

EIGENVALUES—PROLATE AND OBLATE

Table 21.1

OBLATE

$c^2 \backslash n$	$\lambda_{mn}(-ic) - m(m+1)$ *				
	$\lambda_{0n}(-ic)$				
	0	1	2	3	4
0	0.000000	2.000000	6.000000	12.000000	20.000000
1	-0.348602	1.393206	5.486800	11.492120	19.495276
2	-0.729391	0.773097	4.996484	10.990438	18.994079
3	-1.144328	+0.140119	4.531027	10.494512	18.496395
4	-1.594493	-0.505243	4.091509	10.003863	18.002228
5	-2.079934	-1.162477	3.677958	9.517982	17.511597
6	-2.599668	-1.831050	3.289357	9.036338	17.024540
7	-3.151841	-2.510421	2.923796	8.558395	16.541110
8	-3.733981	-3.200049	2.578730	8.083615	16.061382
9	-4.343292	-3.899400	2.251269	7.611465	15.585448
10	-4.976895	-4.607952	1.938419	7.141427	15.113424
11	-5.632021	-5.325200	1.637277	6.673001	14.645441
12	-6.306116	-6.050659	1.345136	6.205705	14.181652
13	-6.996903	-6.783867	1.059541	5.739084	13.722230
14	-7.702385	-7.524384	0.778305	5.272706	13.267364
15	-8.420841	-8.271795	0.499495	4.806165	12.817261
16	-9.150793	-9.025710	0.221407	4.339082	12.372144
	$\left[ \begin{smallmatrix} (-3)4 \\ 7 \end{smallmatrix} \right]$	$\left[ \begin{smallmatrix} (-3)2 \\ 5 \end{smallmatrix} \right]$	$\left[ \begin{smallmatrix} (-3)3 \\ 7 \end{smallmatrix} \right]$	$\left[ \begin{smallmatrix} (-4)8 \\ 5 \end{smallmatrix} \right]$	$\left[ \begin{smallmatrix} (-4)6 \\ 5 \end{smallmatrix} \right]$
$c^{-1} \backslash n$	$c^{-2}[\lambda_{0n}(-ic)]$				
	0	1	2	3	4
0.25	-0.571924	-0.564106	+0.013837	0.271192	0.77325
0.24	-0.585248	-0.579552	-0.009136	0.213225	0.67822
0.23	-0.599067	-0.595037	-0.031481	0.157464	0.58772
0.22	-0.613349	-0.610591	-0.053477	0.103825	0.50191
0.21	-0.628058	-0.626242	-0.075480	0.052196	0.42099
0.20	-0.643161	-0.642016	-0.097943	+0.002437	0.34521
0.19	-0.658625	-0.657938	-0.121428	-0.045635	0.27490
0.18	-0.674418	-0.674031	-0.146603	-0.092251	0.21043
0.17	-0.690515	-0.690310	-0.174201	-0.137692	0.15215
0.16	-0.706891	-0.706792	-0.204894	-0.182301	0.10020
0.15	-0.723530	-0.723486	-0.239109	-0.226469	0.05428
0.14	-0.740416	-0.740399	-0.276886	-0.270627	+0.01332
0.13	-0.757541	-0.757535	-0.317881	-0.315206	-0.02476
0.12	-0.774896	-0.774894	-0.361548	-0.360594	-0.06337
0.11	-0.792476	-0.792476	-0.407352	-0.407081	-0.10723
0.10	-0.810279	-0.810279	-0.454896	-0.454839	-0.16065
0.09	-0.828301	-0.828301	-0.503937	-0.503928	-0.22419
0.08	-0.846539	-0.846539	-0.554337	-0.554337	-0.29513
0.07	-0.864992	-0.864992	-0.606021	-0.606021	-0.37117
0.06	-0.883657	-0.883657	-0.658931	-0.658931	-0.45125
0.05	-0.902532	-0.902532	-0.713025	-0.713025	-0.53495
0.04	-0.921616	-0.921616	-0.768262	-0.768262	-0.62200
0.03	-0.940906	-0.940906	-0.824608	-0.824608	-0.71218
0.02	-0.960402	-0.960402	-0.882031	-0.882031	-0.80533
0.01	-0.980100	-0.980100	-0.940503	-0.940503	-0.90131
0.00	-1.000000	-1.000000	-1.000000	-1.000000	-1.00000
	$\left[ \begin{smallmatrix} (-5)6 \\ 4 \end{smallmatrix} \right]$	$\left[ \begin{smallmatrix} (-5)3 \\ 4 \end{smallmatrix} \right]$	$\left[ \begin{smallmatrix} (-4)4 \\ 7 \end{smallmatrix} \right]$	$\left[ \begin{smallmatrix} (-4)3 \\ 6 \end{smallmatrix} \right]$	$\left[ \begin{smallmatrix} (-3)1 \\ 8 \end{smallmatrix} \right]$

\*See page 11.