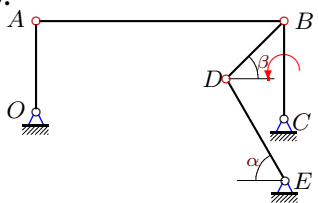
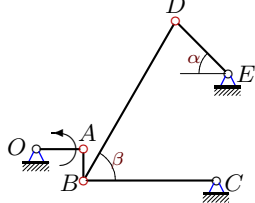
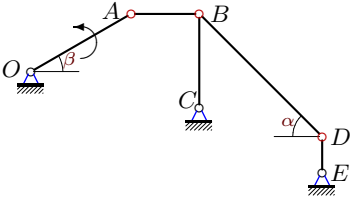
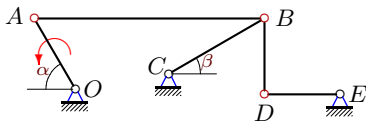
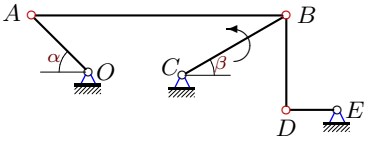
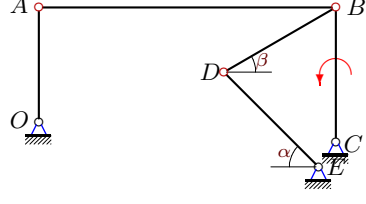
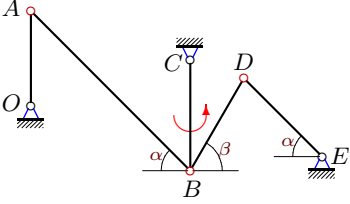
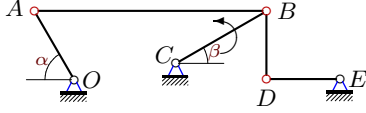


Уравнение трех угловых ускорений

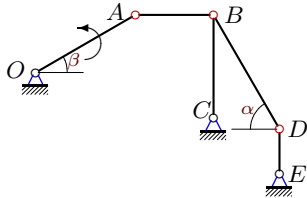
Многозвенный механизм приводится в движение кривошипом OA или BC , вращающимся с известной угловой скоростью и известным угловым ускорением. Найти угловые скорости и угловые ускорения звеньев механизма. Длины звеньев даны в см, угловые скорости — в рад/с, угловые ускорения — в рад/с². Стержни, положение которых не определено углом, вертикальны или горизонтальны.

Кирсанов М.Н. Решебник. Теоретическая механика с. 183.

<p>Вариант 1 K19.</p>  <p>$\omega_{BC}=2, \varepsilon_{BC}=4, \alpha=60^\circ, \beta=45^\circ,$ $OA=28, AB=76, BC=30, BD=25,$ $DE=36.$</p>	<p>Вариант 2 K19.</p>  <p>$\omega_{OA}=2, \varepsilon_{OA}=1, \alpha=45^\circ, \beta=60^\circ,$ $OA=12, AB=8, BC=34, BD=47,$ $DE=19.$</p>
<p>Вариант 3 K19.</p>  <p>$\omega_{OA}=4, \varepsilon_{OA}=1, \alpha=45^\circ, \beta=30^\circ,$ $OA=22, AB=13, BC=18, BD=33,$ $DE=7.$</p>	<p>Вариант 4 K19.</p>  <p>$\omega_{OA}=2, \varepsilon_{OA}=4, \alpha=60^\circ, \beta=30^\circ,$ $OA=28, AB=79, BC=38, BD=26,$ $DE=26.$</p>
<p>Вариант 5 K19.</p>  <p>$\omega_{BC}=3, \varepsilon_{BC}=1, \alpha=45^\circ, \beta=30^\circ,$ $OA=22, AB=70, BC=33, BD=26,$ $DE=14.$</p>	<p>Вариант 6 K19.</p>  <p>$\omega_{BC}=4, \varepsilon_{BC}=2, \alpha=45^\circ, \beta=30^\circ,$ $OA=24, AB=62, BC=28, BD=27,$ $DE=28.$</p>
<p>Вариант 7 K19.</p>  <p>$\omega_{BC}=4, \varepsilon_{BC}=2, \alpha=45^\circ, \beta=60^\circ,$ $OA=24, AB=57, BC=28, BD=27,$ $DE=28.$</p>	<p>Вариант 8 K19.</p>  <p>$\omega_{BC}=1, \varepsilon_{BC}=4, \alpha=60^\circ, \beta=30^\circ,$ $OA=28, AB=82, BC=37, BD=24,$ $DE=26.$</p>

Вариант 9

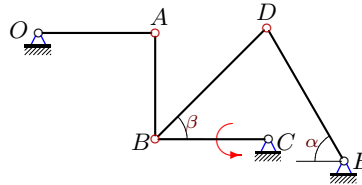
K19.



$\omega_{OA}=3, \varepsilon_{OA}=4, \alpha=60^\circ, \beta=30^\circ,$
 $OA=28, AB=19, BC=25, BD=32,$
 $DE=11.$

Вариант 10

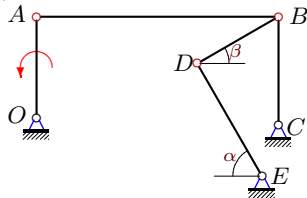
K19.



$\omega_{BC}=1, \varepsilon_{BC}=3, \alpha=60^\circ, \beta=45^\circ,$
 $OA=34, AB=31, BC=33, BD=46,$
 $DE=45.$

Вариант 11

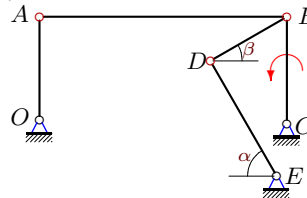
K19.



$\omega_{OA}=2, \varepsilon_{OA}=4, \alpha=60^\circ, \beta=30^\circ,$
 $OA=28, AB=67, BC=30, BD=26,$
 $DE=36.$

Вариант 12

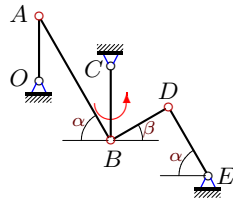
K19.



$\omega_{BC}=1, \varepsilon_{BC}=4, \alpha=60^\circ, \beta=30^\circ,$
 $OA=28, AB=67, BC=29, BD=24,$
 $DE=36.$

Вариант 13

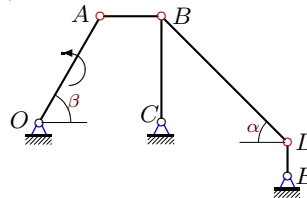
K19.



$\omega_{BC}=4, \varepsilon_{BC}=3, \alpha=60^\circ, \beta=30^\circ,$
 $OA=26, AB=58, BC=30, BD=27,$
 $DE=32.$

Вариант 14

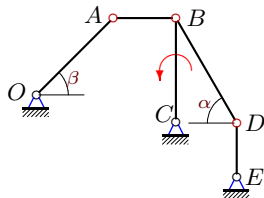
K19.



$\omega_{OA}=3, \varepsilon_{OA}=1, \alpha=45^\circ, \beta=60^\circ,$
 $OA=22, AB=11, BC=19, BD=32,$
 $DE=6.$

Вариант 15

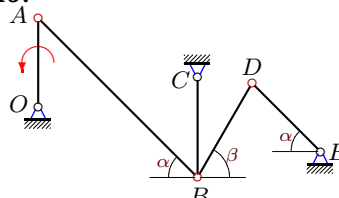
K19.



$\omega_{BC}=1, \varepsilon_{BC}=3, \alpha=60^\circ, \beta=45^\circ,$
 $OA=26, AB=15, BC=25, BD=29,$
 $DE=13.$

Вариант 16

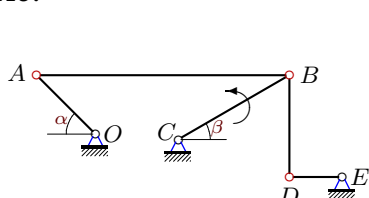
K19.



$\omega_{OA}=3, \varepsilon_{OA}=1, \alpha=45^\circ, \beta=60^\circ,$
 $OA=22, AB=56, BC=25, BD=27,$
 $DE=24.$

Вариант 17

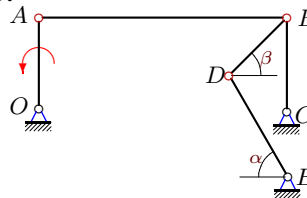
K19.



$\omega_{BC}=4, \varepsilon_{BC}=1, \alpha=45^\circ, \beta=30^\circ,$
 $OA=22, AB=67, BC=34, BD=27,$
 $DE=14.$

Вариант 18

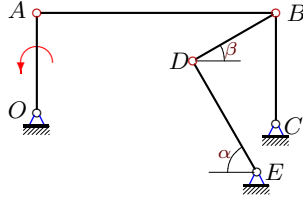
K19.



$\omega_{OA}=1, \varepsilon_{OA}=4, \alpha=60^\circ, \beta=45^\circ,$
 $OA=28, AB=76, BC=29, BD=25,$
 $DE=36.$

Вариант 19

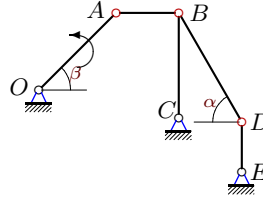
K19.



$\omega_{OA}=3, \varepsilon_{OA}=4, \alpha=60^\circ, \beta=30^\circ,$
 $OA=28, AB=67, BC=31, BD=27,$
 $DE=36.$

Вариант 20

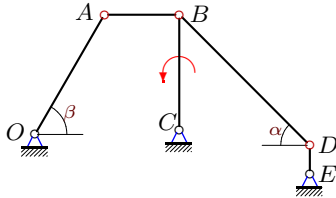
K19.



$\omega_{OA}=1, \varepsilon_{OA}=3, \alpha=60^\circ, \beta=45^\circ,$
 $OA=26, AB=15, BC=25, BD=30,$
 $DE=12.$

Вариант 21

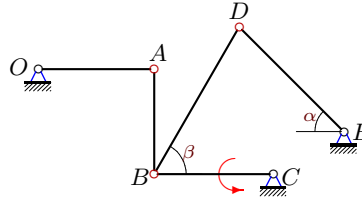
K19.



$\omega_{BC}=4, \varepsilon_{BC}=2, \alpha=45^\circ, \beta=60^\circ,$
 $OA=24, AB=13, BC=20, BD=32,$
 $DE=5.$

Вариант 22

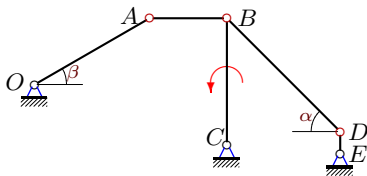
K19.



$\omega_{BC}=2, \varepsilon_{BC}=2, \alpha=45^\circ, \beta=60^\circ,$
 $OA=32, AB=29, BC=33, BD=47,$
 $DE=41.$

Вариант 23

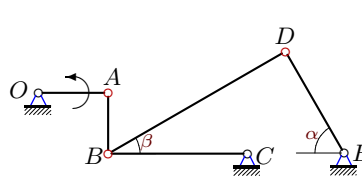
K19.



$\omega_{BC}=1, \varepsilon_{BC}=2, \alpha=45^\circ, \beta=30^\circ,$
 $OA=24, AB=14, BC=23, BD=29,$
 $DE=4.$

Вариант 24

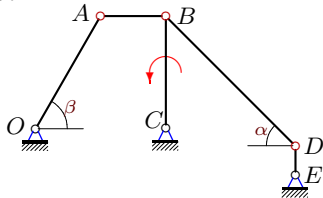
K19.



$\omega_{OA}=2, \varepsilon_{OA}=3, \alpha=60^\circ, \beta=30^\circ,$
 $OA=16, AB=14, BC=32, BD=47,$
 $DE=27.$

Вариант 25

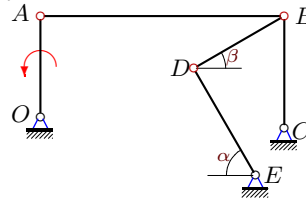
K19.



$\omega_{BC}=3, \varepsilon_{BC}=1, \alpha=45^\circ, \beta=60^\circ,$
 $OA=22, AB=11, BC=19, BD=31,$
 $DE=5.$

Вариант 26

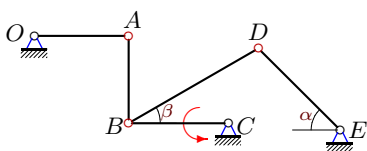
K19.



$\omega_{OA}=3, \varepsilon_{OA}=3, \alpha=60^\circ, \beta=30^\circ,$
 $OA=26, AB=63, BC=29, BD=27,$
 $DE=32.$

Вариант 27

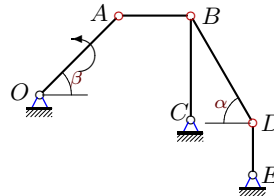
K19.



$\omega_{BC}=3, \varepsilon_{BC}=1, \alpha=45^\circ, \beta=30^\circ,$
 $OA=30, AB=28, BC=32, BD=48,$
 $DE=37.$

Вариант 28

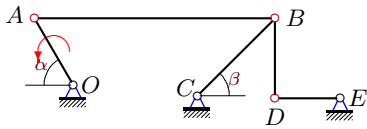
K19.



$\omega_{OA}=2, \varepsilon_{OA}=4, \alpha=60^\circ, \beta=45^\circ,$
 $OA=28, AB=18, BC=26, BD=31,$
 $DE=13.$

Вариант 29

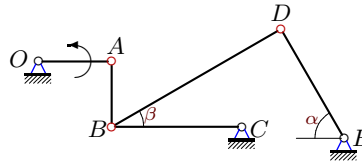
K19.



$\omega_{OA}=3$, $\varepsilon_{OA}=3$, $\alpha=60^\circ$, $\beta=45^\circ$,
 $OA=26$, $AB=81$, $BC=37$, $BD=27$,
 $DE=22$.

Вариант 30

K19.



$\omega_{OA}=3$, $\varepsilon_{OA}=4$, $\alpha=60^\circ$, $\beta=30^\circ$,
 $OA=18$, $AB=16$, $BC=32$, $BD=48$,
 $DE=31$.

Ответы

	ω_{OA}	ω_{AB}	ω_{BC}	ω_{BD}	ω_{DE}	ε_{OA}	ε_{AB}	ε_{BC}	ε_{BD}	ε_{DE}
1	2.143	0.000	2.000	1.242	1.220	4.286	0.113	4.000	0.814	3.372
2	2.000	0.000	-0.706	-0.374	-1.133	1.000	8.118	-0.353	-0.422	-1.014
3	4.000	-5.862	2.444	0.000	6.286	1.000	3.799	42.367	-7.243	133.089
4	2.000	1.418	2.552	1.865	-3.231	4.000	0.049	-0.770	18.122	2.256
5	3.182	1.932	3.000	1.904	-6.124	10.925	2.965	1.000	30.722	1.834
6	4.667	0.000	4.000	3.037	3.586	2.333	1.204	2.000	0.709	4.316
7	-4.667	0.000	4.000	3.037	-2.071	38.111	24.083	2.000	-12.760	-7.324
8	0.763	0.521	1.000	0.771	-1.232	3.791	2.157	4.000	6.064	-4.767
9	3.000	-3.829	1.680	0.000	3.818	4.000	-2.187	22.111	-5.613	64.392
10	-0.971	0.000	1.000	0.643	0.537	-2.912	2.098	3.000	2.120	1.434
11	2.000	0.000	1.867	1.077	1.347	4.000	0.111	3.733	1.185	3.309
12	1.036	0.000	1.000	0.604	0.698	4.143	0.015	4.000	2.100	2.950
13	-4.615	0.000	4.000	2.222	-3.248	65.411	35.650	3.000	-26.229	-5.769
14	3.000	-3.000	3.008	0.000	9.526	1.000	-1.043	11.424	-16.465	98.268
15	1.360	-1.667	1.000	0.000	1.923	-0.036	0.644	3.000	-1.592	8.844
16	3.000	0.000	-2.640	-1.789	1.424	1.000	9.400	14.010	3.765	-10.877
17	4.371	2.773	4.000	2.519	-8.413	17.371	4.849	1.000	54.777	5.093
18	1.000	0.000	0.966	0.580	0.569	4.000	0.013	3.862	1.923	2.499
19	3.000	0.000	2.710	1.556	2.021	4.000	0.364	3.613	0.218	4.041
20	1.000	-1.226	0.735	0.000	1.532	3.000	-3.353	3.843	-0.976	10.120
21	3.849	-3.553	4.000	0.000	16.000	-14.524	12.478	2.000	-42.426	200.000
22	-2.063	0.000	2.000	1.028	1.443	-2.063	9.246	2.000	1.486	0.473
23	1.917	-2.846	1.000	0.000	5.750	-11.976	19.286	2.000	-5.328	38.813
24	2.000	0.000	-1.000	-0.590	-0.593	3.000	6.857	-1.500	-0.746	-1.310
25	2.992	-2.992	3.000	0.000	11.400	-9.338	9.295	1.000	-21.843	99.560
26	3.000	0.000	2.690	1.444	2.111	3.000	0.384	2.690	-0.003	3.629
27	-3.200	0.000	3.000	1.464	1.343	-1.067	21.257	1.000	2.866	-3.169
28	2.000	-2.200	1.523	0.000	3.046	4.000	-3.350	9.442	-3.891	26.920
29	3.000	1.315	2.582	2.502	-3.070	3.000	-0.203	-3.199	11.041	4.050
30	3.000	0.000	-1.688	-0.974	-0.871	4.000	15.820	-2.250	-0.840	-2.237