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I certify that the statements made by me above are correct and complete.—Gordon L. Walker

The editorial committee would welcome readers' comments about this microfiche feature. Please send comments to Professor Eugene Isaacson, MATHEMATICS OF COMPUTATION, Courant Institute of Mathematical Sciences, New York University, 251 Mercer Street, New York, New York 10012.

Mathematics of Computation

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Joyce Weil, Tadepalli S. Murty and Desiraju B. Rao, Zeros of $J_n(\lambda)Y_n(\eta\lambda) - J_n(\eta\lambda)Y_n(\lambda)$ and $J_n'(\lambda)Y_n'(\eta\lambda) - J_n'(\eta\lambda)Y_n'(\lambda)$

The first ten positive zeros of the two functions specified in the title are tabulated to seven significant figures (4D to 6D) for $n = 0(1)10$ and $\eta = 0(0.5)0.95$. Details of the underlying computational procedure have been published [1] by the authors. The zeros of the second function were found in the same manner as those of the first, after use was made of the relation $Z_n'(x) = \frac{n}{x} Z_n(x) - Z_{n+1}(x)$, where Z_n represents either J_n or Y_n.

J. W. W.

1. Joyce Weil, Tadepalli S. Murty and Desiraju B. Rao, "Zeros of $J_n(\lambda)Y_n(\eta\lambda) - J_n(\eta\lambda)Y_n(\lambda)$," Math. Comp., v. 21, 1967, pp. 722-7.

$$J_n(\lambda)Y_n(\eta\lambda) - J_n(\eta\lambda)Y_n(\lambda) = 0$$

$\eta = 0$

n =	0	1	2	3	4	5	6	7	8	9	10
1	2.404825	3.831706	5.135622	6.380161	7.588342	8.771483	9.936109	11.08637	12.22509	13.35430	14.47550
2	5.520078	7.015586	8.417244	9.761023	11.06470	12.33860	13.58929	14.82126	16.03777	17.24122	18.43346
3	8.653727	10.17346	11.61984	13.01520	14.37253	15.70017	17.00382	18.28758	19.55453	20.80704	22.04698
4	11.79153	13.32369	14.79595	16.22346	17.61596	18.98013	20.32078	21.64154	22.94517	24.23388	25.50945
5	14.93091	16.47063	17.95981	19.40941	20.82693	22.21780	23.58608	24.93492	26.26681	27.58374	28.88737
6	18.07106	19.61585	21.11699	22.58273	24.01902	25.43034	26.82015	28.19118	29.54566	30.88537	32.21185
7	21.21163	22.76008	24.27011	25.74816	27.19908	28.62661	30.03372	31.42279	32.79580	34.15437	35.49990
8	24.35247	25.90367	27.42057	28.90835	30.37100	31.81171	33.23304	34.63708	36.02561	37.40010	38.76180
9	27.49347	29.04682	30.56920	32.06485	33.53713	34.98878	36.42202	37.83871	39.24044	40.62855	42.00419
10	30.63460	32.18968	33.71652	35.21867	36.69900	38.15956	39.60323	41.03077	42.44388	43.84382	45.23157

$\eta = 0.05$

n =	0	1	2	3	4	5	6	7	8	9	10
1	3.064399	3.860328	5.136070	6.380165	7.588340	8.771476	9.936103	11.08637	12.22509	13.35430	14.47550
2	6.425392	7.104545	8.420219	9.761085	11.06470	12.33860	13.58928	14.82126	16.03777	17.24121	18.43346
3	9.766746	10.34729	11.62995	13.01549	14.37253	15.70017	17.00382	18.28759	19.55454	20.80704	22.04698
4	13.09748	13.60045	14.82058	16.22451	17.61599	18.98014	20.32079	21.64154	22.94516	24.23387	25.50945
5	16.42191	16.86354	18.00875	19.41228	20.82703	22.21779	23.58608	24.93492	26.26680	27.58374	28.88736
6	19.74227	20.13468	21.20166	22.58937	24.01932	25.43035	26.82015	28.19118	29.54566	30.88538	32.21186
7	23.05985	23.41213	24.40268	25.76163	27.19986	28.62665	30.03373	31.42279	32.79579	34.15438	35.49991
8	26.37543	26.69451	27.61315	28.93294	30.37278	31.81180	33.23304	34.63709	36.02561	37.40009	38.76180
9	29.68952	29.98076	30.83324	32.10619	33.54076	34.98899	36.42203	37.83872	39.24044	40.62854	42.00418
10	33.00246	33.27010	34.06253	35.28354	36.70584	38.16033	39.60326	41.03076	42.44388	43.84380	45.23157

$\eta = 0.1$

n =	0	1	2	3	4	5	6	7	8	9	10
1	3.313942	3.940940	5.142341	6.380455	7.588356	8.771476	9.936103	11.08637	12.22509	13.35430	14.47550
2	6.857582	7.330574	8.457405	9.764106	11.06488	12.33861	13.58928	14.82126	16.03777	17.24121	18.43346
3	10.37741	10.74837	11.73854	13.02079	14.37375	15.70024	17.00382	18.28759	19.55454	20.80704	22.04698
4	13.88642	14.18863	15.04407	16.26813	17.62120	18.98058	20.32082	21.64154	22.94516	24.23387	25.50945
5	17.38962	17.64330	18.38338	19.51281	20.84345	22.21967	23.58625	24.93494	26.26680	27.58374	28.88736
6	20.88939	21.10730	21.75310	22.77088	24.06032	25.43634	26.82082	28.19124	29.54566	30.88538	32.21186
7	24.38694	24.57756	25.14716	26.07535	27.28562	28.64254	30.03588	31.42302	32.79581	34.15438	35.49991
8	27.88297	28.05219	28.55905	29.39925	30.52886	31.84771	33.23902	34.63785	36.02570	37.40010	38.76180
9	31.37795	31.52994	31.98703	32.74863	33.76537	35.06020	36.43636	37.84091	39.24071	40.62857	42.00418
10	34.87213	35.01001	35.42507	36.11765	37.08683	38.28687	39.63378	41.03630	42.44469	43.84387	45.23159