

$u = 0.0 \text{ to } 6.2$

TABLES OF THE INCOMPLETE  $\Gamma$ -FUNCTION

$p = 3.0 \text{ to } 3.5$

$u$	$p = 3.0$				$p = 3.1$				$p = 3.2$				$p = 3.3$				$p = 3.4$				$p = 3.5$					
	$I(u, p)$	$\delta_u^2$	$\delta_p^2$	$\delta_p^4$	$I(u, p)$	$\delta_u^2$	$\delta_p^2$	$\delta_p^4$	$I(u, p)$	$\delta_u^2$	$\delta_p^2$	$\delta_p^4$	$I(u, p)$	$\delta_u^2$	$\delta_p^2$	$\delta_p^4$	$I(u, p)$	$\delta_u^2$	$\delta_p^2$	$\delta_p^4$	$I(u, p)$	$\delta_u^2$	$\delta_p^2$	$\delta_p^4$	$I(u, p)$	$u$
0	0000000			0	0000000			0	0000000			0	0000000			0	0000000			0	0000000			0	0000000	0.0
0.1	0000568	+6626	+40	1	0000436	+6494	+30	1	0000334	+6459	+24	1	0000256	+6379	+13	1	0000195	+6310	+14	1	0000150	+6268	+13	1	0000115	0.1
0.2	00007762	+18825	+298	1	00006366	+16304	+247	1	00005217	+14237	+204	1	00004271	+12407	+169	1	00003494	+10788	+139	1	00002855	+9268	+129	1	00002355	0.2
0.3	00033581	+51399	+832	1	00028600	+42831	+713	1	00024337	+29589	+618	1	00020693	+22375	+533	1	00017580	+16282	+467	1	00014924	+11111	+411	1	00012754	0.3
0.4	00090799	+11865	+1563	1	00079365	+29110	+1384	1	00069316	+20431	+1225	1	00060490	+15249	+1062	1	00052748	+11217	+908	1	00045961	+7138	+744	1	00040591	0.4
0.5	0189882	+48795	+2331	1	0169240	+46541	+2128	1	0150726	+44321	+1924	1	0134136	+42955	+1737	1	0119283	+40954	+1565	1	0105995	+3954	+1405	1	0105995	0.5
0.6	0337690	+51755	+3080	1	0305656	+50378	+2835	1	0276457	+48879	+2609	1	0249867	+47273	+2395	1	0225672	+45690	+2200	1	0203677	+45000	+2000	1	0203677	0.6
0.7	0537253	+51319	+3660	1	0492450	+59811	+3490	1	0451067	+59127	+3192	1	0412876	+58238	+2976	1	0377661	+56838	+2770	1	0345216	+55808	+2670	1	0345216	0.7
0.8	0788135	+48667	+4040	1	0730055	+48364	+3829	1	0675804	+48456	+3620	1	0625173	+48366	+3416	1	0577958	+48141	+3223	1	0533966	+4715	+3047	1	0533966	0.8
0.9	1087084	+42732	+4224	1	1016024	+43752	+4044	1	0949007	+44484	+3863	1	0885856	+44093	+3691	1	0826396	+43597	+3519	1	0770454	+42920	+3444	1	0770454	0.9
1.0	1428765	+36030	+4207	1	1345695	+37309	+4069	1	1266694	+38819	+4300	1	1191622	+39967	+4379	1	1120341	+40953	+4611	1	1052710	+40953	+4611	1	1052710	1.0
1.1	1806476	+28594	+4022	1	1712875	+30492	+3927	1	1623200	+32083	+3829	1	1537355	+33655	+3729	1	1455239	+35045	+3628	1	1376749	+35045	+3628	1	1376749	1.1
1.2	2212771	+20918	+3705	1	2110457	+22999	+3634	1	2011794	+24321	+3572	1	1916723	+26029	+3500	1	1825182	+28016	+3464	1	1737105	+28016	+3464	1	1737105	1.2
1.3	2639984	+13432	+3292	1	2530959	+15482	+2976	1	2425209	+17473	+3253	1	2322713	+19391	+3224	1	2223441	+21235	+3192	1	2127361	+21235	+3192	1	2127361	1.3
1.4	3080626	+6414	+2823	1	2966943	+8411	+2837	1	2856097	+10375	+2843	1	2748094	+12302	+2844	1	2642935	+14185	+2842	1	2540618	+14185	+2842	1	2540618	1.4
1.5	3527682	+65	+2329	1	3411338	+1928	+2366	1	3297360	+3785	+2395	1	3185777	+5631	+2420	1	3076614	+7458	+2440	1	2969891	+7458	+2440	1	2969891	1.5
1.6	3974803	+3495	+1839	1	3857661	+3821	+1889	1	3742403	+2122	+1936	1	3629091	+324	+1977	1	3517751	+1203	+2015	1	3408426	+1203	+2015	1	3408426	1.6
1.7	4416429	+10216	+1369	1	4300163	+8767	+1427	1	4185324	+7283	+1489	1	4071971	+5733	+1539	1	3960157	+4242	+1589	1	3849932	+4242	+1589	1	3849932	1.7
1.8	4847839	+1497	+924	1	4733898	+12831	+1000	1	4620957	+11925	+1064	1	4509078	+10331	+1122	1	4398321	+9002	+1178	1	4288742	+9002	+1178	1	4288742	1.8
1.9	5265152	+17166	+645	1	5154752	+15158	+616	1	5044965	+13142	+695	1	4935854	+11050	+732	1	4827483	+12379	+738	1	4719910	+12379	+738	1	4719910	1.9
2.0	5665299	+19489	+299	1	5559418	+16729	+574	1	5453811	+17928	+336	1	5348540	+17079	+397	1	5243666	+16183	+457	1	5139249	+16183	+457	1	5139249	2.0
2.1	6045966	+21111	-73	1	5945355	+20573	-15	1	5844729	+19993	+44	1	5744147	+19344	+99	1	5643606	+18557	+159	1	5543344	+18557	+159	1	5543344	2.1
2.2	6405522	+22141	-305	1	6310719	+21990	-252	1	6215664	+21392	-199	1	6120410	+20947	-146	1	6025009	+20455	-95	1	5929514	+20455	-95	1	5929514	2.2
2.3	6742937	+22651	-458	1	6654293	+22457	-442	1	6565207	+22337	-593	1	6475726	+21963	-348	1	6385897	+21646	-301	1	6295767	+21646	-301	1	6295767	2.3
2.4	7057701	+22724	-697	1	6975400	+22679	-585	1	6892513	+22596	-547	1	6809079	+22472	-506	1	6725139	+22309	-456	1	6640733	+22309	-456	1	6640733	2.4
2.5	7349741	+22436	-725	1	7273828	+22509	-699	1	7197223	+22546	-653	1	7119960	+22549	-625	1	7042072	+22515	-590	1	6963594	+22515	-590	1	6963594	2.5
2.6	7619345	+21859	-789	1	7549747	+22026	-762	1	7479387	+22162	-755	1	7408292	+22208	-707	1	7336490	+22345	-650	1	7264008	+22345	-650	1	7264008	2.6
2.7	7867090	+21293	-829	1	7803641	+21298	-803	1	7739389	+21512	-782	1	7674356	+21701	-760	1	7608533	+21864	-737	1	7542033	+21864	-737	1	7542033	2.7
2.8	8093776	+20091	-854	1	8036237	+20384	-819	1	7979789	+20657	-802	1	7918719	+20910	-787	1	7858772	+21140	-767	1	7798058	+21140	-767	1	7798058	2.8
2.9	8300371	+19005	-826	1	8248449	+19335	-815	1	8195712	+19659	-803	1	8142172	+19943	-791	1	8087841	+20231	-778	1	8032732	+20231	-778	1	8032732	2.9
3.0	8487961	+17843	-802	1	8441326	+18199	-796	1	8393895	+18542	-788	1	8345676	+18871	-778	1	8296679	+19188	-771	1	8246911	+19188	-771	1	8246911	3.0
3.1	8657708	+16643	-769	1	8616004	+17008	-764	1	8573536	+17355	-759	1	8530309	+17714	-753	1	8486329	+18054	-750	1	8441599	+18054	-750	1	8441599	3.1
3.2	8810812	+15225	-735	1	8773674	+15796	-724	1	8735812	+16160	-723	1	8697223	+16517	-719	1	8657925	+16867	-717	1	8617905	+16867	-717	1	8617905	3.2
3.3	8948490	+14225	-678	1	8915548	+14688	-678	1	8881928	+14949	-678	1	8847630	+15306	-678	1	8812654	+15657	-676	1	8777002	+15657	-676	1	8777002	3.3
3.4	9071943	+12050	-628	1	9042834	+13404	-629	1	9013095	+13755	-630	1	8982726	+14104	-632	1	8951726	+14452	-632	1	8920093	+14452	-632	1	8920093	3.4
3.5	9182346	+11920	-576	1	9156716	+12258	-579	1	9130507	+12595	-681	1	9103718	+12932	-685	1	9076346	+13269	-685	1	9048389	+13269	-685	1	9048389	3.5
3.6	9280829	+10542	-524	1	9258340	+11160	-527	1	9235324	+11451	-531	1	9211778	+11803	-534	1	9187697	+12124	-537	1	9163800	+12124	-537	1	9163800	3.6
3.7	9368470	+9824	-474	1	9348804	+10123	-473	1	9328660	+10423	-482	1	9308035	+10726	-485	1	9286924	+11030	-489	1	9265325	+11030	-489	1	9265325	3.7
3.8	9446287	+8870	-427	1	9429145	+9147	-431	1	9411573	+9428	-434	1	9393566	+9709	-438	1	9375121	+10203	-442	1	9356235	+10203	-442	1	9356235	3.8
3.9	9515234	+7922	-381	1	9500339	+8238	-385	1	9485058	+8495	-389	1	9469338	+8768	-393	1	9453325	+9020	-397	1	9436866	+9020	-397	1	9436866	3.9
4.0	9576199	+7163	-339	1	9563295	+7395	-343	1	9550048	+7632	-347	1	9536454	+7871	-351	1	9522509	+8112	-354	1	9508210	+8112	-354	1	9508210	4.0
4.1	9630001	+6497	-300	1	9618856	+6619	-304	1	9607406	+6833	-308	1	9595649	+7082	-311	1	9583581	+7275	-315	1	9571197	+7275	-315	1	9571197	4.1
4.2	9677396	+5717	-265	1	9667798	+5909	-268	1	9657931	+6103	-272	1	9647792	+6300	-275	1	9637378	+6499	-279	1	9626686	+6499	-279	1	9626686	4.2
4.3	9719074	+5088	-233	1	9710831	+5259	-236	1	9702353	+5435	-239	1	9693635	+5612	-242	1	9684676	+5794	-245	1	9675471	+5794	-245	1	9675471	4.3
4.4	9755664	+4519	-204	1	9748605	+4671	-206	1	9741340	+4827	-209	1	9733866	+4987	-212	1	9726180	+5142	-215	1	9718278	+5142	-215	1	9718278	4.4
4.5	9787735	+4002	-178	1	9781708	+4140	-180	1	9775500	+4278	-183	1	9769110	+4420	-185	1	9762535	+4566	-188	1	9755771	+4566	-188	1	9755771	4.5
4.6	9815804	+3539	-155	1	9810671	+3629	-167	1	9805332	+3783	-169	1	9799934	+3909	-161	1	9794324	+4036	-164	1	9788551	+4036	-164	1	9788551	4.6

$u = 6.2 \text{ to } 12.4$

TABLES OF THE INCOMPLETE  $\Gamma$ -FUNCTION

$p = 3.0 \text{ to } 3.5$

u	p = 3.0				p = 3.1				p = 3.2				p = 3.3				p = 3.4				p = 3.5	
	I(u, p)	$\delta_u^2$	$\delta_u^4$	$\delta_p^2$	I(u, p)	$\delta_u^2$	$\delta_u^4$	$\delta_p^2$	I(u, p)	$\delta_u^2$	$\delta_u^4$	$\delta_p^2$	I(u, p)	$\delta_u^2$	$\delta_u^4$	$\delta_p^2$	I(u, p)	$\delta_u^2$	$\delta_u^4$	$\delta_p^2$	I(u, p)	u
6.2	.9983194	-397	-8	-13	.9982940	-408	-9	-14	.9982672	-420	-10	-14	.9982390	-433	-10	-13	.9982095	-442	-11	-13	.9981787	6.2
6.3	.9985623	-344	-7	-12	.9985420	-353	-8	-12	.9985205	-362	-9	-12	.9984979	-373	-9	-11	.9984741	-382	-10	-11	.9984492	6.3
6.4	.9987708	-287	-7	-11	.9987547	-304	-7	-10	.9987376	-312	-8	-10	.9987195	-319	-8	-9	.9987005	-329	-9	-9	.9986804	6.4
6.5	.9989497	-255	-6	-9	.9989370	-260	-6	-8	.9989235	-267	-7	-8	.9989092	-277	-7	-8	.9988940	-281	-8	-8	.9988780	6.5
6.6	.9991031	-219	-6	-7	.9990933	-223	-6	-7	.9990827	-230	-6	-7	.9990714	-237	-7	-7	.9990594	-240	-7	-7	.9990466	6.6
6.7	.9992346	-189	-5	-7	.9992270	-198	-5	-6	.9992188	-198	-5	-6	.9992099	-201	-6	-6	.9992005	-205	-6	-6	.9991905	6.7
6.8	.9993471	-162	-4	-5	.9993414	-167	-4	-5	.9993351	-170	-4	-5	.9993283	-174	-5	-5	.9993209	-177	-5	-5	.9993130	6.8
6.9	.9994434	-139	-4	-5	.9994391	-143	-4	-4	.9994344	-145	-4	-4	.9994292	-150	-4	-5	.9994236	-153	-4	-5	.9994175	6.9
7.0	.9995258	-120	-4	-4	.9995227	-123	-4	-4	.9995192	-125	-4	-4	.9995153	-128	-4	-4	.9995110	-131	-4	-4	.9995063	7.0
7.1	.9995961	-103	-3	-3	.9995940	-105	-3	-3	.9995915	-107	-3	-3	.9995886	-108	-3	-3	.9995854	-111	-3	-3	.9995819	7.1
7.2	.9996562	-88	-3	-3	.9996548	-89	-3	-3	.9996531	-91	-3	-3	.9996511	-92	-3	-3	.9996487	-94	-3	-3	.9996461	7.2
7.3	.9997075	-75	-3	-3	.9997066	-75	-3	-3	.9997055	-77	-3	-3	.9997041	-78	-3	-3	.9997025	-81	-3	-3	.9997006	7.3
7.4	.9997513	-64	-3	-3	.9997509	-64	-3	-3	.9997502	-66	-3	-3	.9997493	-67	-3	-3	.9997482	-69	-3	-3	.9997469	7.4
7.5	.9997886	-55	-3	-3	.9997885	-55	-3	-3	.9997882	-57	-3	-3	.9997877	-58	-3	-3	.9997870	-59	-3	-3	.9997861	7.5
7.6	.9998204	-47	-3	-3	.9998205	-47	-3	-3	.9998205	-49	-3	-3	.9998203	-50	-3	-3	.9998199	-50	-3	-3	.9998193	7.6
7.7	.9998475	-40	-3	-3	.9998478	-41	-3	-3	.9998479	-41	-3	-3	.9998479	-43	-3	-3	.9998478	-43	-3	-3	.9998475	7.7
7.8	.9998706	-34	-3	-3	.9998710	-35	-3	-3	.9998712	-35	-3	-3	.9998714	-37	-3	-3	.9998714	-36	-3	-3	.9998713	7.8
7.9	.9998902	-29	-3	-3	.9998907	-30	-3	-3	.9998910	-30	-3	-3	.9998912	-31	-3	-3	.9998914	-30	-3	-3	.9998915	7.9
8.0	.9999069	-25	-3	-3	.9999074	-25	-3	-3	.9999078	-26	-3	-3	.9999081	-26	-3	-3	.9999084	-26	-3	-3	.9999085	8.0
8.1	.9999210	-22	-3	-3	.9999216	-21	-3	-3	.9999220	-22	-3	-3	.9999224	-22	-3	-3	.9999227	-22	-3	-3	.9999229	8.1
8.2	.9999331	-19	-3	-3	.9999337	-17	-3	-3	.9999341	-19	-3	-3	.9999345	-19	-3	-3	.9999348	-19	-3	-3	.9999350	8.2
8.3	.9999433	-16	-3	-3	.9999438	-14	-3	-3	.9999443	-16	-3	-3	.9999447	-17	-3	-3	.9999450	-16	-3	-3	.9999453	8.3
8.4	.9999520	-13	-3	-3	.9999525	-12	-3	-3	.9999530	-14	-3	-3	.9999534	-15	-3	-3	.9999537	-13	-3	-3	.9999540	8.4
8.5	.9999594	-11	-3	-3	.9999599	-11	-3	-3	.9999603	-12	-3	-3	.9999607	-13	-3	-3	.9999611	-11	-3	-3	.9999614	8.5
8.6	.9999656	-9	-3	-3	.9999661	-10	-3	-3	.9999665	-10	-3	-3	.9999669	-11	-3	-3	.9999672	-9	-3	-3	.9999675	8.6
8.7	.9999709	-8	-3	-3	.9999714	-9	-3	-3	.9999718	-9	-3	-3	.9999721	-9	-3	-3	.9999724	-8	-3	-3	.9999727	8.7
8.8	.9999754	-7	-3	-3	.9999758	-8	-3	-3	.9999762	-7	-3	-3	.9999765	-7	-3	-3	.9999768	-7	-3	-3	.9999771	8.8
8.9	.9999792	-6	-3	-3	.9999796	-7	-3	-3	.9999799	-6	-3	-3	.9999802	-6	-3	-3	.9999805	-6	-3	-3	.9999808	8.9
9.0	.9999824	-5	-3	-3	.9999828	-6	-3	-3	.9999831	-5	-3	-3	.9999834	-5	-3	-3	.9999836	-5	-3	-3	.9999839	9.0
9.1	.9999852	-4	-3	-3	.9999855	-4	-3	-3	.9999858	-4	-3	-3	.9999860	-4	-3	-3	.9999862	-4	-3	-3	.9999864	9.1
9.2	.9999875	-4	-3	-3	.9999878	-3	-3	-3	.9999880	-3	-3	-3	.9999882	-3	-3	-3	.9999884	-3	-3	-3	.9999886	9.2
9.3	.9999894	-3	-3	-3	.9999897	-3	-3	-3	.9999899	-3	-3	-3	.9999901	-3	-3	-3	.9999903	-3	-3	-3	.9999905	9.3
9.4	.9999911	-3	-3	-3	.9999913	-3	-3	-3	.9999915	-3	-3	-3	.9999917	-3	-3	-3	.9999919	-3	-3	-3	.9999921	9.4
9.5	.9999925	-3	-3	-3	.9999927	-3	-3	-3	.9999929	-3	-3	-3	.9999931	-3	-3	-3	.9999932	-3	-3	-3	.9999933	9.5
9.6	.9999936	-3	-3	-3	.9999938	-3	-3	-3	.9999940	-3	-3	-3	.9999942	-3	-3	-3	.9999943	-3	-3	-3	.9999944	9.6
9.7	.9999947	-3	-3	-3	.9999949	-3	-3	-3	.9999950	-3	-3	-3	.9999951	-3	-3	-3	.9999952	-3	-3	-3	.9999953	9.7
9.8	.9999955	-3	-3	-3	.9999957	-3	-3	-3	.9999958	-3	-3	-3	.9999959	-3	-3	-3	.9999960	-3	-3	-3	.9999961	9.8
9.9	.9999962	-3	-3	-3	.9999963	-3	-3	-3	.9999964	-3	-3	-3	.9999965	-3	-3	-3	.9999966	-3	-3	-3	.9999967	9.9
10.0	.9999968	-3	-3	-3	.9999969	-3	-3	-3	.9999970	-3	-3	-3	.9999971	-3	-3	-3	.9999972	-3	-3	-3	.9999972	10.0
10.1	.9999973	-3	-3	-3	.9999974	-3	-3	-3	.9999975	-3	-3	-3	.9999976	-3	-3	-3	.9999976	-3	-3	-3	.9999977	10.1
10.2	.9999977	-3	-3	-3	.9999978	-3	-3	-3	.9999979	-3	-3	-3	.9999979	-3	-3	-3	.9999980	-3	-3	-3	.9999980	10.2
10.3	.9999981	-3	-3	-3	.9999981	-3	-3	-3	.9999982	-3	-3	-3	.9999982	-3	-3	-3	.9999983	-3	-3	-3	.9999983	10.3
10.4	.9999984	-3	-3	-3	.9999984	-3	-3	-3	.9999985	-3	-3	-3	.9999985	-3	-3	-3	.9999986	-3	-3	-3	.9999986	10.4
10.5	.9999986	-3	-3	-3	.9999987	-3	-3	-3	.9999988	-3	-3	-3	.9999988	-3	-3	-3	.9999988	-3	-3	-3	.9999988	10.5
10.6	.9999989	-3	-3	-3	.9999989	-3	-3	-3	.9999989	-3	-3	-3	.9999989	-3	-3	-3	.9999990	-3	-3	-3	.9999990	10.6
10.7	.9999990	-3	-3	-3	.9999991	-3	-3	-3	.9999991	-3	-3	-3	.9999991	-3	-3	-3	.9999992	-3	-3	-3	.9999992	10.7
10.8	.9999992	-3	-3	-3	.9999992	-3	-3	-3	.9999993	-3	-3	-3	.9999993	-3	-3	-3	.9999993	-3	-3	-3	.9999993	10.8
10.9	.9999993	-3	-3	-3	.9999993	-3	-3	-3	.9999994	-3	-3	-3	.9999994	-3	-3	-3	.9999994	-3	-3	-3	.9999994	10.9
11.0	.9999994	-3	-3	-3	.9999994	-3	-3	-3	.9999995	-3	-3	-3	.9999995	-3	-3	-3	.9999995	-3	-3	-3	.9999995	11.0
11.1	.9999995	-3	-3	-3	.9999995	-3	-3	-3	.9999996	-3	-3	-3	.9999996	-3	-3	-3	.9999996	-3	-3	-3	.9999996	11.1
11.2	.9999996	-3	-3	-3	.9999996	-3	-3	-3	.9999996	-3	-3	-3	.9999996	-3	-3	-3	.9999997	-3	-3	-3	.9999997	11.2
11.3	.9999997	-3	-3	-3	.9999997	-3	-3	-3	.9999997	-3	-3	-3	.9999997	-3	-3	-3	.9999997	-3	-3	-3	.9999997	11.3
11.4	.9999997	-3	-3	-3	.9999997	-3	-3	-3	.9999997	-3	-3	-3	.9999997	-3	-3	-3	.9999998	-3	-3	-3	.9999998	11.4
11.5	.9999998	-3	-3	-3	.9999998	-3	-3	-3	.9999998	-3	-3	-3	.9999998	-3	-3	-3	.9999998	-3	-3	-3	.9999998	11.5
11.6	.9999998	-3	-3	-3	.9999998	-3	-3	-3	.9999998	-3	-3	-3	.9999998	-3	-3	-3	.9999998	-3	-3	-3	.9999998	11.6
11.7	.9999998	-3	-3	-3	.9999998	-3	-3	-3	.9999998	-3	-3	-3	.9999998	-3	-3	-3	.9999999	-3	-3	-3	.9999999	11.7
11.8	.9999999	-3	-3	-3	.9999999	-3	-3	-3	.9999999	-3	-3	-3	.9999999	-3	-3	-3	.9999999	-3	-3	-3	.9999999	11.8
11.9	.9999999	-3	-3	-3	.9999999	-3	-3	-3	.9999999	-3	-3	-3	.9999999	-3	-3	-3	.9999999	-3	-3	-3	.9999999	11.9
12.0	.9999999	-3	-3	-3	.9999999	-3	-3	-3	.9999999	-3	-3	-3	.9999999	-3	-3	-3	.9999999	-3	-3	-3	.9999999	12.0
12.1	.9999999	-3	-3	-3	.9999999	-3	-3	-3	.9999999	-3	-3	-3	.9999999	-3	-3	-3	.9999999	-3	-3	-3	.9999999	12.1
12.2	.9999999	-3	-3	-3	.9999999	-3	-3	-3	.9999999	-3	-3	-3	.9999999	-3	-3	-3	.9999999	-3	-3	-3	.9999999	12.2
12.3	.9999999	-3	-3	-3	.9999999	-3	-3	-3	.9999999	-3	-3	-3	.9999999	-3	-3	-3	.9999999	-3	-3	-3	.9999999	12.3
12.4	1.0000000	-3	-3	-3	1.0000000	-3	-3	-3	1.0000000	-3	-3	-3	1.0000000	-3	-3	-3	1.0000000	-3	-3	-3	1.0000000	12.4

u = 12.0 to 14.0

TABLES OF THE INCOMPLETE Γ-FUNCTION

p = 1.0 to 1.5

Table with columns for u (12.0 to 14.0) and p (1.0 to 1.5). Each p column contains I(u, p) and its derivatives delta\_u^2, delta\_u^4, delta\_p^2, delta\_p^4. The u=13.3 row shows a transition from 0.999999 to 1.000000.

u = 0.0 to 3.0

p = 2.0 to 2.5

Table with columns for u (0.0 to 3.0) and p (2.0 to 2.5). Each p column contains I(u, p) and its derivatives delta\_u^2, delta\_u^4, delta\_p^2, delta\_p^4. The table shows values for u from 0.0 to 3.0 and p from 2.0 to 2.5.

u = 12.0 to 13.2

TABLE I. THE I(u, p) FUNCTION

p = 1.5 to 2.0

Table with columns for u, p=1.5, p=1.6, p=1.7, p=1.8, p=1.9, p=2.0, and u. Rows range from u=12.0 to u=13.2.

u = 0.0 to 3.0

p = 2.5 to 3.0

Table with columns for u, p=2.5, p=2.6, p=2.7, p=2.8, p=2.9, p=3.0, and u. Rows range from u=0 to u=3.0.

Table with 7 columns for p values (2.0, 2.1, 2.2, 2.3, 2.4, 2.5) and rows for u values (3.0 to 9.0). Each cell contains numerical values for I(u, p) and its derivatives.

$u = 3.0 \text{ to } 9.0$

TABLE I. THE  $I(u, p)$  FUNCTION

$p = 2.5 \text{ to } 3.0$

$u$	$p = 2.5$		$p = 2.6$		$p = 2.7$		$p = 2.8$		$p = 2.9$		$p = 3.0$		$u$					
	$\delta_u^2$ $\delta_u^4$	$\delta_p^2$ $\delta_p^4$	$I(u, p)$	$\delta_u^2$ $\delta_u^4$	$\delta_p^2$ $\delta_p^4$	$I(u, p)$	$\delta_u^2$ $\delta_u^4$	$\delta_p^2$ $\delta_p^4$	$I(u, p)$	$\delta_u^2$ $\delta_u^4$	$\delta_p^2$ $\delta_p^4$	$I(u, p)$		$\delta_u^2$ $\delta_u^4$	$\delta_p^2$ $\delta_p^4$			
3.0	-15919	-831	-8666414	-16321	-825	-8623027	-16717	-822	-8578818	-17102	-815	-8533794	-17478	-809	-8487961	-17843	-802	3.0
3.1	-14709	-782	-8816807	-15103	-780	-8778196	-15497	-778	-8738807	-15885	-775	-8698643	-16267	-771	-8657708	-16643	-769	3.1
3.2	-13515	-728	-8952097	-13904	-729	-8917868	-14291	-729	-8882911	-14675	-728	-8847225	-15053	-727	-8810812	-15426	-725	3.2
3.3	-12370	-673	-9073483	-12744	-674	-9043249	-13116	-675	-9012340	-14058	-677	-8980754	-13853	-677	-8948490	-14225	-678	3.3
3.4	-11276	-616	-9182125	-11631	-619	-9155514	-11957	-621	-9128281	-13441	-624	-9100425	-12699	-626	-9071943	-13030	-628	3.4
3.5	-10242	-560	-9279136	-10575	-564	-9255792	-10909	-567	-9231881	-12824	-570	-9207400	-11589	-573	-9182346	-11920	-576	3.5
3.6	-9272	-506	-9365572	-9581	-510	-9345161	-9854	-514	-9324236	-12209	-518	-9302793	-10523	-521	-9280829	-10843	-524	3.6
3.7	-8366	-455	-9442427	-8653	-459	-9424636	-8941	-463	-9406382	-11593	-467	-9387661	-9526	-471	-9368470	-9824	-474	3.7
3.8	-7528	-407	-9510630	-7791	-411	-9495170	-8056	-416	-9479296	-10985	-419	-9463003	-8698	-423	-9446287	-9107	-427	3.8
3.9	-6756	-362	-9571042	-6994	-366	-9557648	-7252	-370	-9543885	-10377	-374	-9529749	-7871	-377	-9515234	-8392	-381	3.9
4.0	-6047	-321	-9624460	-6264	-325	-9612890	-6482	-328	-9600993	-9766	-332	-9588764	-7152	-336	-9576199	-7683	-339	4.0
4.1	-5409	-283	-9671614	-5591	-287	-9661650	-5794	-290	-9651395	-9159	-293	-9640847	-6500	-297	-9630001	-6977	-300	4.1
4.2	-4812	-249	-9713174	-4986	-252	-9704616	-5164	-255	-9695802	-8544	-258	-9686730	-5899	-262	-9677396	-6377	-265	4.2
4.3	-4280	-219	-9749748	-4435	-221	-9742418	-4593	-224	-9734865	-7939	-227	-9727084	-5319	-231	-9719074	-5783	-233	4.3
4.4	-3797	-192	-9781887	-3936	-194	-9775627	-4076	-196	-9769172	-7342	-198	-9762519	-4765	-201	-9755664	-5213	-204	4.4
4.5	-3364	-167	-9810090	-3486	-169	-9804760	-3611	-171	-9799259	-6749	-173	-9793585	-4269	-176	-9787735	-4683	-178	4.5
4.6	-2975	-146	-9834807	-3082	-147	-9830282	-3193	-149	-9825607	-6156	-151	-9820782	-3801	-153	-9815804	-4213	-155	4.6
4.7	-2626	-127	-9856442	-2720	-128	-9852611	-2818	-129	-9848650	-5571	-131	-9844558	-3359	-132	-9840334	-3783	-134	4.7
4.8	-2314	-110	-9875357	-2399	-111	-9872122	-2482	-112	-9868776	-5017	-113	-9865316	-2959	-115	-9861741	-3383	-116	4.8
4.9	-2040	-95	-9891873	-2109	-96	-9889151	-2184	-97	-9886332	-4489	-98	-9883415	-2567	-99	-9880399	-3013	-100	4.9
5.0	-1789	-82	-9906280	-1854	-83	-9903996	-1918	-84	-9901629	-3991	-85	-9899177	-2202	-86	-9896639	-2663	-86	5.0
5.1	-1573	-71	-9918833	-1626	-72	-9916923	-1681	-72	-9914942	-3505	-73	-9912887	-1798	-74	-9910759	-2343	-75	5.1
5.2	-1377	-62	-9929760	-1425	-62	-9928169	-1474	-62	-9926515	-3039	-62	-9924799	-1376	-63	-9923019	-2053	-64	5.2
5.3	-1207	-53	-9939262	-1247	-53	-9937941	-1289	-54	-9936566	-2593	-54	-9935136	-1014	-54	-9933653	-1723	-55	5.3
5.4	-1055	-46	-9947517	-1089	-46	-9946424	-1125	-46	-9945285	-2167	-47	-9944099	-700	-47	-9942867	-1423	-48	5.4
5.5	-921	-40	-9954683	-952	-40	-9953782	-982	-40	-9952842	-1741	-40	-9951862	-447	-40	-9950841	-1173	-39	5.5
5.6	-805	-35	-9960897	-830	-34	-9960158	-856	-34	-9959385	-1356	-34	-9958578	-219	-34	-9957737	-940	-35	5.6
5.7	-700	-30	-9966281	-722	-30	-9965678	-745	-30	-9965046	-951	-30	-9964384	-792	-30	-9963693	-816	-30	5.7
5.8	-611	-26	-9970943	-629	-26	-9970453	-647	-26	-9969939	-606	-25	-9969398	-687	-25	-9968833	-709	-26	5.8
5.9	-531	-22	-9974976	-547	-22	-9974581	-564	-22	-9974164	-479	-22	-9973725	-607	-22	-9973264	-613	-21	5.9
6.0	-462	-20	-9978462	-475	-19	-9978145	-487	-19	-9977810	-380	-19	-9977455	-517	-18	-9977082	-532	-19	6.0
6.1	-402	-17	-9981474	-412	-17	-9981222	-422	-17	-9980953	-306	-16	-9980668	-446	-15	-9980368	-460	-17	6.1
6.2	-349	-15	-9984074	-357	-14	-9983875	-367	-14	-9983662	-247	-14	-9983435	-386	-14	-9983194	-397	-13	6.2
6.3	-302	-13	-9986317	-309	-13	-9986161	-318	-13	-9985993	-198	-12	-9985814	-334	-11	-9985623	-344	-12	6.3
6.4	-262	-11	-9988249	-267	-11	-9988129	-275	-10	-9987999	-151	-10	-9987859	-289	-10	-9987708	-297	-11	6.4
6.5	-227	-10	-9989914	-231	-10	-9989824	-238	-9	-9989724	-108	-9	-9989615	-249	-9	-9989497	-255	-9	6.5
6.6	-195	-8	-9991348	-200	-8	-9991281	-205	-8	-9991205	-69	-8	-9991122	-214	-8	-9991031	-219	-7	6.6
6.7	-169	-8	-9992582	-173	-7	-9992533	-176	-7	-9992477	-35	-7	-9992415	-184	-6	-9992346	-189	-7	6.7
6.8	-147	-7	-9993643	-149	-6	-9993609	-151	-6	-9993569	-7	-6	-9993523	-159	-6	-9993471	-162	-6	6.8
6.9	-127	-6	-9994554	-128	-5	-9994532	-130	-5	-9994505	-134	-5	-9994472	-135	-5	-9994434	-139	-5	6.9
7.0	-109	-5	-9995337	-110	-5	-9995324	-112	-5	-9995307	-116	-5	-9995285	-120	-5	-9995258	-120	-4	7.0
7.1	-94	-5	-9996010	-95	-5	-9996004	-96	-4	-9995993	-99	-4	-9995979	-109	-4	-9995961	-103	-4	7.1
7.2	-81	-4	-9996586	-81	-4	-9996585	-82	-4	-9996581	-85	-4	-9996573	-86	-4	-9996562	-88	-4	7.2
7.3	-70	-4	-9997081	-71	-4	-9997084	-72	-4	-9997084	-73	-4	-9997081	-74	-4	-9997075	-75	-4	7.3
7.4	-60	-4	-9997505	-61	-4	-9997511	-63	-4	-9997515	-63	-4	-9997515	-64	-4	-9997513	-64	-4	7.4
7.5	-51	-4	-9997868	-52	-4	-9997876	-54	-4	-9997882	-54	-4	-9997885	-55	-4	-9997886	-55	-4	7.5
7.6	-43	-4	-9998179	-44	-4	-9998189	-46	-4	-9998196	-46	-4	-9998201	-47	-4	-9998204	-47	-4	7.6
7.7	-37	-3	-9998446	-38	-3	-9998456	-39	-3	-9998464	-39	-3	-9998470	-39	-3	-9998475	-40	-3	7.7
7.8	-32	-3	-9998674	-33	-3	-9998684	-33	-3	-9998693	-33	-3	-9998700	-34	-3	-9998706	-34	-3	7.8
7.9	-27	-3	-9998869	-29	-3	-9998879	-28	-3	-9998888	-28	-3	-9998896	-29	-3	-9998902	-29	-3	7.9
8.0	-24	-3	-9999035	-24	-3	-9999045	-23	-3	-9999054	-24	-3	-9999062	-25	-3	-9999069	-25	-3	8.0
8.1	-21	-3	-9999177	-20	-3	-9999186	-19	-3	-9999195	-20	-3	-9999203	-21	-3	-9999210	-22	-3	8.1
8.2	-17	-3	-9999299	-17	-3	-9999308	-17	-3	-9999316	-18	-3	-9999324	-18	-3	-9999331	-19	-3	8.2
8.3	-14	-3	-9999403	-14	-3	-9999411	-15	-3	-9999419	-16	-3	-9999426	-16	-3	-9999433	-16	-3	8.3
8.4	-12	-3	-9999491	-12	-3	-9999499	-13	-3	-9999507	-14	-3	-9999514	-14	-3	-9999520	-13	-3	8.4
8.5	-11	-3	-9999567	-10	-3	-9999574	-11	-3	-9999581	-11	-3	-9999588	-12	-3	-9999594	-11	-3	8.5
8.6	-9	-3	-9999631	-9	-3	-9999638	-10	-3	-9999644	-9	-3	-9999650	-10	-3	-9999656	-9	-3	8.6
8.7	-8	-3	-9999686	-8	-3	-9999692	-9	-3	-9999698	-8	-3	-9999704	-9	-3	-9999709	-8	-3	8.7
8.8	-7	-3	-9999733	-7	-3	-9999739	-8	-3	-9999744	-7	-3	-9999749	-8	-3	-9999754	-7	-3	8.8
8.9	-6	-3	-9999773	-6	-3	-9999778	-7	-3	-9999783	-6	-3	-9999788	-7	-3	-9999792	-6	-3	8.9
9.0	-5	-3	-9999807	-5	-3	-9999812	-6	-3	-9999816	-5	-3	-9999820	-6	-3	-9999824	-5	-3	9.0