

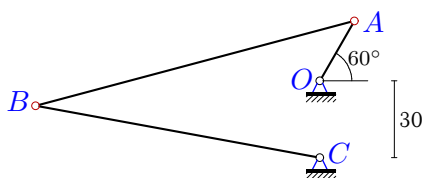
Уравнение трех угловых скоростей

Подобрать длины звеньев (в сантиметрах) шарнирного четырехзвенника так, чтобы в некоторый момент движения угловые скорости его звеньев были бы равны заданным. Положение опорных шарниров четырехзвенника известно. Расстояния даны в сантиметрах, угловые скорости — в рад/с.

Кирсанов М.Н. **Решебник. Теоретическая механика**/Под ред. А. И. Кириллова. — М.: ФИЗМАТЛИТ, 2008. — 384 с. (с.179.)

Задача K18.1.

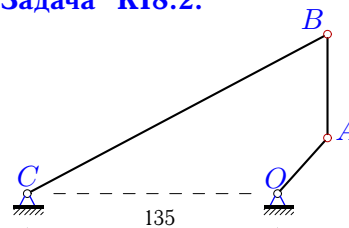
3



$$\omega_{OA}=3, \\ \omega_{AB}=1.2, \omega_{BC}=1, OA = 27.$$

Задача K18.2.

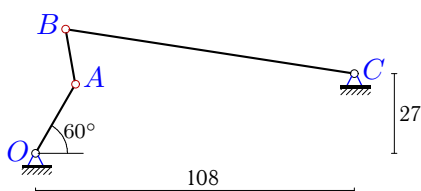
3



$$\omega_{OA}=1, \\ \omega_{AB} = -0.3, \omega_{BC}=0.2, AB \perp OC, AB = 56.$$

Задача K18.3.

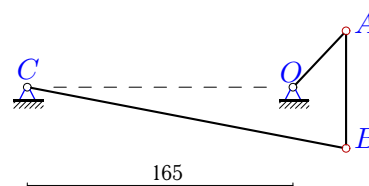
3



$$\omega_{OA} = -5, \\ \omega_{AB}=8, \omega_{BC}=1, OA = 27.$$

Задача K18.4.

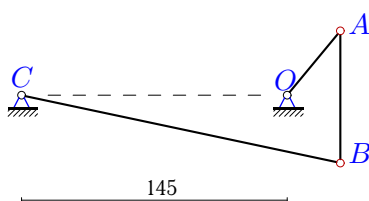
3



$$\omega_{OA}=24, \\ \omega_{AB}=14, \omega_{BC}=4, AB \perp OC, AB = 73.$$

Задача K18.5.

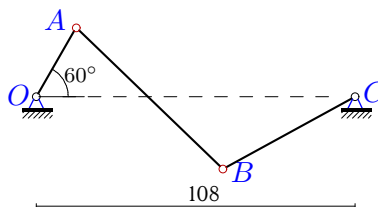
3



$$\omega_{OA}=2, \\ \omega_{AB}=1.1, \omega_{BC}=0.3, AB \perp OC, AB = 72.$$

Задача K18.6.

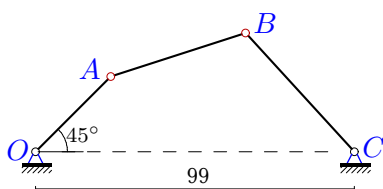
3



$$\omega_{OA} = -1.9, \\ \omega_{AB} = -0.4, \omega_{BC}=1, OA = 27.$$

Задача K18.7.

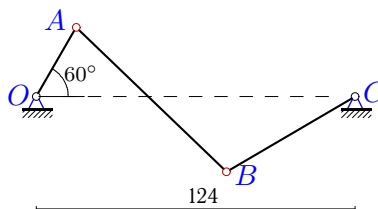
3



$$\omega_{OA}=4, \\ \omega_{AB} = -3, \omega_{BC}=1.3, OA = 33.$$

Задача K18.8.

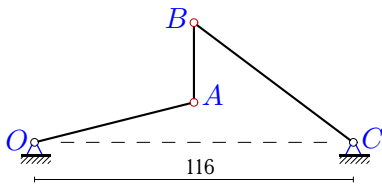
3



$$\omega_{OA} = -6, \\ \omega_{AB} = -1.1, \omega_{BC}=3, OA = 31.$$

Задача K18.9.

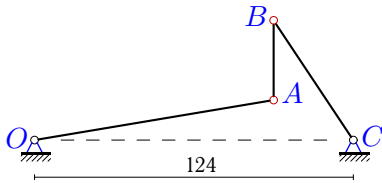
3



$\omega_{OA}=2,$
 $\omega_{AB}=-4, \omega_{BC}=-2, AB \perp OC, AB = 29.$

Задача K18.11.

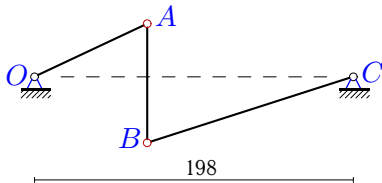
3



$\omega_{OA}=-1,$
 $\omega_{AB}=5, \omega_{BC}=3, AB \perp OC, AB = 31.$

Задача K18.13.

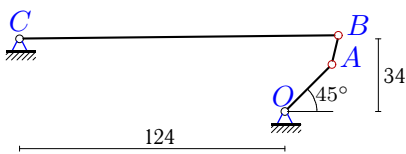
3



$\omega_{OA}=4,$
 $\omega_{AB}=0.6, \omega_{BC}=-2, AB \perp OC, AB = 74.$

Задача K18.15.

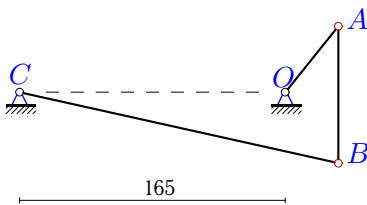
3



$\omega_{OA}=3,$
 $\omega_{AB}=-5, \omega_{BC}=0.3, OA = 31.$

Задача K18.17.

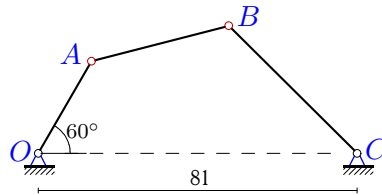
3



$\omega_{OA}=24,$
 $\omega_{AB}=14, \omega_{BC}=4, AB \perp OC, AB = 85.$

Задача K18.10.

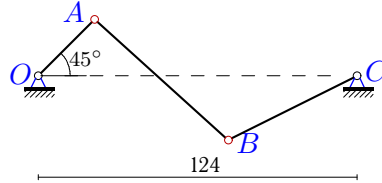
3



$\omega_{OA}=2,$
 $\omega_{AB}=-1.7, \omega_{BC}=1, OA = 27.$

Задача K18.12.

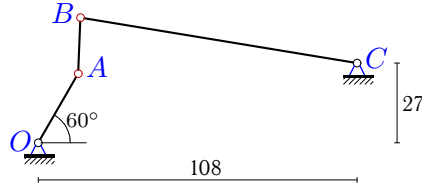
3



$\omega_{OA}=3,$
 $\omega_{AB}=0.5, \omega_{BC}=-1.8, OA = 31.$

Задача K18.14.

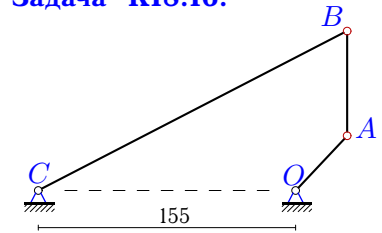
3



$\omega_{OA}=-8,$
 $\omega_{AB}=10, \omega_{BC}=1, OA = 27.$

Задача K18.16.

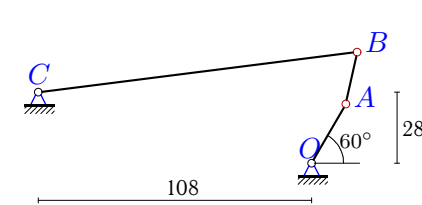
3



$\omega_{OA}=3,$
 $\omega_{AB}=-0.8, \omega_{BC}=0.5, AB \perp OC, AB = 63.$

Задача K18.18.

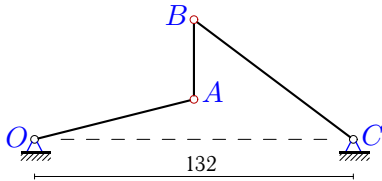
3



$\omega_{OA}=15,$
 $\omega_{AB}=-16, \omega_{BC}=1, OA = 27.$

Задача K18.19.

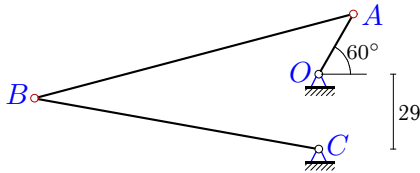
3



$\omega_{OA}=4,$
 $\omega_{AB}=-8, \omega_{BC}=-4, AB \perp OC, AB = 33.$

Задача K18.21.

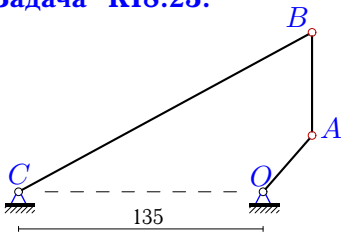
3



$\omega_{OA}=2,$
 $\omega_{AB}=1.2, \omega_{BC}=1, OA = 27.$

Задача K18.23.

3



$\omega_{OA}=6,$
 $\omega_{AB}=-1.7, \omega_{BC}=1, AB \perp OC, AB = 57.$

Задача K18.25.

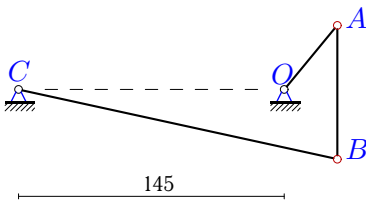
3



$\omega_{OA}=-19,$
 $\omega_{AB}=-19, \omega_{BC}=3, OA = 31.$

Задача K18.27.

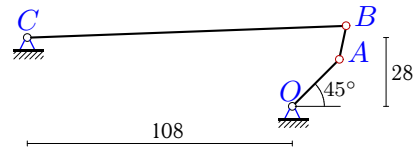
3



$\omega_{OA}=12,$
 $\omega_{AB}=7, \omega_{BC}=2, AB \perp OC, AB = 73.$

Задача K18.20.

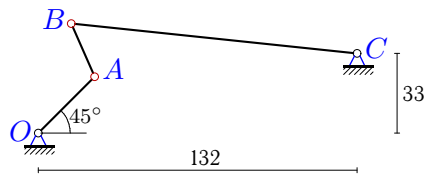
3



$\omega_{OA}=1,$
 $\omega_{AB}=-1.4, \omega_{BC}=0.1, OA = 27.$

Задача K18.22.

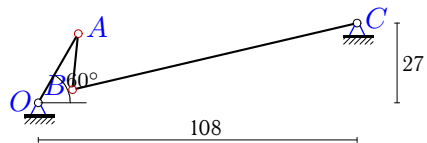
3



$\omega_{OA}=4,$
 $\omega_{AB}=-5, \omega_{BC}=-1.2, OA = 33.$

Задача K18.24.

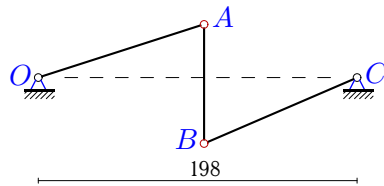
3



$\omega_{OA}=-8,$
 $\omega_{AB}=-9, \omega_{BC}=1, OA = 27.$

Задача K18.26.

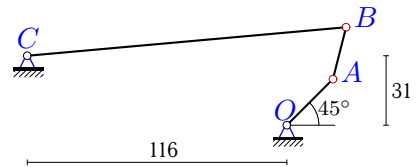
3



$\omega_{OA}=-4,$
 $\omega_{AB}=0.6, \omega_{BC}=4, AB \perp OC, AB = 74.$

Задача K18.28.

3



$\omega_{OA}=2,$
 $\omega_{AB}=-1.6, \omega_{BC}=0.2, OA = 29.$

К18 Ответы.
Уравнение трех угловых скоростей

08.04.2012

№	<i>OA</i>	<i>AB</i>	<i>BC</i>
1	27.000	158.909	125.256
2	48.622	56.000	191.723
3	27.000	16.638	99.157
4	49.206	73.000	201.336
5	42.459	72.000	174.795
6	27.000	69.026	51.785
7	33.000	46.928	49.083
8	31.000	81.784	60.926
9	59.785	29.000	72.500
10	27.000	36.056	45.640
11	94.283	31.000	55.886
12	31.000	68.732	56.095
13	73.378	74.000	138.501
14	27.000	20.438	94.499
15	31.000	13.733	150.072
16	45.102	63.000	209.203
17	53.808	85.000	202.510
18	27.000	21.440	127.311
19	68.031	33.000	82.500
20	27.000	13.985	131.421
21	27.000	73.110	96.909
22	33.000	23.618	119.009
23	40.944	57.000	184.253
24	27.000	18.394	98.334
25	31.000	22.663	110.387
26	103.875	74.000	107.757
27	46.618	73.000	177.787
28	29.000	25.133	144.750

К18 файл о18к3А