

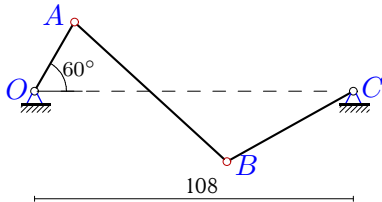
## Уравнение трех угловых скоростей

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.

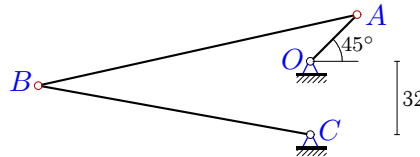
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$$\omega_{OA} = -1.8, \\ \omega_{AB} = -0.4, \omega_{BC} = 1, OA = 27.$$

### Задача K18.2.

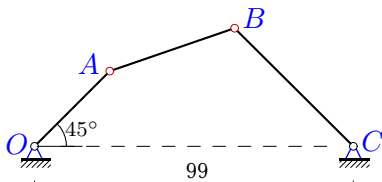
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$$\omega_{OA} = 2, \\ \omega_{AB} = 0.9, \omega_{BC} = 0.7, OA = 29.$$

### Задача K18.3.

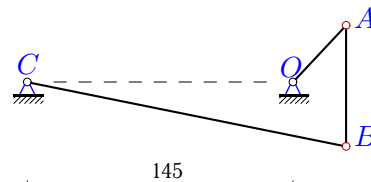
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$$\omega_{OA} = 4, \\ \omega_{AB} = -4, \omega_{BC} = 1.2, OA = 33.$$

### Задача K18.4.

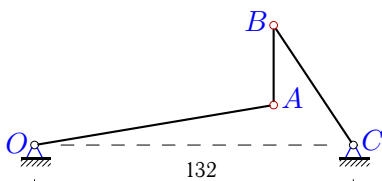
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$$\omega_{OA} = 2, \\ \omega_{AB} = 1.1, \omega_{BC} = 0.3, AB \perp OC, AB = 66.$$

### Задача K18.5.

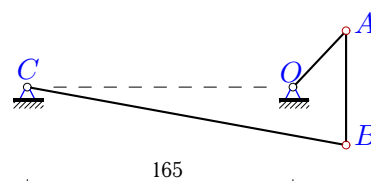
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$$\omega_{OA} = -1.3, \\ \omega_{AB} = 7, \omega_{BC} = 4, AB \perp OC, AB = 33.$$

### Задача K18.6.

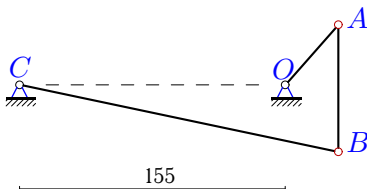
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$$\omega_{OA} = 4, \\ \omega_{AB} = 2, \omega_{BC} = 0.7, AB \perp OC, AB = 71.$$

### Задача K18.7.

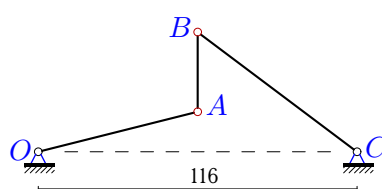
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$$\omega_{OA} = 18, \\ \omega_{AB} = 10, \omega_{BC} = 3, AB \perp OC, AB = 74.$$

### Задача K18.8.

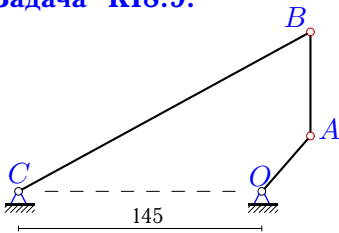
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$$\omega_{OA} = 2, \\ \omega_{AB} = -4, \omega_{BC} = -2, AB \perp OC, AB = 29.$$

**Задача K18.9.**

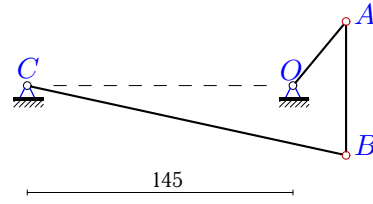
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$\omega_{OA}=12,$   
 $\omega_{AB}=-3, \omega_{BC}=2, AB \perp OC, AB = 62.$

**Задача K18.10.**

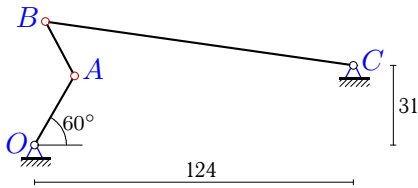
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$\omega_{OA}=2,$   
 $\omega_{AB}=1.1, \omega_{BC}=0.3, AB \perp OC, AB = 73.$

**Задача K18.11.**

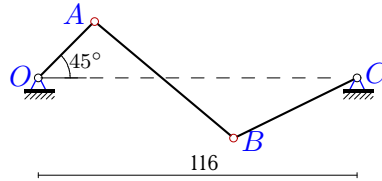
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$\omega_{OA}=-11,$   
 $\omega_{AB}=17, \omega_{BC}=3, OA = 31.$

**Задача K18.12.**

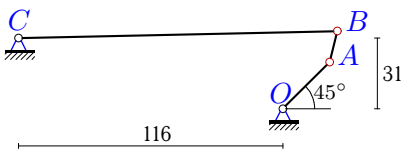
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$\omega_{OA}=2,$   
 $\omega_{AB}=0.3, \omega_{BC}=-1.3, OA = 29.$

**Задача K18.13.**

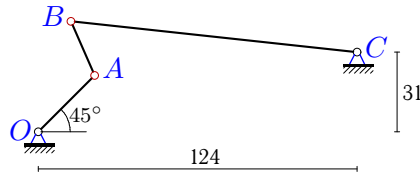
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$\omega_{OA}=2,$   
 $\omega_{AB}=-3, \omega_{BC}=0.2, OA = 29.$

**Задача K18.14.**

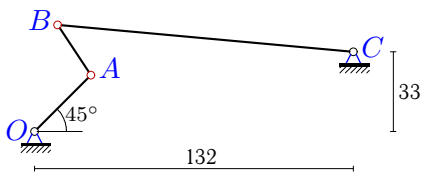
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$\omega_{OA}=3,$   
 $\omega_{AB}=-4, \omega_{BC}=-0.9, OA = 31.$

**Задача K18.15.**

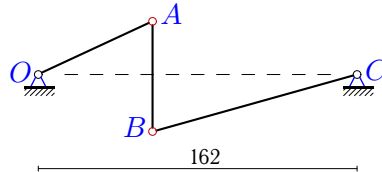
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$\omega_{OA}=4,$   
 $\omega_{AB}=-5, \omega_{BC}=-1.3, OA = 33.$

**Задача K18.16.**

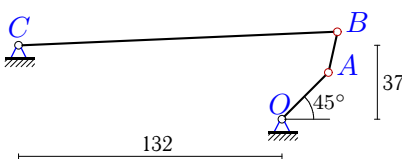
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$\omega_{OA}=1,$   
 $\omega_{AB}=0.2, \omega_{BC}=-0.6, AB \perp OC, AB = 56.$

**Задача K18.17.**

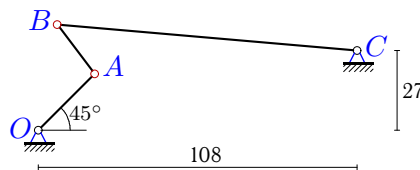
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$\omega_{OA}=4,$   
 $\omega_{AB}=-4, \omega_{BC}=0.5, OA = 33.$

**Задача K18.18.**

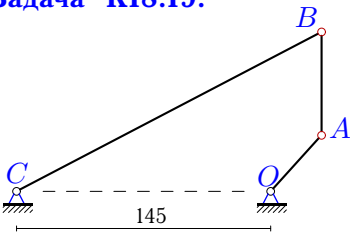
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$\omega_{OA}=1,$   
 $\omega_{AB}=-1.3, \omega_{BC}=-0.4, OA = 27.$

**Задача K18.19.**

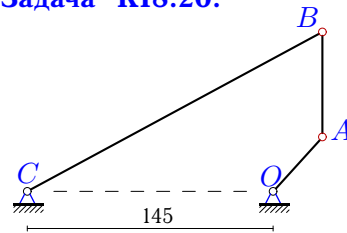
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$\omega_{OA}=12,$   
 $\omega_{AB}=-3, \omega_{BC}=2, AB \perp OC, AB = 59.$

**Задача K18.20.**

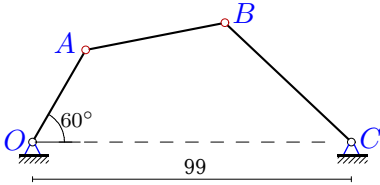
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$\omega_{OA}=2,$   
 $\omega_{AB}=-0.5, \omega_{BC}=0.3, AB \perp OC, AB = 62.$

**Задача K18.21.**

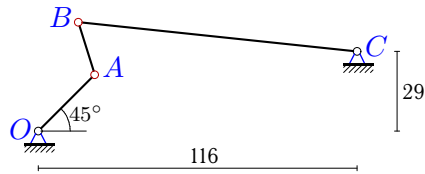
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$\omega_{OA}=7,$   
 $\omega_{AB}=-6, \omega_{BC}=4, OA = 33.$

**Задача K18.22.**

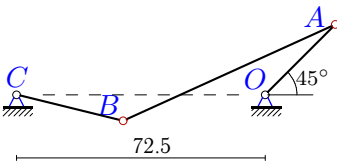
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$\omega_{OA}=2,$   
 $\omega_{AB}=-2, \omega_{BC}=-0.5, OA = 29.$

**Задача K18.23.**

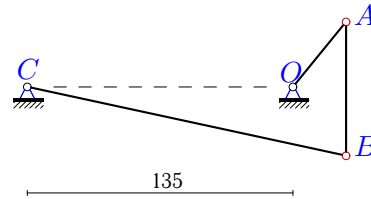
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$\omega_{OA}=2,$   
 $\omega_{AB}=1.2, \omega_{BC}=-1, OA = 29.$

**Задача K18.24.**

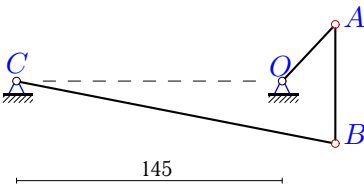
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$\omega_{OA}=1,$   
 $\omega_{AB}=0.6, \omega_{BC}=0.2, AB \perp OC, AB = 68.$

**Задача K18.25.**

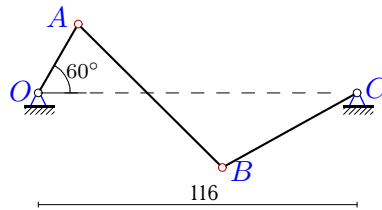
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$\omega_{OA}=12,$   
 $\omega_{AB}=7, \omega_{BC}=2, AB \perp OC, AB = 65.$

**Задача K18.26.**

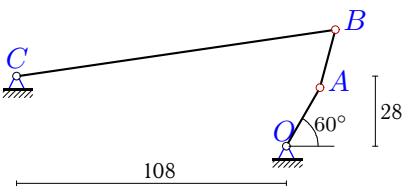
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$\omega_{OA}=-4,$   
 $\omega_{AB}=-0.8, \omega_{BC}=2, OA = 29.$

**Задача K18.27.**

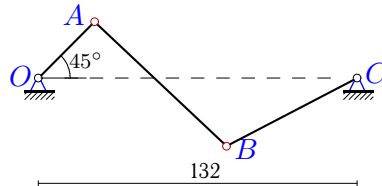
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$\omega_{OA}=17,$   
 $\omega_{AB}=-16, \omega_{BC}=1, OA = 27.$

**Задача K18.28.**

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$\omega_{OA}=4,$   
 $\omega_{AB}=0.6, \omega_{BC}=-2, OA = 33.$

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

08.04.2012

№	<i>OA</i>	<i>AB</i>	<i>BC</i>
1	27.000	68.566	50.143
2	29.000	134.979	117.024
3	33.000	37.574	53.937
4	40.242	66.000	174.130
5	101.359	33.000	60.984
6	44.803	71.000	204.577
7	46.406	74.000	190.141
8	59.785	29.000	72.500
9	42.450	62.000	197.294
10	42.836	73.000	174.911
11	31.000	23.039	120.644
12	29.000	66.994	48.685
13	29.000	14.137	140.822
14	31.000	20.397	110.910
15	33.000	25.384	122.226
16	66.892	56.000	105.050
17	33.000	22.531	159.049
18	27.000	25.459	107.656
19	41.367	59.000	195.213
20	38.808	62.000	193.426
21	33.000	45.367	53.108
22	29.000	24.918	101.258
23	29.000	67.029	32.944
24	47.907	68.000	172.141
25	43.557	65.000	177.009
26	29.000	74.686	57.405
27	27.000	24.493	129.262
28	33.000	71.931	68.185

K18 файл o18k10A