

TETRAGAMMA AND PENTAGAMMA FUNCTIONS

Table 6.2

x	$\psi''(x)$	$\psi^{(3)}(x)$	x	$\psi''(x)$	$\psi^{(3)}(x)$		
1.00	-2.40411 38063	6.49393 94023	0.00	1.50	-0.82879 66442	1.40909 10340	0.50
1.01	-2.34039 86771	6.25106 18729	0.01	1.51	-0.81487 76121	1.37489 70527	0.51
1.02	-2.27905 42052	6.01969 49890	0.02	1.52	-0.80129 51399	1.34177 21104	0.52
1.03	-2.21996 85963	5.79918 38573	0.03	1.53	-0.78803 87419	1.30967 56244	0.53
1.04	-2.16303 63855	5.58891 68399	0.04	1.54	-0.77509 83287	1.27856 88154	0.54
1.05	-2.10815 80219	5.38832 23132	0.05	1.55	-0.76246 41904	1.24841 46160	0.55
1.06	-2.05523 94833	5.19686 56970	0.06	1.56	-0.75012 69793	1.21917 75841	0.56
1.07	-2.00419 19194	5.01404 67303	0.07	1.57	-0.73807 76946	1.19082 38216	0.57
1.08	-1.95493 13213	4.83939 69702	0.08	1.58	-0.72630 76669	1.16332 08979	0.58
1.09	-1.90737 82154	4.67247 74947	0.09	1.59	-0.71480 85441	1.13663 77770	0.59
1.10	-1.86145 73783	4.51287 67903	0.10	1.60	-0.70357 22779	1.11074 47490	0.60
1.11	-1.81709 75731	4.36020 88083	0.11	1.61	-0.69259 11105	1.08561 33658	0.61
1.12	-1.77423 13035	4.21411 11755	0.12	1.62	-0.68185 75627	1.06121 63792	0.62
1.13	-1.73279 45852	4.07424 35447	0.13	1.63	-0.67136 44220	1.03752 76835	0.63
1.14	-1.69272 67342	3.94028 60737	0.14	1.64	-0.66110 47316	1.01452 22608	0.64
1.15	-1.65397 01677	3.81193 80220	0.15	1.65	-0.65107 17793	0.99217 61290	0.65
1.16	-1.61647 02206	3.68891 64540	0.16	1.66	-0.64125 90881	0.97046 62927	0.66
1.17	-1.58017 49731	3.57095 50416	0.17	1.67	-0.63166 04061	0.94937 06973	0.67
1.18	-1.54503 50903	3.45780 29554	0.18	1.68	-0.62226 96973	0.92886 81843	0.68
1.19	-1.51100 36723	3.34922 38402	0.19	1.69	-0.61308 11332	0.90893 84502	0.69
1.20	-1.47803 61144	3.24499 48647	0.20	1.70	-0.60408 90841	0.88956 20066	0.70
1.21	-1.44608 99765	3.14490 58422	0.21	1.71	-0.59528 81112	0.87072 01433	0.71
1.22	-1.41512 48602	3.04875 84139	0.22	1.72	-0.58667 29593	0.85239 48922	0.72
1.23	-1.38510 22950	2.95636 52925	0.23	1.73	-0.57823 85490	0.83456 89940	0.73
1.24	-1.35598 56308	2.86754 95589	0.24	1.74	-0.56997 99702	0.81722 58660	0.74
1.25	-1.32773 99375	2.78214 40092	0.25	1.75	-0.56189 24756	0.80034 95719	0.75
1.26	-1.30033 19112	2.69999 05478	0.26	1.76	-0.55397 14738	0.78392 47929	0.76
1.27	-1.27372 97857	2.62093 96227	0.27	1.77	-0.54621 25238	0.76793 68005	0.77
1.28	-1.24790 32496	2.54484 97000	0.28	1.78	-0.53861 13291	0.75237 14300	0.78
1.29	-1.22282 33691	2.47158 67746	0.29	1.79	-0.53116 37320	0.73721 50564	0.79
1.30	-1.19846 25147	2.40102 39143	0.30	1.80	-0.52386 57084	0.72245 45705	0.80
1.31	-1.17479 42923	2.33304 08348	0.31	1.81	-0.51671 33630	0.70807 73565	0.81
1.32	-1.15179 34794	2.26752 35032	0.32	1.82	-0.50970 29242	0.69407 12710	0.82
1.33	-1.12943 59642	2.20436 37678	0.33	1.83	-0.50283 07396	0.68042 46226	0.83
1.34	-1.10769 86881	2.14345 90132	0.34	1.84	-0.49609 32712	0.66712 61527	0.84
1.35	-1.08655 95925	2.08471 18367	0.35	1.85	-0.48948 70921	0.65416 50169	0.85
1.36	-1.06599 75682	2.02802 97472	0.36	1.86	-0.48300 88813	0.64153 07680	0.86
1.37	-1.04599 24073	1.97332 48830	0.37	1.87	-0.47665 54207	0.62921 33389	0.87
1.38	-1.02652 47586	1.92051 37473	0.38	1.88	-0.47042 35909	0.61720 30270	0.88
1.39	-1.00757 60850	1.86951 69616	0.39	1.89	-0.46431 03677	0.60549 04793	0.89
1.40	-0.98912 86236	1.82025 90339	0.40	1.90	-0.45831 28188	0.59406 66772	0.90
1.41	-0.97116 53479	1.77266 81419	0.41	1.91	-0.45242 81007	0.58292 29238	0.91
1.42	-0.95366 99322	1.72667 59295	0.42	1.92	-0.44665 34549	0.57205 08299	0.92
1.43	-0.93662 67177	1.68221 73161	0.43	1.93	-0.44098 62055	0.56144 23020	0.93
1.44	-0.92002 06808	1.63923 03178	0.44	1.94	-0.43542 37563	0.55108 95304	0.94
1.45	-0.90383 74031	1.59765 58792	0.45	1.95	-0.42996 35876	0.54098 49774	0.95
1.46	-0.88806 30426	1.55743 77157	0.46	1.96	-0.42460 32537	0.53112 13668	0.96
1.47	-0.87268 43070	1.51852 21649	0.47	1.97	-0.41934 03805	0.52149 16733	0.97
1.48	-0.85768 84281	1.48085 80478	0.48	1.98	-0.41417 26631	0.51208 91127	0.98
1.49	-0.84306 31376	1.44439 65370	0.49	1.99	-0.40909 78630	0.50290 71324	0.99
1.50	-0.82879 66442	1.40909 10340	0.50	2.00	-0.40411 38063	0.49393 94023	1.00

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*

$$\frac{d^3}{dy^3} \ln y! \quad \left[\begin{matrix} (-4)3 \\ 7 \end{matrix} \right]$$

$$\frac{d^4}{dy^4} \ln y! \quad \left[\begin{matrix} (-3)1 \\ 7 \end{matrix} \right]$$

y

$$\frac{d^3}{dy^3} \ln y! \quad \left[\begin{matrix} (-5)4 \\ 6 \end{matrix} \right]$$

$$\frac{d^4}{dy^4} \ln y! \quad \left[\begin{matrix} (-4)1 \\ 6 \end{matrix} \right]$$

y

Compiled from H. T. Davis, Tables of the higher mathematical functions, 2 vols. (Principia Press, Bloomington, Ind., 1933, 1935) (with permission).

*See page II.