

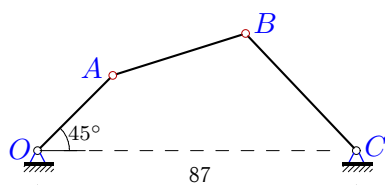
## Уравнение трех угловых скоростей

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.

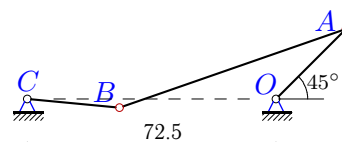
4



$$\omega_{OA}=2, \\ \omega_{AB}=-1.7, \omega_{BC}=0.7, OA=29.$$

### Задача K18.2.

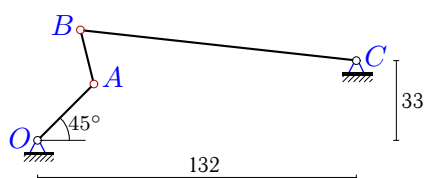
4



$$\omega_{OA}=2, \\ \omega_{AB}=1.5, \omega_{BC}=-2, OA=29.$$

### Задача K18.3.

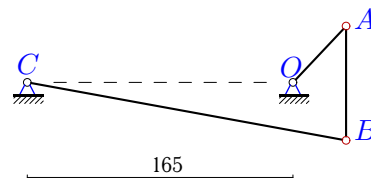
4



$$\omega_{OA}=4, \\ \omega_{AB}=-5, \omega_{BC}=-1.1, OA=33.$$

### Задача K18.4.

4



$$\omega_{OA}=4, \\ \omega_{AB}=2, \omega_{BC}=0.7, AB \perp OC, AB=71.$$

### Задача K18.5.

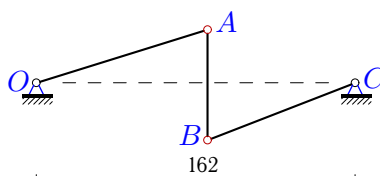
4



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

### Задача K18.6.

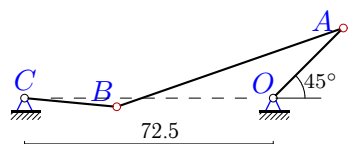
4



$$\omega_{OA}=-0.9, \\ \omega_{AB}=0.1, \omega_{BC}=1, AB \perp OC, AB=56.$$

### Задача K18.7.

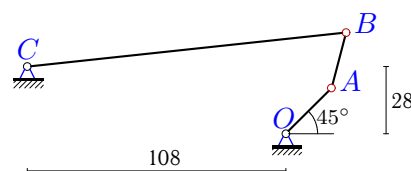
4



$$\omega_{OA}=2, \\ \omega_{AB}=1.5, \omega_{BC}=-2, OA=29.$$

### Задача K18.8.

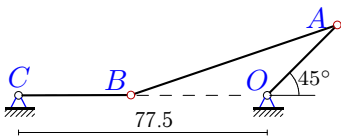
4



$$\omega_{OA}=1, \\ \omega_{AB}=-0.8, \omega_{BC}=0.1, OA=27.$$

**Задача K18.9.**

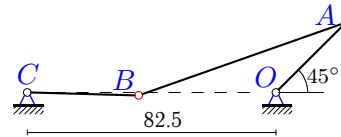
4



$\omega_{OA}=3,$   
 $\omega_{AB}=3, \omega_{BC}=-4, OA = 31.$

**Задача K18.10.**

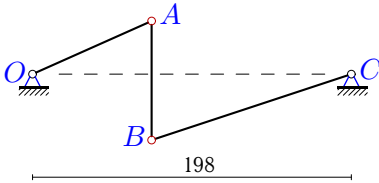
4



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

**Задача K18.11.**

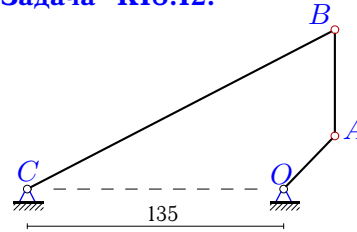
4



$\omega_{OA}=4,$   
 $\omega_{AB}=0.5, \omega_{BC}=-2, AB \perp OC, AB = 74.$

**Задача K18.12.**

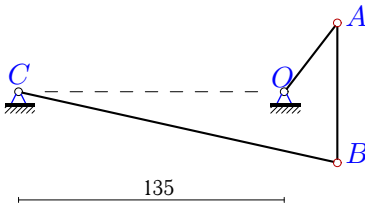
4



$\omega_{OA}=6,$   
 $\omega_{AB}=-1.5, \omega_{BC}=1, AB \perp OC, AB = 56.$

**Задача K18.13.**

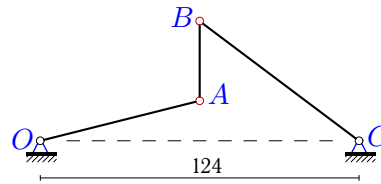
4



$\omega_{OA}=1,$   
 $\omega_{AB}=0.6, \omega_{BC}=0.2, AB \perp OC, AB = 71.$

**Задача K18.14.**

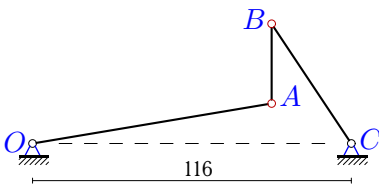
4



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

**Задача K18.15.**

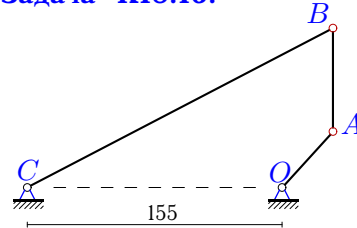
4



$\omega_{OA}=-0.7,$   
 $\omega_{AB}=3, \omega_{BC}=2, AB \perp OC, AB = 29.$

**Задача K18.16.**

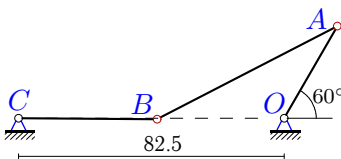
4



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

**Задача K18.17.**

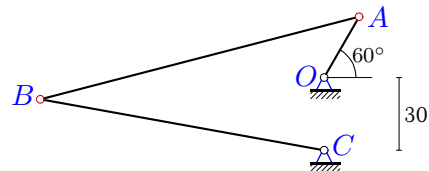
4



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

**Задача K18.18.**

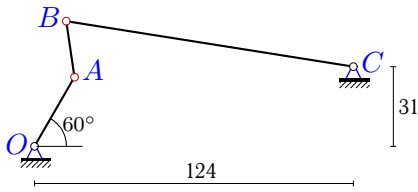
4



$\omega_{OA}=5,$   
 $\omega_{AB}=4, \omega_{BC}=2, OA = 29.$

**Задача K18.19.**

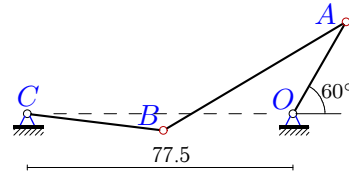
4



$\omega_{OA} = -17,$   
 $\omega_{AB} = 23, \omega_{BC} = 3, OA = 31.$

**Задача K18.20.**

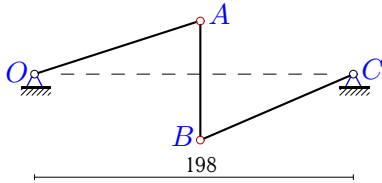
4



$\omega_{OA} = -5,$   
 $\omega_{AB} = -4, \omega_{BC} = 3, OA = 31.$

**Задача K18.21.**

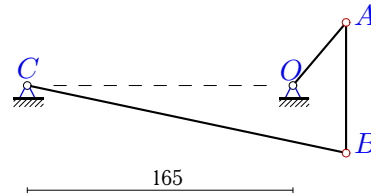
4



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

**Задача K18.22.**

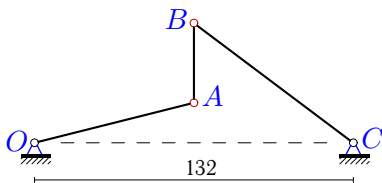
4



$\omega_{OA} = 24,$   
 $\omega_{AB} = 14, \omega_{BC} = 4, AB \perp OC, AB = 81.$

**Задача K18.23.**

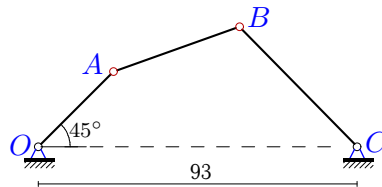
4



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

**Задача K18.24.**

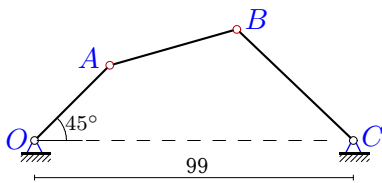
4



$\omega_{OA} = 3,$   
 $\omega_{AB} = -3, \omega_{BC} = 0.9, OA = 31.$

**Задача K18.25.**

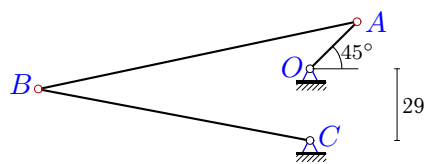
4



$\omega_{OA} = 4,$   
 $\omega_{AB} = -4, \omega_{BC} = 1.5, OA = 33.$

**Задача K18.26.**

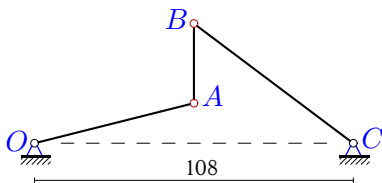
4



$\omega_{OA} = 1,$   
 $\omega_{AB} = 0.4, \omega_{BC} = 0.3, OA = 27.$

**Задача K18.27.**

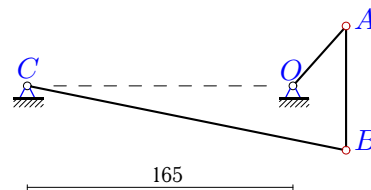
4



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

**Задача K18.28.**

4



$\omega_{OA} = 4,$   
 $\omega_{AB} = 2, \omega_{BC} = 0.7, AB \perp OC, AB = 77.$

**K18 Ответы.**  
**Уравнение трех угловых скоростей**

08.04.2012

№	<i>OA</i>	<i>AB</i>	<i>BC</i>
1	29.000	38.136	43.590
2	29.000	68.968	28.294
3	33.000	22.245	115.958
4	44.803	71.000	204.577
5	29.000	25.005	111.860
6	89.294	56.000	82.202
7	29.000	68.968	28.294
8	27.000	23.308	134.841
9	31.000	69.741	33.214
10	33.000	68.671	41.250
11	72.847	74.000	138.879
12	38.897	56.000	182.483
13	48.983	71.000	172.444
14	63.908	31.000	77.500
15	86.595	29.000	49.837
16	45.102	63.000	209.203
17	33.000	64.435	41.250
18	29.000	23.063	47.993
19	31.000	22.412	113.049
20	31.000	59.457	42.246
21	103.875	74.000	107.757
22	52.242	81.000	202.100
23	68.031	33.000	82.500
24	31.000	35.297	50.668
25	33.000	39.074	50.995
26	27.000	141.549	114.560
27	55.662	27.000	67.500
28	46.315	77.000	205.372

K18 файл o18k4A