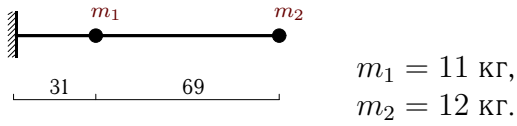


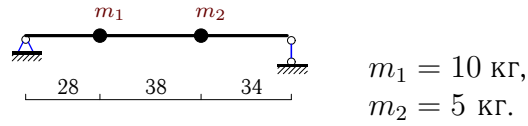
Колебания грузов на упругой балке

Найти собственные частоты колебаний грузов на упругой балке. Принять жесткость балки на изгиб $EJ = 1000 \text{ Нм}^2$. Размеры даны в сантиметрах.

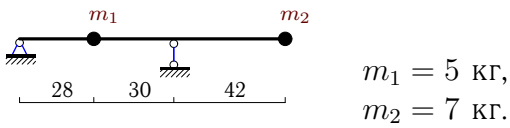
Задача 35.1.



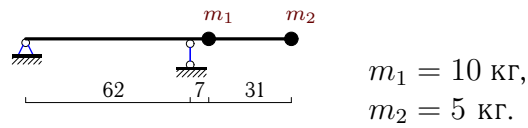
Задача 35.2.



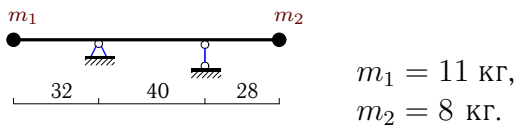
Задача 35.3.



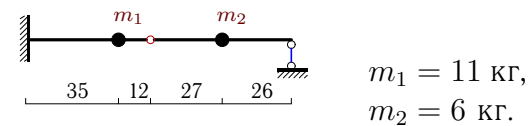
Задача 35.4.



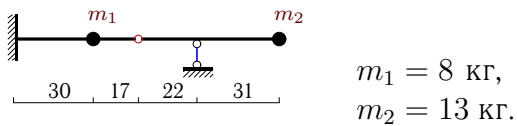
Задача 35.5.



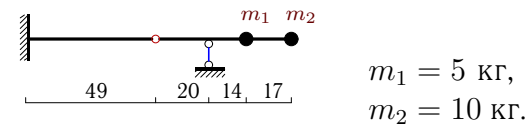
Задача 35.6.



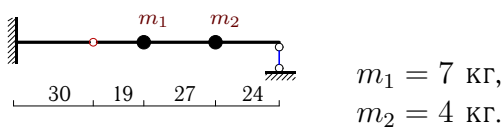
Задача 35.7.



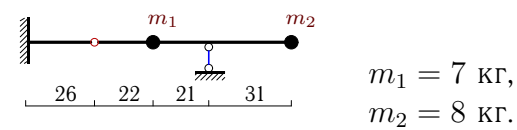
Задача 35.8.



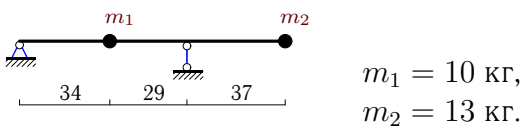
Задача 35.9.



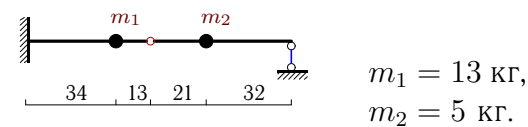
Задача 35.10.



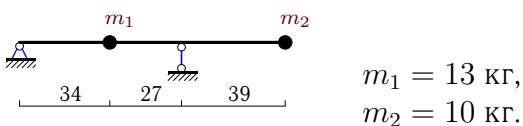
Задача 35.11.



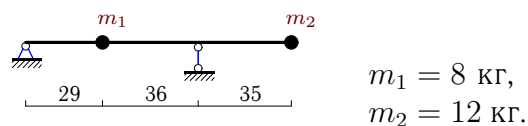
Задача 35.12.

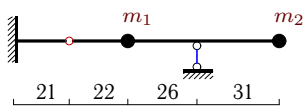


Задача 35.13.



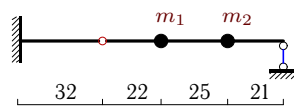
Задача 35.14.



Задача 35.15.

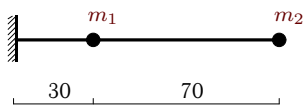
$$m_1 = 8 \text{ кг},$$

$$m_2 = 13 \text{ кг}.$$

Задача 35.16.

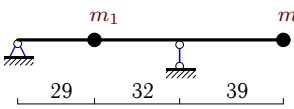
$$m_1 = 9 \text{ кг},$$

$$m_2 = 10 \text{ кг}.$$

Задача 35.17.

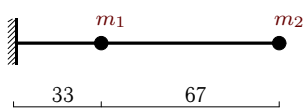
$$m_1 = 9 \text{ кг},$$

$$m_2 = 11 \text{ кг}.$$

Задача 35.18.

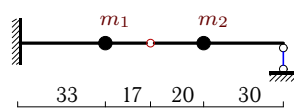
$$m_1 = 7 \text{ кг},$$

$$m_2 = 4 \text{ кг}.$$

Задача 35.19.

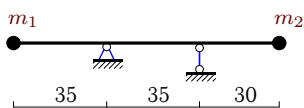
$$m_1 = 13 \text{ кг},$$

$$m_2 = 9 \text{ кг}.$$

Задача 35.20.

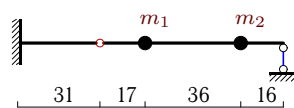
$$m_1 = 7 \text{ кг},$$

$$m_2 = 6 \text{ кг}.$$

Задача 35.21.

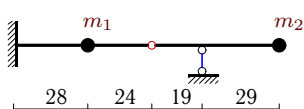
$$m_1 = 13 \text{ кг},$$

$$m_2 = 11 \text{ кг}.$$

Задача 35.22.

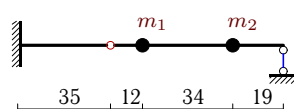
$$m_1 = 10 \text{ кг},$$

$$m_2 = 11 \text{ кг}.$$

Задача 35.23.

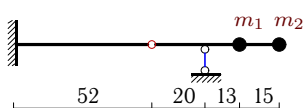
$$m_1 = 10 \text{ кг},$$

$$m_2 = 7 \text{ кг}.$$

Задача 35.24.

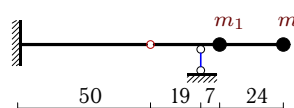
$$m_1 = 7 \text{ кг},$$

$$m_2 = 12 \text{ кг}.$$

Задача 35.25.

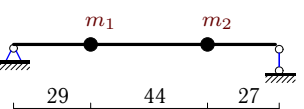
$$m_1 = 12 \text{ кг},$$

$$m_2 = 5 \text{ кг}.$$

Задача 35.26.

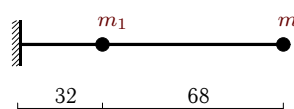
$$m_1 = 9 \text{ кг},$$

$$m_2 = 11 \text{ кг}.$$

Задача 35.27.

$$m_1 = 9 \text{ кг},$$

$$m_2 = 10 \text{ кг}.$$

Задача 35.28.

$$m_1 = 11 \text{ кг},$$

$$m_2 = 12 \text{ кг}.$$

Колебания грузов на упругой балке

	δ_{11}	δ_{12}	δ_{22}	ω_1	ω_2
	см ³			рад/с	
1	9.930	43.085	333.333	145.489	15.690
2	13.548	12.789	16.785	252.617	70.060
3	4.055	8.719	58.800	271.250	48.895
4	1.127	6.371	48.133	604.155	63.347
5	24.576	5.973	17.771	90.863	58.583
6	14.292	10.617	11.428	250.653	69.030
7	9.000	23.461	85.692	225.369	29.281
8	21.437	48.024	110.554	616.338	28.747
9	9.249	6.551	6.862	385.386	108.176
10	3.052	-5.671	26.750	283.652	66.975
11	5.144	9.362	45.633	179.121	40.373
12	13.101	12.447	15.456	275.341	65.315
13	4.605	9.293	50.700	166.600	43.403
14	5.589	8.807	40.833	187.062	44.449
15	3.178	-5.390	26.594	248.047	53.083
16	10.019	6.470	5.817	305.214	85.248
17	9.000	40.500	333.333	166.043	16.415
18	4.706	8.900	50.700	219.481	68.202
19	11.979	48.461	333.333	126.796	17.979
20	11.979	12.741	17.400	302.658	75.093
21	28.583	6.125	19.500	73.393	49.973
22	9.415	4.505	4.008	252.813	90.317
23	7.317	25.528	122.645	230.359	33.098
24	11.576	5.581	5.138	227.704	90.018
25	21.661	47.078	104.408	535.120	35.841
26	6.080	27.123	126.935	636.189	26.275
27	14.132	11.001	12.949	204.264	65.553
28	10.923	45.739	333.333	141.091	15.675