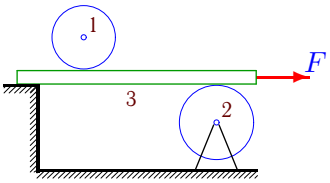
Уравнение Лагранжа 2-го рода

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.

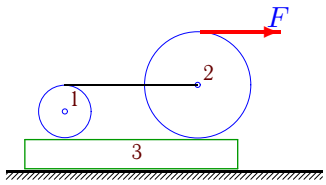
Кирсанов М.Н. **Решебник. Теоретическая механика**/Под ред. А. И. Кириллова.– М.:ФИЗМАТЛИТ, 2008.– 384 с. (с.300.)

Задача 14.1. 2



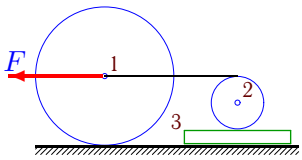
$F = 19,\ m_1 = 2,\ m_2 = 1,\ m_3 = 2.$

Задача 14.2. 2



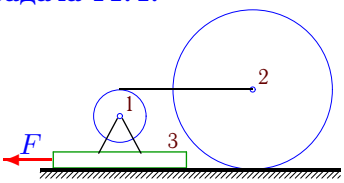
$F = 62,\ m_1 = 2,\ m_2 = 3,\ m_3 = 1.$

Задача 14.3. 2



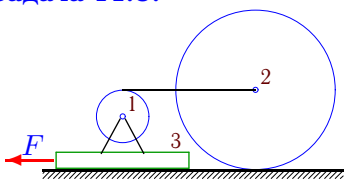
$F = 107,\ m_1 = 3,\ m_2 = 1,\ m_3 = 1.$

Задача 14.4. 2



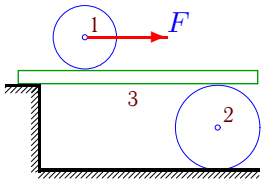
$F = 42,\ m_1 = 2,\ m_2 = 3,\ m_3 = 1.$

Задача 14.5. 2



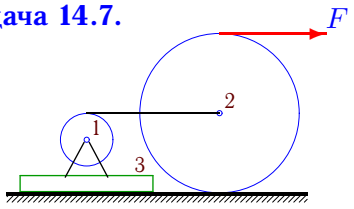
$F = 15,\ m_1 = 2,\ m_2 = 2,\ m_3 = 1.$

Задача 14.6. 2



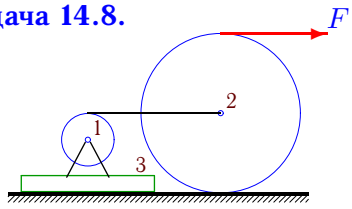
$F = 81,\ m_1 = 3,\ m_2 = 1,\ m_3 = 2.$

Задача 14.7. 2



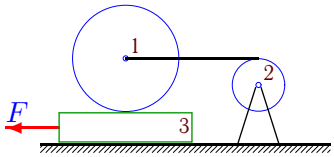
$F = 9,\ m_1 = 3,\ m_2 = 2,\ m_3 = 2.$

Задача 14.8. 2



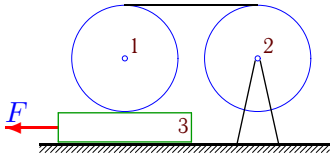
$F = 17,\ m_1 = 1,\ m_2 = 2,\ m_3 = 1.$

Задача 14.9. 2



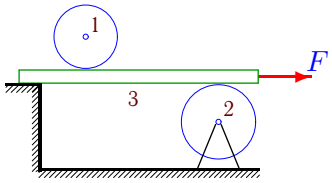
$F = 41,\ m_1 = 1,\ m_2 = 3,\ m_3 = 3.$

Задача 14.10. 2



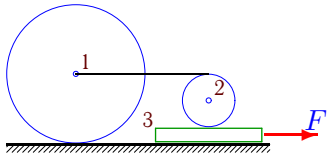
$F = 31,\ m_1 = 2,\ m_2 = 3,\ m_3 = 1.$

Задача 14.11. 2



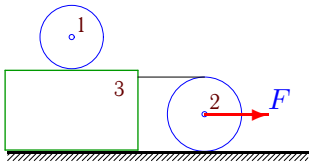
$F = 9,\ m_1 = 3,\ m_2 = 3,\ m_3 = 2.$

Задача 14.12. 2



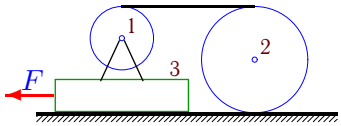
$F = 37,\ m_1 = 2,\ m_2 = 1,\ m_3 = 1.$

Задача 14.13. 2



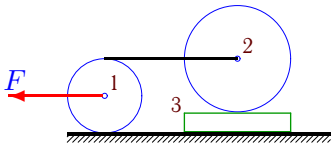
$F = 25,\ m_1 = 3,\ m_2 = 3,\ m_3 = 1.$

Задача 14.14. 2



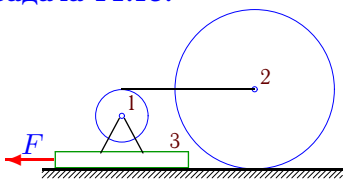
$F = 47,\ m_1 = 2,\ m_2 = 1,\ m_3 = 2.$

Задача 14.15. 2



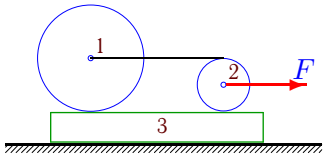
$F = 63,\ m_1 = 3,\ m_2 = 3,\ m_3 = 1.$

Задача 14.16. 2



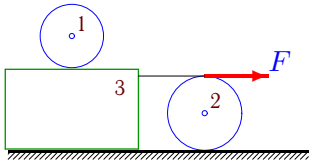
$F = 49,\ m_1 = 3,\ m_2 = 3,\ m_3 = 2.$

Задача 14.17. 2



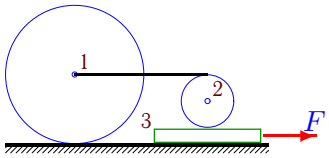
$F = 166,\ m_1 = 2,\ m_2 = 3,\ m_3 = 3.$

Задача 14.18. 2



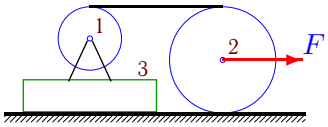
$F = 19,\ m_1 = 3,\ m_2 = 2,\ m_3 = 3.$

Задача 14.19. 2



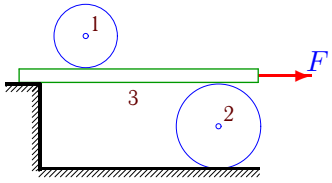
$F = 73,\ m_1 = 3,\ m_2 = 2,\ m_3 = 1.$

Задача 14.20. 2



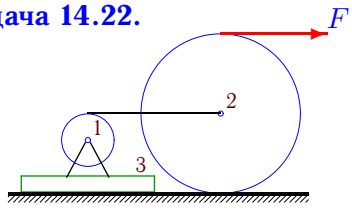
$F = 15,\ m_1 = 2,\ m_2 = 3,\ m_3 = 1.$

Задача 14.21. 2



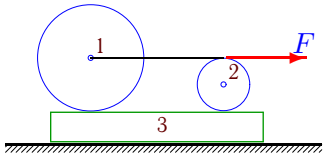
$F = 25,\ m_1 = 3,\ m_2 = 3,\ m_3 = 1.$

Задача 14.22. 2



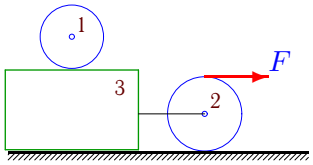
$F = 21,\ m_1 = 3,\ m_2 = 2,\ m_3 = 3.$

Задача 14.23. 2



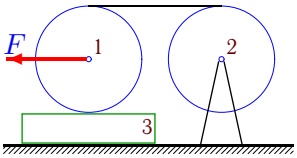
$F = 22,\ m_1 = 3,\ m_2 = 3,\ m_3 = 2.$

Задача 14.24. 2



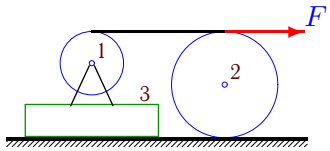
$F = 23,\ m_1 = 1,\ m_2 = 1,\ m_3 = 2.$

Задача 14.25. 2



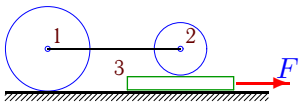
$F = 37,\ m_1 = 2,\ m_2 = 1,\ m_3 = 3.$

Задача 14.26. 2



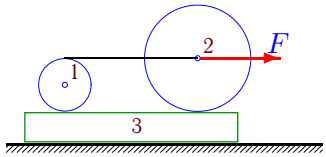
$F = 107,\ m_1 = 3,\ m_2 = 3,\ m_3 = 4.$

Задача 14.27. 2



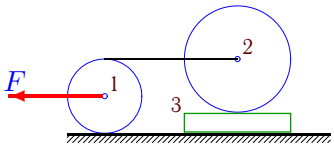
$F = 25,\ m_1 = 1,\ m_2 = 2,\ m_3 = 2.$

Задача 14.28. 2



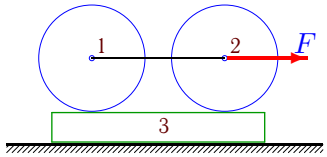
$F = 62,\ m_1 = 2,\ m_2 = 3,\ m_3 = 1.$

Задача 14.29. 2



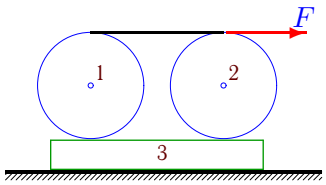
$F = 71,\ m_1 = 1,\ m_2 = 1,\ m_3 = 2.$

Задача 14.30. 2



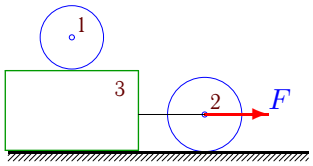
$F = 13,\ m_1 = 1,\ m_2 = 3,\ m_3 = 3.$

Задача 14.31. 2



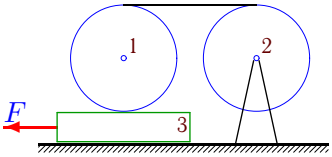
$F = 7,\ m_1 = 1,\ m_2 = 3,\ m_3 = 1.$

Задача 14.32. 2



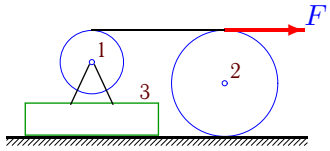
$F = 13,\ m_1 = 1,\ m_2 = 2,\ m_3 = 1.$

Задача 14.33. 2



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

Задача 14.34. 2



$F = 27,\ m_1 = 3,\ m_2 = 2,\ m_3 = 1.$

14.2

Уравнение Лагранжа 2-го рода

№	a
1	6
2	-11
3	2
4	-11
5	-4
6	8
7	1
8	2
9	-12
10	-18
11	2
12	27
13	4
14	-11
15	-4
16	-8
17	19
18	4
19	42
20	1
21	8
22	2
23	1
24	12
25	-4
26	8
27	9
28	5
29	-4
30	1
31	-1
32	3
33	-7
34	4