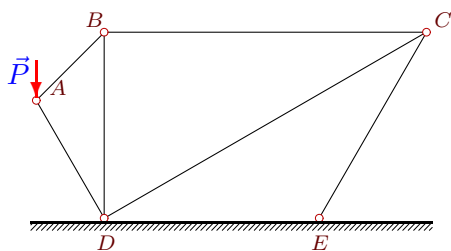


Плоская конструкция из 6 стержней

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

Задача S1.17.

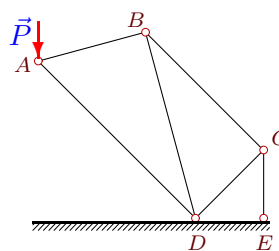
33



$P=19$ кН,
 $\angle ABD=45^\circ$,
 $\angle ADB=30^\circ$,
 $\angle BDC=60^\circ$,
 $\angle BCD=30^\circ$,
 $\angle CDE=30^\circ$,
 $\angle CED=120^\circ$.

Задача S1.18.

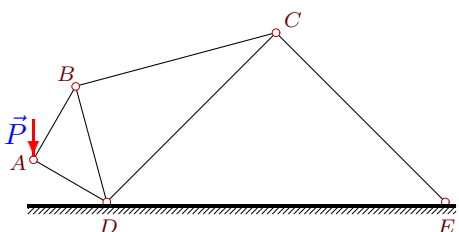
33



$P=25$ кН,
 $\angle ABD=90^\circ$,
 $\angle ADB=30^\circ$,
 $\angle BDC=60^\circ$,
 $\angle BCD=90^\circ$,
 $\angle CDE=45^\circ$,
 $\angle CED=90^\circ$.

Задача S1.19.

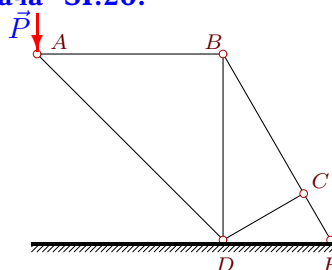
33



$P=8$ кН,
 $\angle ABD=45^\circ$,
 $\angle ADB=45^\circ$,
 $\angle BDC=60^\circ$,
 $\angle BCD=30^\circ$,
 $\angle CDE=45^\circ$,
 $\angle CED=45^\circ$.

Задача S1.20.

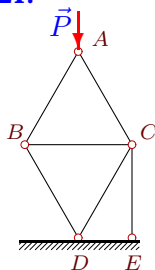
33



$P=15$ кН,
 $\angle ABD=90^\circ$,
 $\angle ADB=45^\circ$,
 $\angle BDC=60^\circ$,
 $\angle BCD=90^\circ$,
 $\angle CDE=30^\circ$,
 $\angle CED=60^\circ$.

Задача S1.21.

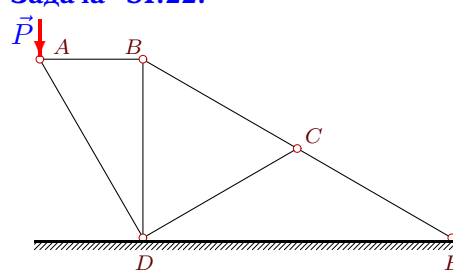
33



$P=28$ кН,
 $\angle ACB=60^\circ$,
 $\angle ABC=60^\circ$,
 $\angle BDC=60^\circ$,
 $\angle BCD=60^\circ$,
 $\angle CDE=60^\circ$,
 $\angle CED=90^\circ$.

Задача S1.22.

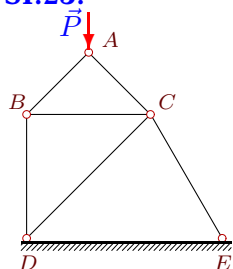
33



$P=20$ кН,
 $\angle ABD=90^\circ$,
 $\angle ADB=30^\circ$,
 $\angle BDC=60^\circ$,
 $\angle BCD=60^\circ$,
 $\angle CDE=30^\circ$,
 $\angle CED=30^\circ$.

Задача S1.23.

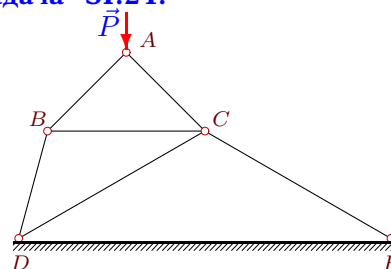
33



$P=4$ кН,
 $\angle ACB=45^\circ$,
 $\angle ABC=45^\circ$,
 $\angle BDC=45^\circ$,
 $\angle BCD=45^\circ$,
 $\angle CDE=45^\circ$,
 $\angle CED=60^\circ$.

Задача S1.24.

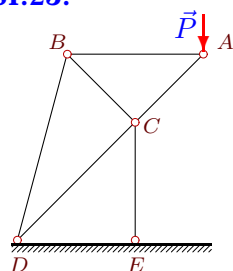
33



$P=17$ кН,
 $\angle ACB=45^\circ$,
 $\angle ABC=45^\circ$,
 $\angle BDC=45^\circ$,
 $\angle BCD=30^\circ$,
 $\angle CDE=30^\circ$,
 $\angle CED=30^\circ$.

Задача S1.25.

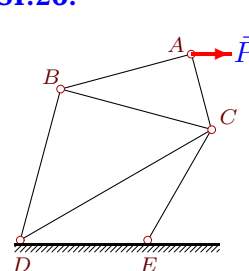
33



$P=11$ кН,
 $\angle ACB=90^\circ$,
 $\angle ABC=45^\circ$,
 $\angle BDC=30^\circ$,
 $\angle BCD=90^\circ$,
 $\angle CDE=45^\circ$,
 $\angle CED=90^\circ$.

Задача S1.26.

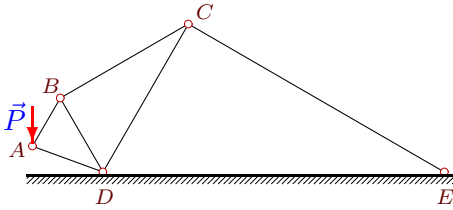
33



$P=9$ кН,
 $\angle ACB=60^\circ$,
 $\angle ABC=30^\circ$,
 $\angle BDC=45^\circ$,
 $\angle BCD=45^\circ$,
 $\angle CDE=30^\circ$,
 $\angle CED=120^\circ$.

Задача S1.27.

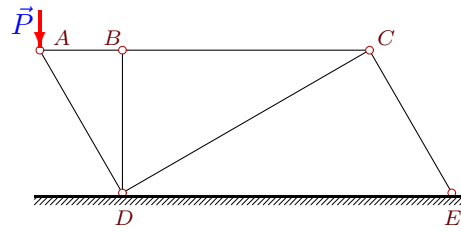
33



$P=18$ кН,
 $\angle ABD=60^\circ$,
 $\angle ADB=40^\circ$,
 $\angle BDC=60^\circ$,
 $\angle BCD=30^\circ$,
 $\angle CDE=60^\circ$,
 $\angle CED=30^\circ$.

Задача S1.28.

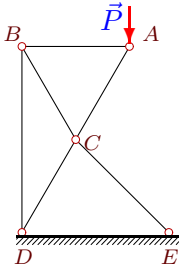
33



$P=19$ кН,
 $\angle ABD=90^\circ$,
 $\angle ADB=30^\circ$,
 $\angle BDC=60^\circ$,
 $\angle BCD=30^\circ$,
 $\angle CDE=30^\circ$,
 $\angle CED=60^\circ$.

Задача S1.29.

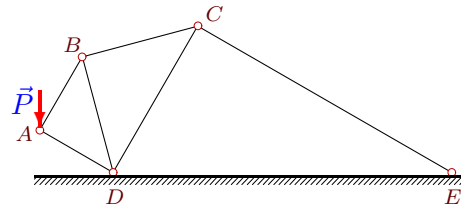
33



$P=21$ кН,
 $\angle ACB=60^\circ$,
 $\angle ABC=60^\circ$,
 $\angle BDC=30^\circ$,
 $\angle BCD=120^\circ$,
 $\angle CDE=60^\circ$,
 $\angle CED=45^\circ$.

Задача S1.30.

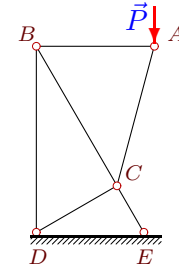
33



$P=5$ кН,
 $\angle ABD=45^\circ$,
 $\angle ADB=45^\circ$,
 $\angle BDC=45^\circ$,
 $\angle BCD=45^\circ$,
 $\angle CDE=60^\circ$,
 $\angle CED=30^\circ$.

Задача S1.31.

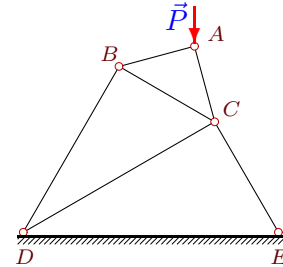
33



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

Задача S1.32.

33



$P=8$ кН,
 $\angle ACB=45^\circ$,
 $\angle ABC=45^\circ$,
 $\angle BDC=30^\circ$,
 $\angle BCD=60^\circ$,
 $\angle CDE=30^\circ$,
 $\angle CED=60^\circ$.

S1 Ответы.
Плоская конструкция из 6 стержней

01.03.2012

	S_{AB}	S_{AC}	S_{AD}	S_{BC}	S_{BD}	S_{CD}	S_{CE}
17	9.835	—	-13.909	6.954	-6.954	-12.046	6.954
18	20.412	—	-27.884	40.825	-35.355	-40.825	57.735
19	6.928	—	-4.000	4.899	-4.899	-4.243	2.449
20	15.000	—	-21.213	30.000	-25.981	-0.000	30.000
21	-16.166	-16.166	—	16.166	-16.166	-16.166	0.000
22	11.547	—	-23.094	13.333	-6.667	0.000	13.333
23	-2.828	-2.828	—	2.000	-2.000	-1.035	-1.464
24	-12.021	-12.021	—	6.222	-8.800	-7.185	-9.815
25	11.000	-15.556	—	-12.269	8.981	-3.287	-17.351
26	8.693	-2.329	—	-7.529	4.347	17.838	-15.147
27	17.175	—	-9.139	14.874	-8.588	-12.882	7.437
28	10.970	—	-21.939	10.970	-0.000	-9.500	5.485
29	12.124	-24.249	—	-24.249	21.000	-30.746	-21.741
30	4.330	—	-2.500	3.062	-3.062	-2.165	2.165
31	1.340	-5.176	—	-2.679	2.321	-3.660	-6.340
32	-2.071	-7.727	—	1.464	-1.464	-2.732	-6.196