

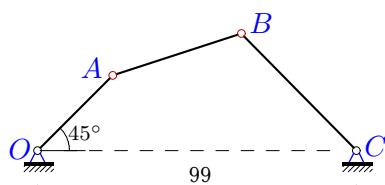
## Уравнение трех угловых скоростей

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.

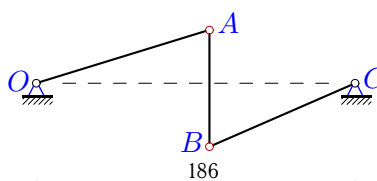
9



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

### Задача K18.2.

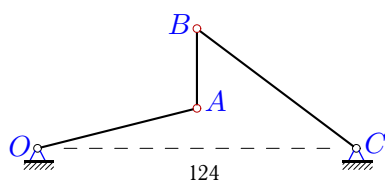
9



$$\omega_{OA}=-3, \\ \omega_{AB}=0.5, \omega_{BC}=3, AB \perp OC, AB=68.$$

### Задача K18.3.

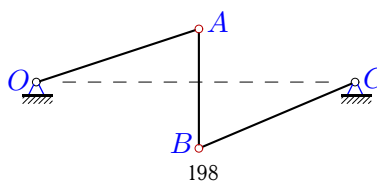
9



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

### Задача K18.4.

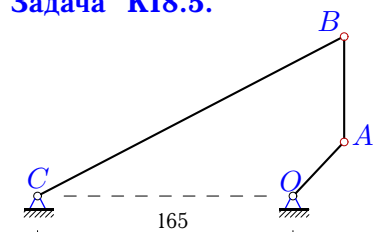
9



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

### Задача K18.5.

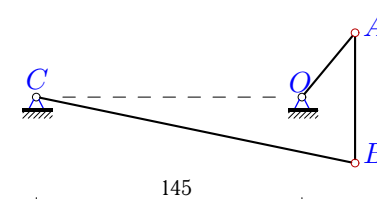
9



$$\omega_{OA}=4, \\ \omega_{AB}=-1, \omega_{BC}=0.7, AB \perp OC, AB=68.$$

### Задача K18.6.

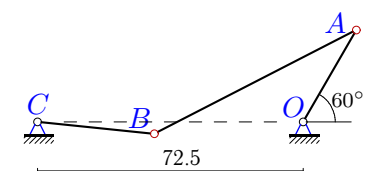
9



$$\omega_{OA}=12, \\ \omega_{AB}=7, \omega_{BC}=2, AB \perp OC, AB=71.$$

### Задача K18.7.

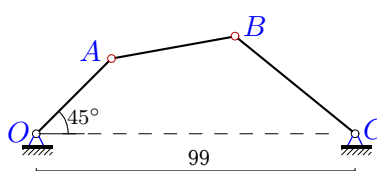
9



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

### Задача K18.8.

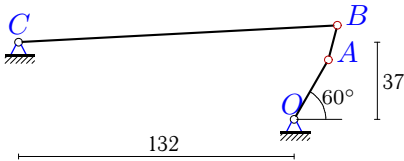
9



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

**Задача K18.9.**

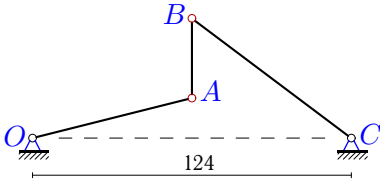
9



$\omega_{OA}=67,$   
 $\omega_{AB}=-114, \omega_{BC}=4, OA=33.$

**Задача K18.11.**

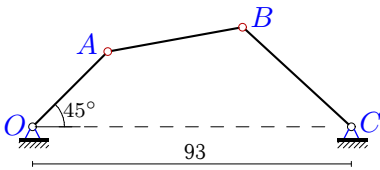
9



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

**Задача K18.13.**

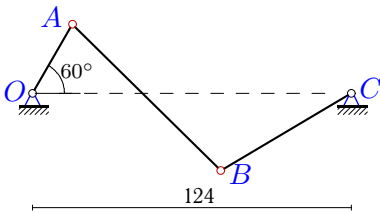
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$\omega_{OA}=3,$   
 $\omega_{AB}=-3, \omega_{BC}=1.5, OA=31.$

**Задача K18.15.**

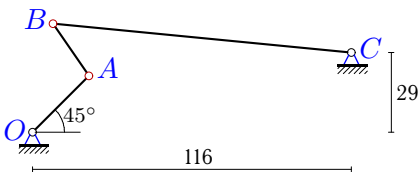
9



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

**Задача K18.17.**

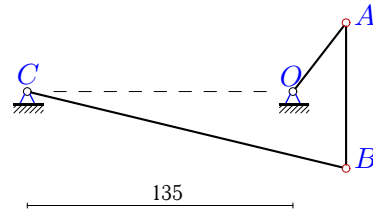
9



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

**Задача K18.10.**

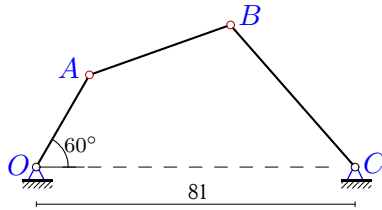
9



$\omega_{OA}=6,$   
 $\omega_{AB}=3, \omega_{BC}=1, AB \perp OC, AB=74.$

**Задача K18.12.**

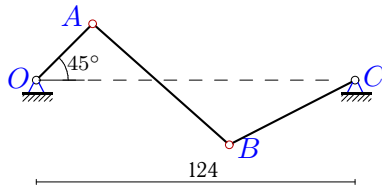
9



$\omega_{OA}=3,$   
 $\omega_{AB}=-1.8, \omega_{BC}=1, OA=27.$

**Задача K18.14.**

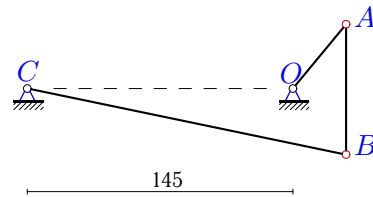
9



$\omega_{OA}=3,$   
 $\omega_{AB}=0.4, \omega_{BC}=-1.8, OA=31.$

**Задача K18.16.**

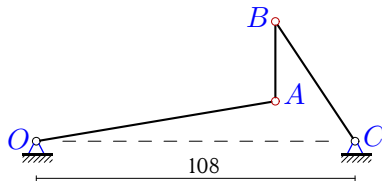
9



$\omega_{OA}=2,$   
 $\omega_{AB}=1.2, \omega_{BC}=0.3, AB \perp OC, AB=71.$

**Задача K18.18.**

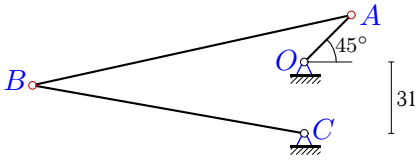
9



$\omega_{OA}=-0.3,$   
 $\omega_{AB}=1.7, \omega_{BC}=1, AB \perp OC, AB=27.$

**Задача K18.19.**

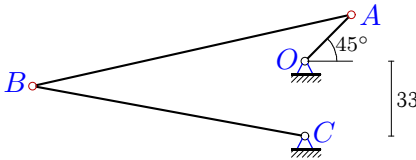
9



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

**Задача K18.21.**

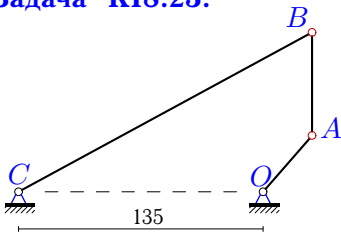
9



$\omega_{OA}=2,$   
 $\omega_{AB}=0.8, \omega_{BC}=0.7, OA = 29.$

**Задача K18.23.**

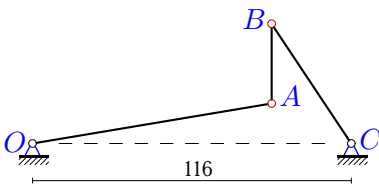
9



$\omega_{OA}=1,$   
 $\omega_{AB} = -0.3, \omega_{BC}=0.2, AB \perp OC, AB = 57.$

**Задача K18.25.**

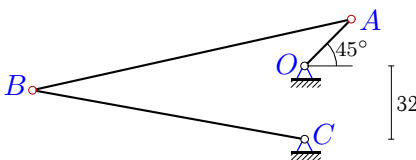
9



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

**Задача K18.27.**

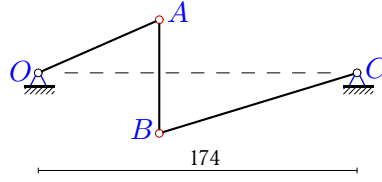
9



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

**Задача K18.20.**

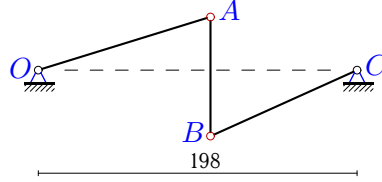
9



$\omega_{OA}=2,$   
 $\omega_{AB}=0.3, \omega_{BC} = -1.2, AB \perp OC, AB = 62.$

**Задача K18.22.**

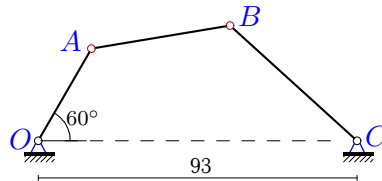
9



$\omega_{OA} = -3,$   
 $\omega_{AB}=0.7, \omega_{BC}=4, AB \perp OC, AB = 74.$

**Задача K18.24.**

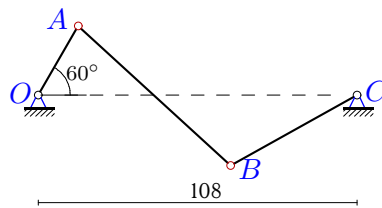
9



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

**Задача K18.26.**

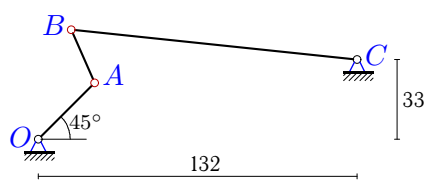
9



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

**Задача K18.28.**

9



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

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

08.04.2012

№	<i>OA</i>	<i>AB</i>	<i>BC</i>
1	33.000	38.074	52.919
2	97.220	68.000	101.106
3	63.908	31.000	77.500
4	104.159	74.000	107.395
5	49.519	68.000	224.978
6	45.839	71.000	177.584
7	29.000	61.215	32.200
8	33.000	41.513	46.745
9	33.000	17.072	153.049
10	40.064	74.000	167.974
11	63.908	31.000	77.500
12	27.000	42.032	49.433
13	31.000	38.997	43.912
14	31.000	71.856	54.942
15	31.000	81.784	60.926
16	45.471	71.000	173.829
17	29.000	18.937	106.939
18	84.339	27.000	48.442
19	29.000	135.575	115.905
20	71.430	62.000	113.629
21	29.000	268.943	246.725
22	118.399	74.000	93.438
23	49.073	57.000	192.499
24	31.000	39.327	51.261
25	86.595	29.000	49.837
26	27.000	68.566	50.143
27	29.000	134.979	117.024
28	33.000	23.618	119.009

K18 файл о18k9A