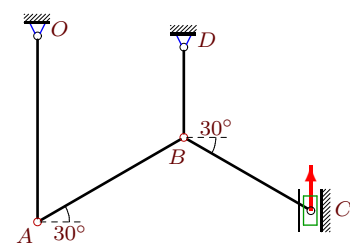
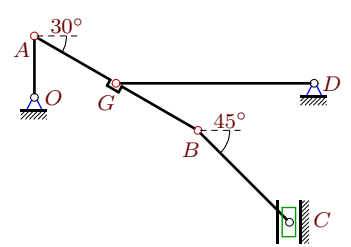
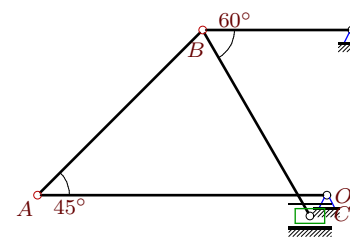
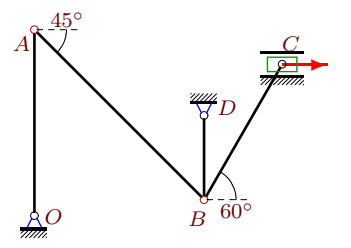
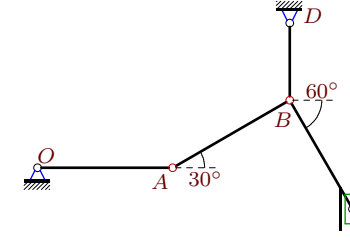
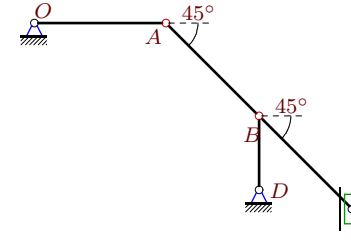
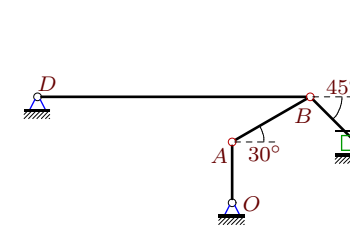
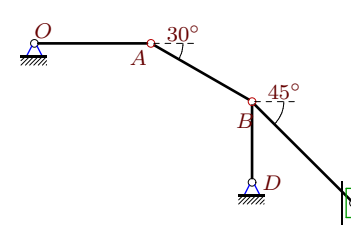
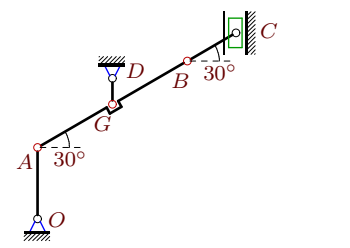
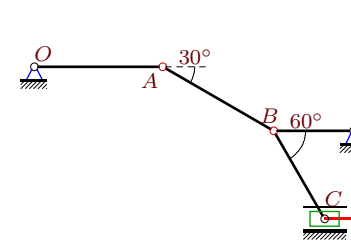


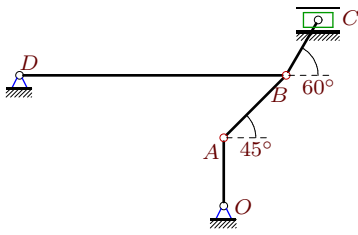
Кинематический анализ механизма (4звена)

Найти скорости и ускорения шарниров плоского механизма.

Кирсанов М.Н. **Решebник. Теоретическая механика**/Под ред. А. И. Кириллова.- М.:ФИЗМАТЛИТ, 2002.- 384 с. (с. 279.)

<p>Задача 7.1</p>  <p style="text-align: right;"> $v_C = 135 \text{ см/с},$ $OA = 33 \text{ см},$ $DB = 16 \text{ см},$ $AB = 30 \text{ см},$ $BC = 26 \text{ см}.$ </p> <p style="font-size: small;">7.101</p>	<p>Задача 7.2</p>  <p style="text-align: right;"> $\omega_{DG} = 28 \text{ рад/с},$ $OA = 26 \text{ см},$ $BG = 40 \text{ см},$ $DG = 84 \text{ см},$ $AG = 40 \text{ см},$ $BC = 55 \text{ см}.$ </p> <p style="font-size: small;">7.101</p>
<p>Задача 7.3</p>  <p style="text-align: right;"> $\omega_{DB} = 15 \text{ рад/с},$ $OA = 31 \text{ см},$ $DB = 16 \text{ см},$ $AB = 25 \text{ см},$ $BC = 23 \text{ см}.$ </p> <p style="font-size: small;">7.101</p>	<p>Задача 7.4</p>  <p style="text-align: right;"> $v_C = 80 \text{ см/с},$ $OA = 31 \text{ см},$ $DB = 14 \text{ см},$ $AB = 40 \text{ см},$ $BC = 26 \text{ см}.$ </p> <p style="font-size: small;">7.101</p>
<p>Задача 7.5</p>  <p style="text-align: right;"> $\omega_{DB} = 14 \text{ рад/с},$ $OA = 28 \text{ см},$ $DB = 16 \text{ см},$ $AB = 28 \text{ см},$ $BC = 26 \text{ см}.$ </p> <p style="font-size: small;">7.101</p>	<p>Задача 7.6</p>  <p style="text-align: right;"> $\omega_{OA} = 11 \text{ рад/с},$ $OA = 32 \text{ см},$ $DB = 18 \text{ см},$ $AB = 32 \text{ см},$ $BC = 32 \text{ см}.$ </p> <p style="font-size: small;">7.101</p>
<p>Задача 7.7</p>  <p style="text-align: right;"> $\omega_{OA} = 20 \text{ рад/с},$ $OA = 27 \text{ см},$ $DB = 121 \text{ см},$ $AB = 40 \text{ см},$ $BC = 29 \text{ см}.$ </p> <p style="font-size: small;">7.101</p>	<p>Задача 7.8</p>  <p style="text-align: right;"> $\omega_{DB} = 12 \text{ рад/с},$ $OA = 26 \text{ см},$ $DB = 18 \text{ см},$ $AB = 26 \text{ см},$ $BC = 32 \text{ см}.$ </p> <p style="font-size: small;">7.101</p>
<p>Задача 7.9</p>  <p style="text-align: right;"> $\omega_{DG} = 14 \text{ рад/с},$ $OA = 33 \text{ см},$ $BG = 40 \text{ см},$ $DG = 12 \text{ см},$ $AG = 40 \text{ см},$ $BC = 26 \text{ см}.$ </p> <p style="font-size: small;">7.101</p>	<p>Задача 7.10</p>  <p style="text-align: right;"> $v_C = 105 \text{ см/с},$ $OA = 29 \text{ см},$ $DB = 18 \text{ см},$ $AB = 29 \text{ см},$ $BC = 23 \text{ см}.$ </p> <p style="font-size: small;">7.101</p>

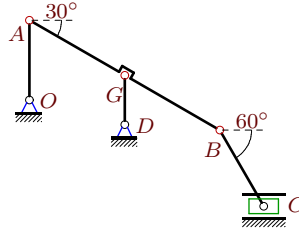
Задача 7.11



$\omega_{DB} = 9 \text{ рад/с,}$
 $OA = 31 \text{ см,}$
 $DB = 121 \text{ см,}$
 $AB = 40 \text{ см,}$
 $BC = 29 \text{ см.}$

7.101

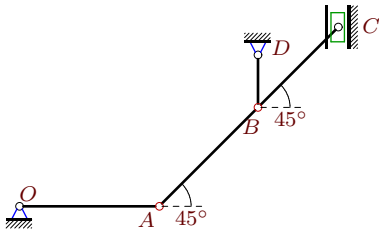
Задача 7.12



$\omega_{DG} = 1 \text{ рад/с,}$
 $OA = 29 \text{ см,}$
 $BG = 40 \text{ см,}$
 $DG = 18 \text{ см,}$
 $AG = 40 \text{ см,}$
 $BC = 32 \text{ см.}$

7.101

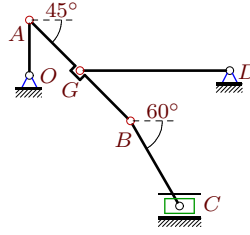
Задача 7.13



$\omega_{OA} = 13 \text{ рад/с,}$
 $OA = 32 \text{ см,}$
 $DB = 12 \text{ см,}$
 $AB = 32 \text{ см,}$
 $BC = 26 \text{ см.}$

7.101

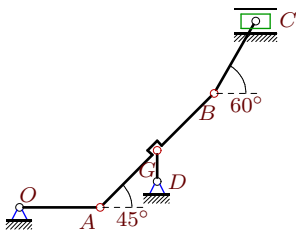
Задача 7.14



$\omega_{OA} = 3 \text{ рад/с,}$
 $OA = 31 \text{ см,}$
 $BG = 40 \text{ см,}$
 $DG = 84 \text{ см,}$
 $AG = 40 \text{ см,}$
 $BC = 55 \text{ см.}$

7.101

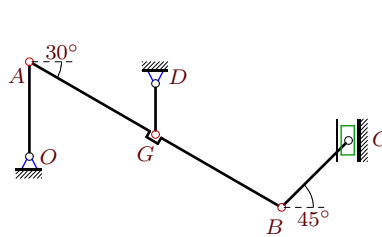
Задача 7.15



$\omega_{OA} = 3 \text{ рад/с,}$
 $OA = 31 \text{ см,}$
 $BG = 31 \text{ см,}$
 $DG = 12 \text{ см,}$
 $AG = 31 \text{ см,}$
 $BC = 32 \text{ см.}$

7.101

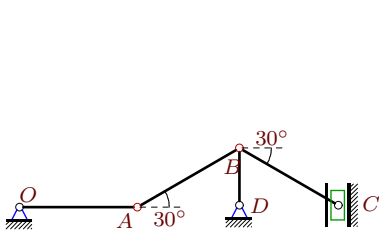
Задача 7.16



$\omega_{OA} = 18 \text{ рад/с,}$
 $OA = 26 \text{ см,}$
 $BG = 40 \text{ см,}$
 $DG = 14 \text{ см,}$
 $AG = 40 \text{ см,}$
 $BC = 26 \text{ см.}$

7.101

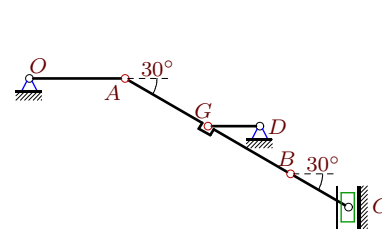
Задача 7.17



$\omega_{DB} = 33 \text{ рад/с,}$
 $OA = 33 \text{ см,}$
 $DB = 16 \text{ см,}$
 $AB = 33 \text{ см,}$
 $BC = 32 \text{ см.}$

7.101

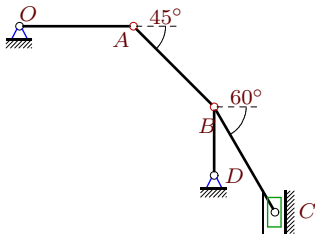
Задача 7.18



$\omega_{DG} = 16 \text{ рад/с,}$
 $OA = 33 \text{ см,}$
 $BG = 33 \text{ см,}$
 $DG = 18 \text{ см,}$
 $AG = 33 \text{ см,}$
 $BC = 23 \text{ см.}$

7.101

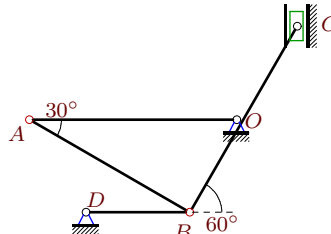
Задача 7.19



$\omega_{DB} = 2 \text{ рад/с,}$
 $OA = 30 \text{ см,}$
 $DB = 18 \text{ см,}$
 $AB = 30 \text{ см,}$
 $BC = 32 \text{ см.}$

7.101

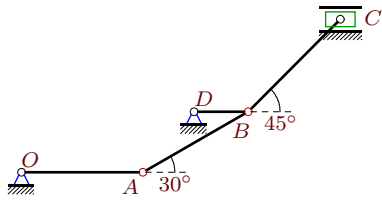
Задача 7.20



$\omega_{OA} = 13 \text{ рад/с,}$
 $OA = 28 \text{ см,}$
 $DB = 14 \text{ см,}$
 $AB = 25 \text{ см,}$
 $BC = 29 \text{ см.}$

7.101

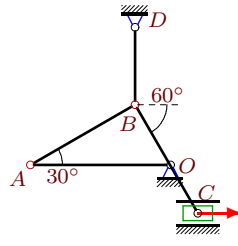
Задача 7.21



$\omega_{DB} = 29$ рад/с,
 $OA = 27$ см,
 $DB = 12$ см,
 $AB = 27$ см,
 $BC = 29$ см.

7.101

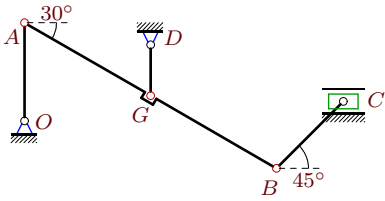
Задача 7.22



$v_C = 35$ см/с,
 $OA = 29$ см,
 $DB = 16$ см,
 $AB = 25$ см,
 $BC = 26$ см.

7.101

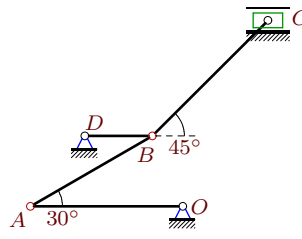
Задача 7.23



$\omega_{DG} = 9$ рад/с,
 $OA = 27$ см,
 $BG = 40$ см,
 $DG = 14$ см,
 $AG = 40$ см,
 $BC = 26$ см.

7.101

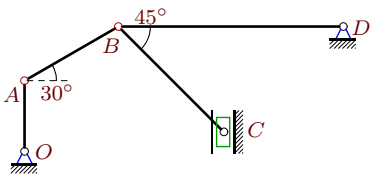
Задача 7.24



$\omega_{DB} = 22$ рад/с,
 $OA = 27$ см,
 $DB = 12$ см,
 $AB = 25$ см,
 $BC = 29$ см.

7.101

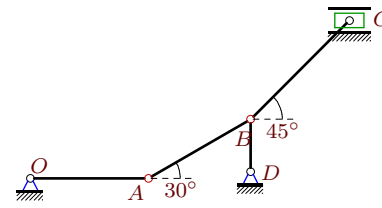
Задача 7.25



$\omega_{DB} = 31$ рад/с,
 $OA = 26$ см,
 $DB = 83$ см,
 $AB = 40$ см,
 $BC = 55$ см.

7.101

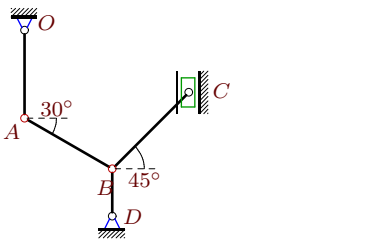
Задача 7.26



$\omega_{DB} = 1$ рад/с,
 $OA = 27$ см,
 $DB = 12$ см,
 $AB = 27$ см,
 $BC = 32$ см.

7.101

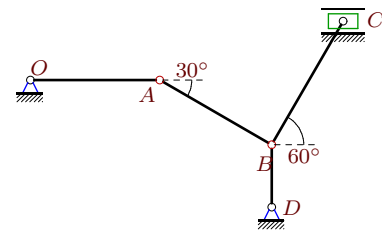
Задача 7.27



$\omega_{OA} = 16$ рад/с,
 $OA = 26$ см,
 $DB = 14$ см,
 $AB = 30$ см,
 $BC = 32$ см.

7.101

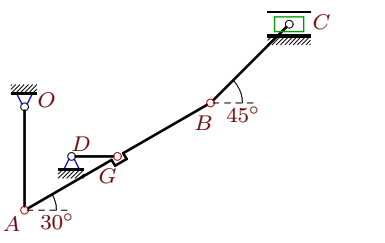
Задача 7.28



$\omega_{OA} = 4$ рад/с,
 $OA = 29$ см,
 $DB = 14$ см,
 $AB = 29$ см,
 $BC = 32$ см.

7.101

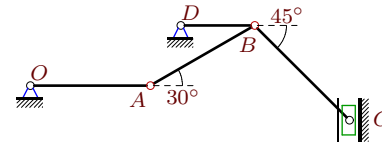
Задача 7.29



$\omega_{DG} = 2$ рад/с,
 $OA = 27$ см,
 $BG = 28$ см,
 $DG = 12$ см,
 $AG = 28$ см,
 $BC = 29$ см.

7.101

Задача 7.30



$\omega_{OA} = 30$ рад/с,
 $OA = 26$ см,
 $DB = 16$ см,
 $AB = 26$ см,
 $BC = 29$ см.

7.101

Кинематический анализ механизма (4звена)

n	v_A	v_B	v_C	v_G	a_A	a_B	a_C	a_G
1	0.779	0.779	1.350	-	14.233	13.528	0.000	-
2	13.579	48.961	33.461	23.520	2481.816	1276.379	2718.700	658.560
3	2.400	2.400	4.157	-	25.469	36.000	164.348	-
4	0.800	0.800	0.800	-	14.700	9.143	0.000	-
5	3.880	2.240	1.293	-	273.177	31.360	61.072	-
6	3.520	3.520	3.520	-	38.720	227.725	257.753	-
7	5.400	9.353	9.353	-	108.000	570.576	359.530	-
8	3.741	2.160	2.160	-	268.179	25.920	15.318	-
9	1.680	1.680	2.910	1.680	20.397	58.596	63.323	23.520
10	0.606	0.606	1.050	-	12.000	6.529	0.000	-
11	10.890	10.890	18.862	-	1186.483	98.010	3369.516	-
12	0.180	0.180	0.180	0.180	0.118	0.251	0.391	0.180
13	4.160	4.160	4.160	-	54.080	379.707	395.301	-
14	0.930	2.080	2.292	0.930	2.790	11.684	68.182	4.475
15	0.930	2.080	0.249	0.930	2.790	15.003	50.748	8.001
16	4.680	4.680	4.680	4.680	84.240	484.719	436.785	209.249
17	9.145	5.280	9.145	-	974.118	174.240	522.720	-
18	2.880	2.880	2.880	2.880	125.882	170.213	79.813	46.080
19	0.360	0.360	0.208	-	2.413	0.720	0.096	-
20	3.640	3.640	3.640	-	47.320	263.467	300.522	-
21	3.480	3.480	3.480	-	106.968	100.920	219.035	-
22	0.606	0.350	0.350	-	4.952	1.531	0.000	-
23	1.260	1.260	1.260	1.260	11.551	30.241	38.502	11.340
24	2.640	2.640	2.640	-	147.583	58.080	126.056	-
25	14.855	25.730	25.730	-	3928.609	797.630	797.630	-
26	0.208	0.120	0.120	-	0.605	0.120	0.120	-
27	4.160	4.160	4.160	-	66.560	165.333	386.368	-
28	1.160	0.670	0.670	-	4.640	14.005	19.183	-
29	0.139	0.500	0.341	0.240	0.216	0.759	3.074	0.480
30	7.800	7.800	7.800	-	234.000	456.900	633.562	-