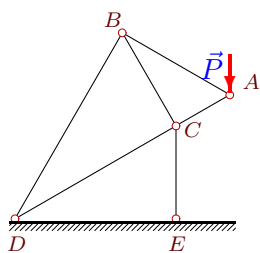


Плоская конструкция из 6 стержней

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

Задача S-1.1.

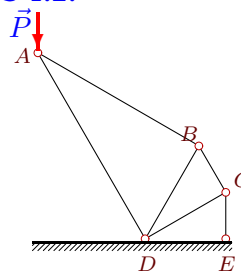
Дергачева Мария



$P=27$ кН,
 $\angle ACB=90^\circ$,
 $\angle ABC=30^\circ$,
 $\angle BDC=30^\circ$,
 $\angle BCD=90^\circ$,
 $\angle CDE=30^\circ$,
 $\angle CED=90^\circ$.

Задача S-1.2.

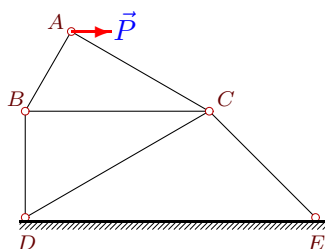
Лукин Евгений



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

Задача S-1.3.

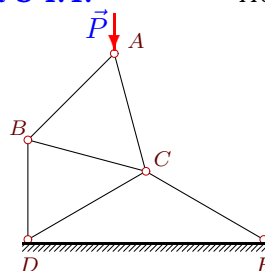
Очеретный Владимир



$P=18$ кН,
 $\angle ACB=30^\circ$,
 $\angle ABC=60^\circ$,
 $\angle BDC=60^\circ$,
 $\angle BCD=30^\circ$,
 $\angle CDE=30^\circ$,
 $\angle CED=45^\circ$.

Задача S-1.4.

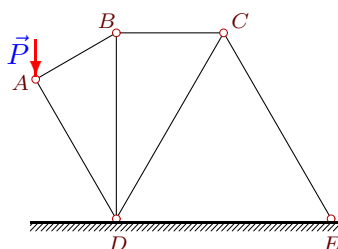
Повальнова Екатерина



$P=29$ кН,
 $\angle ACB=60^\circ$,
 $\angle ABC=60^\circ$,
 $\angle BDC=60^\circ$,
 $\angle BCD=45^\circ$,
 $\angle CDE=30^\circ$,
 $\angle CED=30^\circ$.

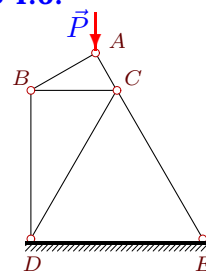
Задача S-1.5.

Чеврев Александр



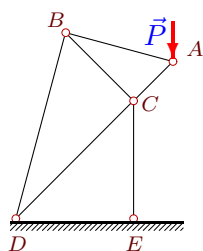
$P=23$ кН,
 $\angle ABD=60^\circ$,
 $\angle ADB=30^\circ$,
 $\angle BDC=30^\circ$,
 $\angle BCD=60^\circ$,
 $\angle CDE=60^\circ$,
 $\angle CED=60^\circ$.

Задача S-1.6.



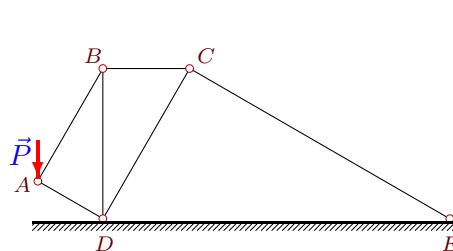
$P=20$ кН,
 $\angle ACB=60^\circ$,
 $\angle ABC=30^\circ$,
 $\angle BDC=30^\circ$,
 $\angle BCD=60^\circ$,
 $\angle CDE=60^\circ$,
 $\angle CED=60^\circ$.

Задача S-1.7.



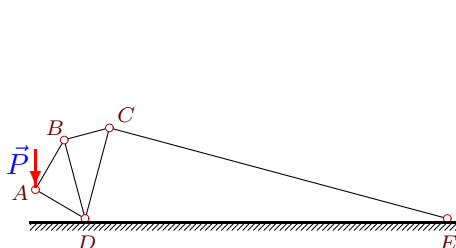
$P=18$ кН,
 $\angle ACB=90^\circ$,
 $\angle ABC=30^\circ$,
 $\angle BDC=30^\circ$,
 $\angle BCD=90^\circ$,
 $\angle CDE=45^\circ$,
 $\angle CED=90^\circ$.

Задача S-1.8.



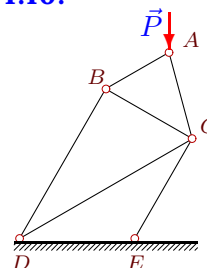
$P=1$ кН,
 $\angle ABD=30^\circ$,
 $\angle ADB=60^\circ$,
 $\angle BDC=30^\circ$,
 $\angle BCD=60^\circ$,
 $\angle CDE=60^\circ$,
 $\angle CED=30^\circ$.

Задача S-1.9.



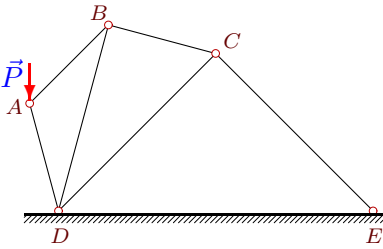
$P=9$ кН,
 $\angle ABD=45^\circ$,
 $\angle ADB=45^\circ$,
 $\angle BDC=30^\circ$,
 $\angle BCD=60^\circ$,
 $\angle CDE=75^\circ$,
 $\angle CED=15^\circ$.

Задача S-1.10.



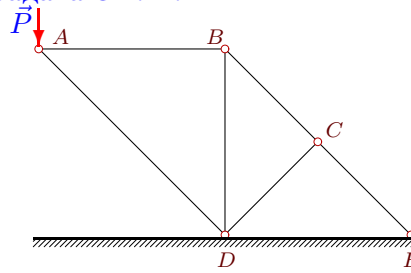
$P=16$ кН,
 $\angle ACB=45^\circ$,
 $\angle ABC=60^\circ$,
 $\angle BDC=30^\circ$,
 $\angle BCD=60^\circ$,
 $\angle CDE=30^\circ$,
 $\angle CED=120^\circ$.

Задача S-1.11.



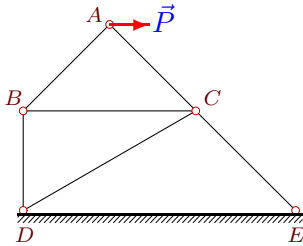
$P=2$ кН,
 $\angle ABD=30^\circ$,
 $\angle ADB=30^\circ$,
 $\angle BDC=30^\circ$,
 $\angle BCD=60^\circ$,
 $\angle CDE=45^\circ$,
 $\angle CED=45^\circ$.

Задача S-1.12.



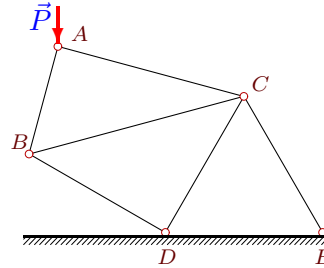
$P=8$ кН,
 $\angle ABD=90^\circ$,
 $\angle ADB=45^\circ$,
 $\angle BDC=45^\circ$,
 $\angle BCD=90^\circ$,
 $\angle CDE=45^\circ$,
 $\angle CED=45^\circ$.

Задача S-1.13.



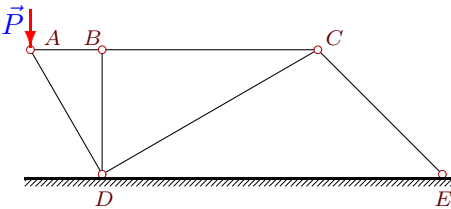
$P=15$ кН,
 $\angle ACB=45^\circ$,
 $\angle ABC=45^\circ$,
 $\angle BDC=60^\circ$,
 $\angle BCD=30^\circ$,
 $\angle CDE=30^\circ$,
 $\angle CED=45^\circ$.

Задача S-1.14.



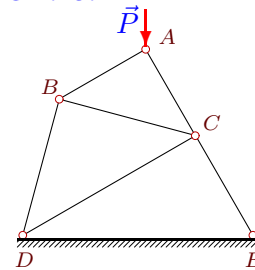
$P=14$ кН,
 $\angle ACB=30^\circ$,
 $\angle ABC=60^\circ$,
 $\angle BDC=90^\circ$,
 $\angle BCD=45^\circ$,
 $\angle CDE=60^\circ$,
 $\angle CED=60^\circ$.

Задача S-1.15.



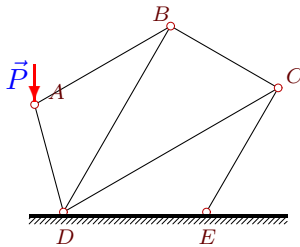
$P=26$ кН,
 $\angle ABD=90^\circ$,
 $\angle ADB=30^\circ$,
 $\angle BDC=60^\circ$,
 $\angle BCD=30^\circ$,
 $\angle CDE=30^\circ$,
 $\angle CED=45^\circ$.

Задача S-1.16.



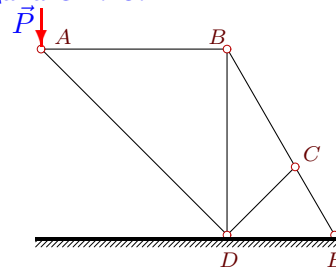
$P=16$ кН,
 $\angle ACB=45^\circ$,
 $\angle ABC=45^\circ$,
 $\angle BDC=45^\circ$,
 $\angle BCD=45^\circ$,
 $\angle CDE=30^\circ$,
 $\angle CED=60^\circ$.

Задача S-1.17.



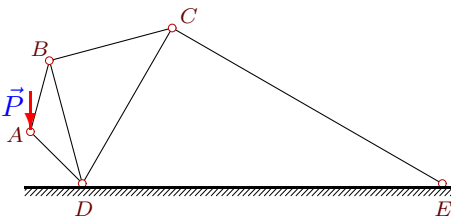
$P=26$ кН,
 $\angle ABD=30^\circ$,
 $\angle ADB=45^\circ$,
 $\angle BDC=30^\circ$,
 $\angle BCD=60^\circ$,
 $\angle CDE=30^\circ$,
 $\angle CED=120^\circ$.

Задача S-1.18.



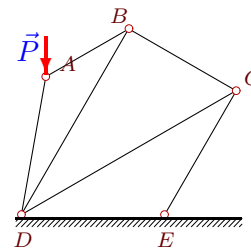
$P=11$ кН,
 $\angle ABD=90^\circ$,
 $\angle ADB=45^\circ$,
 $\angle BDC=45^\circ$,
 $\angle BCD=105^\circ$,
 $\angle CDE=45^\circ$,
 $\angle CED=60^\circ$.

Задача S-1.19.



$P=13$ кН,
 $\angle ABD=30^\circ$,
 $\angle ADB=30^\circ$,
 $\angle BDC=45^\circ$,
 $\angle BCD=45^\circ$,
 $\angle CDE=60^\circ$,
 $\angle CED=30^\circ$.

Задача S-1.20.



$P=29$ кН,
 $\angle ABD=30^\circ$,
 $\angle ADB=20^\circ$,
 $\angle BDC=30^\circ$,
 $\angle BCD=60^\circ$,
 $\angle CDE=30^\circ$,
 $\angle CED=120^\circ$.

S-1 Ответы.**Плоская конструкция из 6 стержней**

03.03.2013

	S_{AB}	S_{AC}	S_{AD}	S_{BC}	S_{BD}	S_{CD}	S_{CE}	
1	27.000	-27.000	—	-31.177	15.588	-9.000	-36.000	Дергачева Мария
2	30.000	—	-51.962	34.641	-17.321	-20.000	40.000	Лукин Евгений
3	9.000	-15.588	—	-4.500	7.794	7.471	-16.306	Очеретный Владимир
4	-8.667	-23.678	—	6.345	-7.771	-21.229	-21.229	Повальнова Екатерина
5	11.500	—	-19.919	9.959	-5.750	-9.959	9.959	Чеверев Александр
6	-10.000	-17.321	—	8.660	-5.000	-8.660	-8.660	
7	14.697	-20.076	—	-16.971	8.485	-3.106	-24.000	
8	0.866	—	-0.500	0.433	-0.750	-0.217	0.375	
9	7.794	—	-4.500	5.511	-5.511	-2.756	4.773	
10	-4.287	-14.345	—	2.144	-3.713	16.000	-24.000	
11	0.598	—	-1.633	0.299	-0.518	-0.149	0.259	
12	8.000	—	-11.314	11.314	-8.000	0.000	11.314	
13	10.607	-10.607	—	-7.500	7.500	5.490	-14.489	
14	-13.523	-3.623	—	18.473	-16.562	-17.645	11.041	
15	15.011	—	-30.022	15.011	-0.000	-10.989	7.770	
16	-8.000	-13.856	—	5.657	-5.657	-4.000	-9.856	
17	6.967	—	-23.311	3.483	-6.033	-6.967	6.033	
18	11.000	—	-15.556	22.000	-19.053	-0.000	22.000	
19	10.614	—	-3.885	5.307	-9.192	-3.753	3.753	
20	-6.574	—	-32.785	-3.287	5.693	6.574	-5.693	

S-1 файл o1sWB