

ТАБЛИЦЫ

I. Натуральные логарифмы ¹⁾

N	0	1	2	3	4	5	6	7	8	9
1,0	0,0000	0,0100	0,0198	0,0296	0,0392	0,0488	0,0583	0,0677	0,0770	0,0862
1,1	0,0953	0,1044	0,1133	0,1222	0,1310	0,1398	0,1484	0,1570	0,1655	0,1740
1,2	0,1823	0,1906	0,1989	0,2070	0,2151	0,2231	0,2311	0,2390	0,2469	0,2546
1,3	0,2624	0,2700	0,2776	0,2852	0,2927	0,3001	0,3075	0,3148	0,3221	0,3293
1,4	0,3365	0,3436	0,3507	0,3577	0,3646	0,3716	0,3784	0,3853	0,3920	0,3988
1,5	0,4055	0,4121	0,4187	0,4253	0,4318	0,4383	0,4447	0,4511	0,4574	0,4637
1,6	0,4700	0,4762	0,4824	0,4886	0,4947	0,5008	0,5068	0,5128	0,5188	0,5247
1,7	0,5306	0,5365	0,5423	0,5481	0,5539	0,5596	0,5653	0,5710	0,5766	0,5822
1,8	0,5878	0,5933	0,5988	0,6043	0,6098	0,6152	0,6206	0,6259	0,6313	0,6366
1,9	0,6419	0,6471	0,6523	0,6575	0,6627	0,6678	0,6729	0,6780	0,6831	0,6881
2,0	0,6931	0,6981	0,7031	0,7080	0,7129	0,7178	0,7227	0,7275	0,7324	0,7372
2,1	0,7419	0,7467	0,7514	0,7561	0,7608	0,7655	0,7701	0,7747	0,7793	0,7839
2,2	0,7885	0,7930	0,7975	0,8020	0,8065	0,8109	0,8154	0,8198	0,8242	0,8286
2,3	0,8329	0,8372	0,8416	0,8459	0,8502	0,8544	0,8587	0,8629	0,8671	0,8713
2,4	0,8755	0,8796	0,8838	0,8879	0,8920	0,8961	0,9002	0,9042	0,9083	0,9123
2,5	0,9163	0,9203	0,9243	0,9282	0,9322	0,9361	0,9400	0,9439	0,9478	0,9517
2,6	0,9555	0,9594	0,9632	0,9670	0,9708	0,9746	0,9783	0,9821	0,9858	0,9895
2,7	0,9933	0,9969	1,0006	1,0043	1,0080	1,0116	1,0152	1,0188	1,0225	1,0260
2,8	1,0296	1,0332	1,0367	1,0403	1,0438	1,0473	1,0508	1,0543	1,0578	1,0613
2,9	1,0647	1,0682	1,0716	1,0750	1,0784	1,0818	1,0852	1,0886	1,0919	1,0953

¹⁾ Натуральный логарифм числа, не содержащегося среди аргументов таблицы, находится следующим образом. Пусть ищется $\ln 753$. Имеем: $\ln 753 = \ln (7,53 \cdot 10^2) = \ln 7,53 + 2 \ln 10$. Первое слагаемое находим по таблице натуральных логарифмов, второе — по таблице III. Получаем: $\ln 753 = 2,0189 + 4,6052 = 6,6241$.

Таким же образом находим $\ln 0,00753 = \ln (7,53 \cdot 10^{-3}) = 2,0189 - 6,9078 = -4,8889$.

Продолжение

N	0	1	2	3	4	5	6	7	8	9
3,0	1,0986	1,1019	1,1053	1,1086	1,1119	1,1151	1,1184	1,1217	1,1249	1,1282
3,1	1,1314	1,1346	1,1378	1,1410	1,1442	1,1474	1,1506	1,1537	1,1569	1,1600
3,2	1,1632	1,1663	1,1694	1,1725	1,1756	1,1787	1,1817	1,1848	1,1878	1,1909
3,3	1,1939	1,1969	1,2000	1,2030	1,2060	1,2090	1,2119	1,2149	1,2179	1,2208
3,4	1,2238	1,2267	1,2296	1,2326	1,2355	1,2384	1,2413	1,2442	1,2470	1,2499
3,5	1,2528	1,2556	1,2585	1,2613	1,2641	1,2669	1,2698	1,2726	1,2754	1,2782
3,6	1,2809	1,2837	1,2865	1,2892	1,2920	1,2947	1,2975	1,3002	1,3029	1,3056
3,7	1,3083	1,3110	1,3137	1,3164	1,3191	1,3218	1,3244	1,3271	1,3297	1,3324
3,8	1,3350	1,3376	1,3403	1,3429	1,3455	1,3481	1,3507	1,3533	1,3558	1,3584
3,9	1,3610	1,3635	1,3661	1,3686	1,3712	1,3737	1,3762	1,3788	1,3813	1,3838
4,0	1,3863	1,3888	1,3913	1,3938	1,3962	1,3987	1,4012	1,4036	1,4061	1,4085
4,1	1,4110	1,4134	1,4159	1,4183	1,4207	1,4231	1,4255	1,4279	1,4303	1,4327
4,2	1,4351	1,4375	1,4398	1,4422	1,4446	1,4469	1,4493	1,4516	1,4540	1,4563
4,3	1,4586	1,4609	1,4633	1,4656	1,4679	1,4702	1,4725	1,4748	1,4770	1,4793
4,4	1,4816	1,4839	1,4861	1,4884	1,4907	1,4929	1,4951	1,4974	1,4996	1,5019
4,5	1,5041	1,5063	1,5085	1,5107	1,5129	1,5151	1,5173	1,5195	1,5217	1,5239
4,6	1,5261	1,5282	1,5304	1,5326	1,5347	1,5369	1,5390	1,5412	1,5433	1,5454
4,7	1,5476	1,5497	1,5518	1,5539	1,5560	1,5581	1,5602	1,5623	1,5644	1,5665
4,8	1,5686	1,5707	1,5728	1,5748	1,5769	1,5790	1,5810	1,5831	1,5851	1,5872
4,9	1,5892	1,5913	1,5933	1,5953	1,5974	1,5994	1,6014	1,6034	1,6054	1,6074
5,0	1,6094	1,6114	1,6134	1,6154	1,6174	1,6194	1,6214	1,6233	1,6253	1,6273
5,1	1,6292	1,6312	1,6332	1,6351	1,6371	1,6390	1,6409	1,6429	1,6448	1,6467
5,2	1,6487	1,6506	1,6525	1,6544	1,6563	1,6582	1,6601	1,6620	1,6639	1,6658
5,3	1,6677	1,6696	1,6715	1,6734	1,6752	1,6771	1,6790	1,6808	1,6827	1,6845
5,4	1,6864	1,6882	1,6901	1,6919	1,6938	1,6956	1,6974	1,6993	1,7011	1,7029

Продолжение

N	0	1	2	3	4	5	6	7	8	9
5,5	1,7047	1,7066	1,7084	1,7102	1,7120	1,7138	1,7156	1,7174	1,7192	1,7210
5,6	1,7228	1,7246	1,7263	1,7281	1,7299	1,7317	1,7334	1,7352	1,7370	1,7387
5,7	1,7405	1,7422	1,7440	1,7457	1,7475	1,7492	1,7509	1,7527	1,7544	1,7561
5,8	1,7579	1,7596	1,7613	1,7630	1,7647	1,7664	1,7681	1,7699	1,7716	1,7733
5,9	1,7750	1,7766	1,7783	1,7800	1,7817	1,7834	1,7851	1,7867	1,7884	1,7901
6,0	1,7918	1,7934	1,7951	1,7967	1,7984	1,8001	1,8017	1,8034	1,8050	1,8066
6,1	1,8083	1,8099	1,8116	1,8132	1,8148	1,8165	1,8181	1,8197	1,8213	1,8229
6,2	1,8245	1,8262	1,8278	1,8294	1,8310	1,8326	1,8342	1,8358	1,8374	1,8390
6,3	1,8405	1,8421	1,8437	1,8453	1,8469	1,8485	1,8500	1,8516	1,8532	1,8547
6,4	1,8563	1,8579	1,8594	1,8610	1,8625	1,8641	1,8656	1,8672	1,8687	1,8703
6,5	1,8718	1,8733	1,8749	1,8764	1,8779	1,8795	1,8810	1,8825	1,8840	1,8856
6,6	1,8871	1,8886	1,8901	1,8916	1,8931	1,8946	1,8961	1,8976	1,8991	1,9006
6,7	1,9021	1,9036	1,9051	1,9066	1,9081	1,9095	1,9110	1,9125	1,9140	1,9155
6,8	1,9169	1,9184	1,9199	1,9213	1,9228	1,9242	1,9257	1,9272	1,9286	1,9301
6,9	1,9315	1,9330	1,9344	1,9359	1,9373	1,9387	1,9402	1,9416	1,9430	1,9445
7,0	1,9459	1,9473	1,9488	1,9502	1,9516	1,9530	1,9544	1,9559	1,9573	1,9587
7,1	1,9601	1,9615	1,9629	1,9643	1,9657	1,9671	1,9685	1,9699	1,9713	1,9727
7,2	1,9741	1,9755	1,9769	1,9782	1,9796	1,9810	1,9824	1,9838	1,9851	1,9865
7,3	1,9879	1,9892	1,9906	1,9920	1,9933	1,9947	1,9961	1,9974	1,9988	2,0001
7,4	2,0015	2,0028	2,0042	2,0055	2,0069	2,0082	2,0096	2,0109	2,0122	2,0136
7,5	2,0149	2,0162	2,0176	2,0189	2,0202	2,0215	2,0229	2,0242	2,0255	2,0268
7,6	2,0281	2,0295	2,0308	2,0321	2,0334	2,0347	2,0360	2,0373	2,0386	2,0399
7,7	2,0412	2,0425	2,0438	2,0451	2,0464	2,0477	2,0490	2,0503	2,0516	2,0528
7,8	2,0541	2,0554	2,0567	2,0580	2,0592	2,0605	2,0618	2,0631	2,0643	2,0656
7,9	2,0669	2,0681	2,0694	2,0707	2,0719	2,0732	2,0744	2,0757	2,0769	2,0782

Продолжение

N	0	1	2	3	4	5	6	7	8	9
8,0	2,0794	2,0807	2,0819	2,0832	2,0844	2,0857	2,0869	2,0882	2,0894	2,0906
8,1	2,0919	2,0931	2,0943	2,0956	2,0968	2,0980	2,0992	2,1005	2,1017	2,1029
8,2	2,1041	2,1054	2,1066	2,1078	2,1090	2,1102	2,1114	2,1126	2,1138	2,1150
8,3	2,1163	2,1175	2,1187	2,1199	2,1211	2,1223	2,1235	2,1247	2,1258	2,1270
8,4	2,1282	2,1294	2,1306	2,1318	2,1330	2,1342	2,1353	2,1365	2,1377	2,1389
8,5	2,1401	2,1412	2,1424	2,1436	2,1448	2,1459	2,1471	2,1483	2,1494	2,1506
8,6	2,1518	2,1529	2,1541	2,1552	2,1564	2,1576	2,1587	2,1599	2,1610	2,1622
8,7	2,1633	2,1645	2,1656	2,1668	2,1679	2,1691	2,1702	2,1713	2,1725	2,1736
8,8	2,1748	2,1759	2,1770	2,1782	2,1793	2,1804	2,1815	2,1827	2,1838	2,1849
8,9	2,1861	2,1872	2,1883	2,1894	2,1905	2,1917	2,1928	2,1939	2,1950	2,1961
9,0	2,1972	2,1983	2,1994	2,2006	2,2017	2,2028	2,2039	2,2050	2,2061	2,2072
9,1	2,2083	2,2094	2,2105	2,2116	2,2127	2,2138	2,2148	2,2159	2,2170	2,2181
9,2	2,2192	2,2203	2,2214	2,2225	2,2235	2,2246	2,2257	2,2268	2,2279	2,2289
9,3	2,2300	2,2311	2,2322	2,2332	2,2343	2,2354	2,2364	2,2375	2,2386	2,2396
9,4	2,2407	2,2418	2,2428	2,2439	2,2450	2,2460	2,2471	2,2481	2,2492	2,2502
9,5	2,2513	2,2523	2,2534	2,2544	2,2555	2,2565	2,2576	2,2586	2,2597	2,2607
9,6	2,2618	2,2628	2,2638	2,2649	2,2659	2,2670	2,2680	2,2690	2,2701	2,2711
9,7	2,2721	2,2732	2,2742	2,2752	2,2762	2,2773	2,2783	2,2793	2,2803	2,2814
9,8	2,2824	2,2834	2,2844	2,2854	2,2865	2,2875	2,2885	2,2895	2,2905	2,2915
9,9	2,2925	2,2935	2,2946	2,2956	2,2966	2,2976	2,2986	2,2996	2,3006	2,3016

**II. Таблица для перехода от натуральных логарифмов к десятичным
(таблица умножения на $M = \log e = 0,4342945\dots$)**

	0	10	20	30	40	50	60	70	80	90
0	0,0000	4,3430	8,6859	13,0288	17,3718	21,7147	26,0577	30,4006	34,7436	39,0865
1	0,4343	4,7772	9,1202	13,4631	17,8061	22,1490	26,4920	30,8349	35,1779	39,5208
2	0,8686	5,2115	9,5545	13,8974	18,2404	22,5833	26,9263	31,2692	35,6122	39,9551
3	1,3029	5,6458	9,9888	14,3317	18,6747	23,0176	27,3606	31,7035	36,0464	40,3894
4	1,7372	6,0801	10,4231	14,7660	19,1090	23,4519	27,7948	32,1378	36,4807	40,8237
5	2,1715	6,5144	10,8574	15,2003	19,5433	23,8862	28,2291	32,5721	36,9150	41,2580
6	2,6058	6,9487	11,2917	15,6346	19,9775	24,3205	28,6634	33,0064	37,3493	41,6923
7	3,0401	7,3830	11,7260	16,0689	20,4118	24,7548	29,0977	33,4407	37,7836	42,1266
8	3,4744	7,8173	12,1602	16,5032	20,8461	25,1891	29,5320	33,8750	38,2179	42,5609
9	3,9086	8,2516	12,5945	16,9375	21,2804	25,6234	29,9663	34,3093	38,6522	42,9952

**III. Таблица для перехода от десятичных логарифмов к натуральным
(таблица умножения на $\frac{1}{M} = \ln 10 = 2,302585$)**

	0	10	20	30	40	50	60	70	80	90
0	0,0000	23,026	46,052	69,078	92,103	115,129	138,155	161,181	184,207	207,233
1	2,3026	25,328	48,354	71,380	94,406	117,431	140,458	163,484	186,509	209,535
2	4,6052	27,631	50,657	73,683	96,709	119,734	142,760	165,786	188,812	211,838
3	6,9078	29,934	52,959	75,985	99,011	122,037	145,062	168,089	191,115	214,140
4	9,2103	32,236	55,262	78,288	101,314	124,340	147,365	170,391	193,417	216,443
5	11,513	34,539	57,565	80,590	103,616	126,642	149,668	172,694	195,720	218,746
6	13,816	36,841	59,867	82,893	105,919	128,945	151,971	174,997	198,022	221,048
7	16,118	39,144	62,170	85,196	108,221	131,247	154,273	177,299	200,325	223,351
8	18,421	41,447	64,472	87,498	110,524	133,550	156,576	179,602	202,627	225,653
9	20,723	43,749	66,775	89,801	112,827	135,853	158,878	181,904	204,930	227,956

IV. Показательная функция e^x (натуральные антилогарифмы)

	0	1	2	3	4	5	6	7	8	9
0,0	1,0000	1,0101	1,0202	1,0305	1,0408	1,0513	1,0618	1,0725	1,0833	1,0942
0,1	1,1052	1,1163	1,1275	1,1388	1,1503	1,1618	1,1735	1,1853	1,1972	1,2092
0,2	1,2214	1,2337	1,2461	1,2586	1,2712	1,2840	1,2969	1,3100	1,3231	1,3364
0,3	1,3499	1,3634	1,3771	1,3910	1,4049	1,4191	1,4333	1,4477	1,4623	1,4770
0,4	1,4918	1,5068	1,5220	1,5373	1,5527	1,5683	1,5841	1,6000	1,6161	1,6323
0,5	1,6487	1,6653	1,6820	1,6989	1,7160	1,7333	1,7507	1,7683	1,7860	1,8040
0,6	1,8221	1,8404	1,8589	1,8776	1,8965	1,9155	1,9348	1,9542	1,9739	1,9937
0,7	2,0138	2,0340	2,0544	2,0751	2,0959	2,1170	2,1383	2,1598	2,1815	2,2034
0,8	2,2255	2,2479	2,2705	2,2933	2,3164	2,3396	2,3632	2,3869	2,4109	2,4351
0,9	2,4596	2,4843	2,5093	2,5345	2,5600	2,5857	2,6117	2,6379	2,6645	2,6912
1,0	2,7183	2,7456	2,7732	2,8011	2,8292	2,8577	2,8864	2,9154	2,9447	2,9743
1,1	3,0042	3,0344	3,0649	3,0957	3,1268	3,1582	3,1899	3,2220	3,2544	3,2871
1,2	3,3201	3,3535	3,3872	3,4212	3,4556	3,4903	3,5254	3,5609	3,5966	3,6328
1,3	3,6693	3,7062	3,7434	3,7810	3,8190	3,8574	3,8962	3,9354	3,9749	4,0149
1,4	4,0552	4,0960	4,1371	4,1787	4,2207	4,2631	4,3060	4,3492	4,3929	4,4371
1,5	4,4817	4,5267	4,5722	4,6182	4,6646	4,7115	4,7588	4,8066	4,8550	4,9037
1,6	4,9530	5,0028	5,0531	5,1039	5,1552	5,2070	5,2593	5,3122	5,3656	5,4195
1,7	5,4739	5,5290	5,5845	5,6407	5,6973	5,7546	5,8124	5,8709	5,9299	5,9895
1,8	6,0496	6,1104	6,1719	6,2339	6,2965	6,3598	6,4237	6,4883	6,5535	6,6194
1,9	6,6859	6,7531	6,8210	6,8895	6,9588	7,0287	7,0993	7,1707	7,2427	7,3155

Продолжение

	0	1	2	3	4	5	6	7	8	9
2,0	7,3891	7,4633	7,5383	7,6141	7,6906	7,7679	7,8460	7,9248	8,0045	8,0849
2,1	8,1662	8,2482	8,3311	8,4149	8,4994	8,5849	8,6711	8,7583	8,8463	8,9352
2,2	9,0250	9,1157	9,2073	9,2999	9,3933	9,4877	9,5831	9,6794	9,7767	9,8749
2,3	9,9742	10,074	10,176	10,278	10,381	10,486	10,591	10,697	10,805	10,913
2,4	11,023	11,134	11,246	11,359	11,473	11,588	11,705	11,822	11,941	12,061
2,5	12,182	12,305	12,429	12,554	12,680	12,807	12,936	13,066	13,197	13,330
2,6	13,464	13,599	13,736	13,874	14,013	14,154	14,296	14,440	14,585	14,732
2,7	14,880	15,029	15,180	15,333	15,487	15,643	15,800	15,959	16,119	16,281
2,8	16,445	16,610	16,777	16,945	17,116	17,288	17,462	17,637	17,814	17,993
2,9	18,174	18,357	18,541	18,728	18,916	19,106	19,298	19,492	19,688	19,886
3,0	20,086	20,287	20,491	20,697	20,905	21,115	21,328	21,542	21,758	21,977
3,1	22,198	22,421	22,646	22,874	23,104	23,336	23,571	23,807	24,047	24,288
3,2	24,533	24,779	25,028	25,280	25,534	25,790	26,050	26,311	26,576	26,843
3,3	27,113	27,385	27,660	27,938	28,219	28,503	28,789	29,079	29,371	29,666
3,4	29,964	30,265	30,569	30,877	31,187	31,500	31,817	32,137	32,460	32,786
3,5	33,115	33,448	33,784	34,124	34,467	34,813	35,163	35,517	35,874	36,234
3,6	36,598	36,966	37,338	37,713	38,092	38,475	38,861	39,252	39,646	40,045
3,7	40,447	40,854	41,264	41,679	42,098	42,521	42,948	43,380	43,816	44,256
3,8	44,701	45,150	45,604	46,063	46,525	46,993	47,465	47,942	48,424	48,911
3,9	49,402	49,899	50,400	50,907	51,419	51,935	52,457	52,985	53,517	54,055