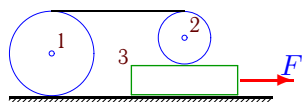


Уравнение Лагранжа 2-го рода

Механическая система из двух однородных цилиндров 1 и 2 и бруска 3 с идеальными стационарными связями имеет две степени свободы и движется под действием силы F . Трением пренебречь. Массы даны в килограммах, сила — в ньютонах. Найти ускорение бруска, скользящего по гладкой поверхности.

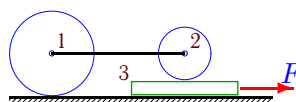
Курсанов М.Н. **Решбник. Теоретическая механика**/Под ред. А. И. Кириллова.— М.:ФИЗМАТЛИТ, 2008.— 384 с. (с.300.)

Задача 14.1.



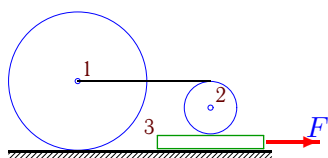
$$F = 61, m_1 = 2, m_2 = 3, m_3 = 2.$$

Задача 14.2.



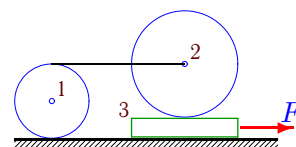
$$F = 34, m_1 = 1, m_2 = 2, m_3 = 3.$$

Задача 14.3.



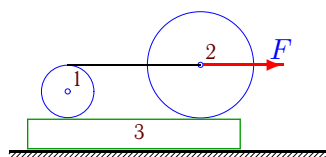
$$F = 71, m_1 = 1, m_2 = 1, m_3 = 2.$$

Задача 14.4.



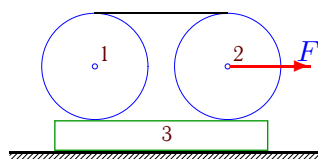
$$F = 25, m_1 = 2, m_2 = 1, m_3 = 1.$$

Задача 14.5.



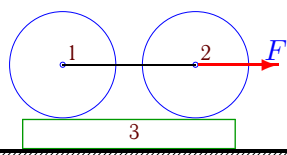
$$F = 23, m_1 = 2, m_2 = 2, m_3 = 3.$$

Задача 14.6.



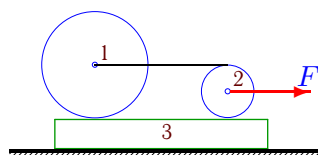
$$F = 13, m_1 = 2, m_2 = 2, m_3 = 3.$$

Задача 14.7.



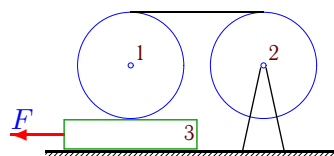
$$F = 12, m_1 = 1, m_2 = 2, m_3 = 3.$$

Задача 14.8.



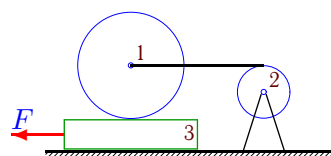
$$F = 14, m_1 = 1, m_2 = 1, m_3 = 2.$$

Задача 14.9.



$$F = 17, m_1 = 2, m_2 = 1, m_3 = 1.$$

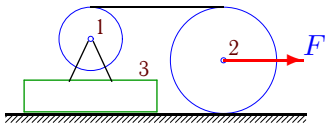
Задача 14.10.



$$F = 7, m_1 = 1, m_2 = 2, m_3 = 1.$$

Задача 14.11.

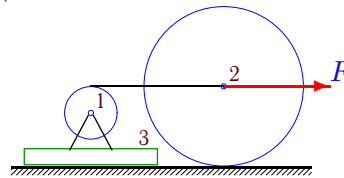
1



$F = 45, m_1 = 1, m_2 = 1, m_3 = 2.$

Задача 14.12.

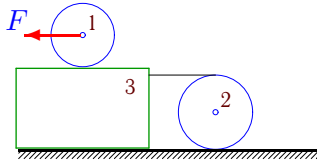
1



$F = 14, m_1 = 2, m_2 = 1, m_3 = 3.$

Задача 14.13.

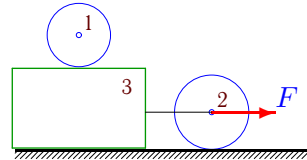
1



$F = 25, m_1 = 1, m_2 = 2, m_3 = 1.$

Задача 14.14.

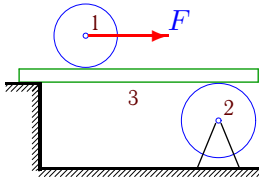
1



$F = 35, m_1 = 1, m_2 = 3, m_3 = 1.$

Задача 14.15.

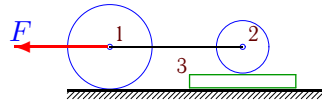
1



$F = 21, m_1 = 3, m_2 = 1, m_3 = 2.$

Задача 14.16.

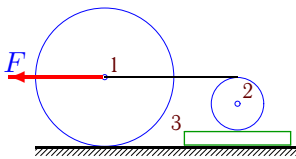
1



$F = 35, m_1 = 3, m_2 = 1, m_3 = 1.$

Задача 14.17.

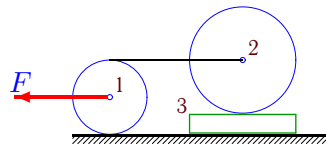
1



$F = 29, m_1 = 1, m_2 = 3, m_3 = 1.$

Задача 14.18.

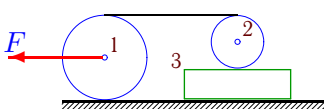
1



$F = 153, m_1 = 3, m_2 = 3, m_3 = 4.$

Задача 14.19.

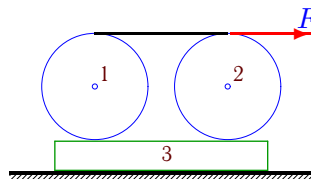
1



$F = 121, m_1 = 2, m_2 = 1, m_3 = 3.$

Задача 14.20.

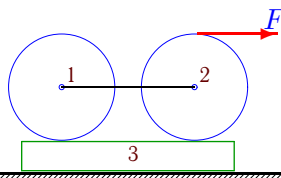
1



$F = 9, m_1 = 3, m_2 = 3, m_3 = 1.$

Задача 14.21.

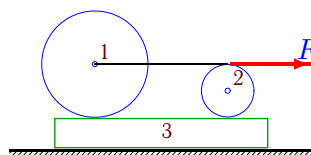
1



$F = 13, m_1 = 2, m_2 = 2, m_3 = 3.$

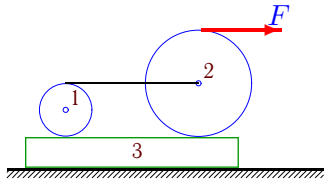
Задача 14.22.

1



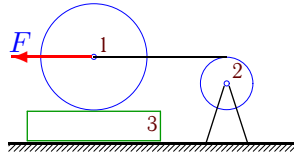
$F = 76, m_1 = 1, m_2 = 3, m_3 = 2.$

Задача 14.23.



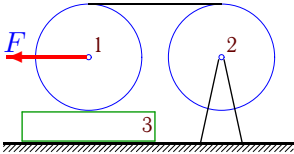
$F = 55, m_1 = 3, m_2 = 1, m_3 = 1.$

Задача 14.24.



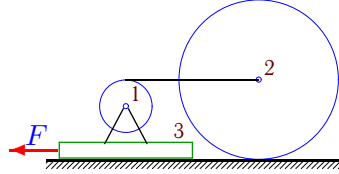
$F = 61, m_1 = 3, m_2 = 1, m_3 = 2.$

Задача 14.25.



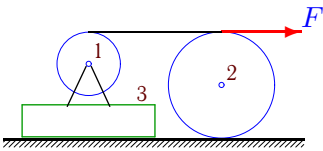
$F = 31, m_1 = 2, m_2 = 3, m_3 = 1.$

Задача 14.26.



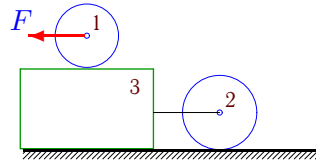
$F = 64, m_1 = 2, m_2 = 3, m_3 = 3.$

Задача 14.27.



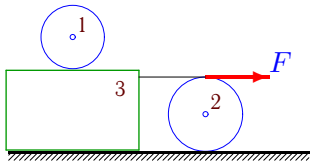
$F = 19, m_1 = 2, m_2 = 2, m_3 = 3.$

Задача 14.28.



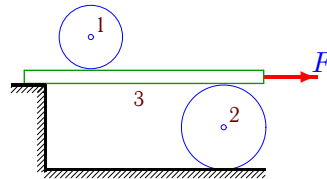
$F = 18, m_1 = 3, m_2 = 2, m_3 = 2.$

Задача 14.29.



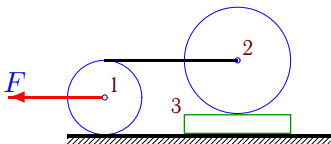
$F = 37, m_1 = 1, m_2 = 2, m_3 = 2.$

Задача 14.30.



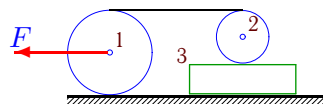
$F = 91, m_1 = 2, m_2 = 3, m_3 = 2.$

Задача 14.31.



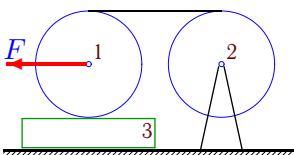
$F = 61, m_1 = 2, m_2 = 1, m_3 = 3.$

Задача 14.32.



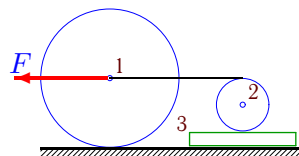
$F = 61, m_1 = 1, m_2 = 2, m_3 = 1.$

Задача 14.33.



$F = 26, m_1 = 2, m_2 = 2, m_3 = 3.$

Задача 14.34.



$F = 71, m_1 = 1, m_2 = 1, m_3 = 2.$

Уравнение Лагранжа 2-го рода

№	a
1	20
2	9
3	30
4	18
5	1
6	1
7	1
8	3
9	-10
10	-5
11	4
12	1
13	-4
14	6
15	2
16	-2
17	2
18	-4
19	2
20	-1
21	-1
22	1
23	-19
24	-6
25	-8
26	-11
27	2
28	-1
29	12
30	24
31	-2
32	4
33	-3
34	2