle BDC=45^\circ$,
 $\angle BCD=90^\circ$,
 $\angle CDE=60^\circ$,
 $\angle CED=90^\circ$.

S-1

Ответы.

Плоская конструкция из 6 стержней

01-Mar-16

	S_{AB}	S_{AC}	S_{AD}	S_{BC}	S_{BD}	S_{CD}	S_{CE}	
1	2.588	-9.659	—	-2.887	2.113	11.220	-12.440	Каргин Н
2	7.500	-12.990	—	-12.990	7.500	-19.486	-11.250	Персианова Д. С.
3	4.619	—	-9.238	5.333	-2.667	-0.000	5.333	Курманов
4	9.000	—	-12.728	9.000	0.000	-8.069	6.588	Можаев В.Н.
5	16.837	-20.621	—	-32.527	23.811	-29.337	-29.163	Захаров Н.Н.
6	29.445	—	-34.000	34.000	-17.000	-0.000	34.000	Микеров А.
7	14.000	-24.249	—	-9.899	9.899	14.849	-28.372	Мякота К.
8	2.588	-5.000	—	-2.887	2.113	6.220	-7.440	Никоноров В.
9	4.899	—	-6.692	8.485	-9.798	6.212	7.608	НИКИТИН К.
10	33.461	—	-24.495	28.978	-16.730	-14.489	25.095	Семенов Д.
11	5.627	-21.741	—	-7.958	5.627	-19.492	-13.783	Морозов А. И.
12	2.828	-2.828	—	-2.000	2.000	0.277	-4.392	
13	43.841	—	-59.887	50.623	-25.311	-50.623	71.591	
14	22.627	-22.627	—	-16.000	16.000	2.219	-35.138	
15	8.660	-17.321	—	-8.660	8.660	20.000	-25.000	
16	7.348	-10.038	—	-10.038	5.196	-0.000	-14.196	
17	0.577	-1.155	—	-0.789	0.408	0.211	-1.577	

S-1 файл 1sd-AnsA