

Appendix E

Prandtl-Meyer Functions

TABLE E.1 Prandtl–Meyer Functions ($\gamma = 1.4$)

M	ν	μ	M	ν	μ
1.00	0.0000	90.0000	1.92	24.1506	31.3882
1.02	0.1257	78.6351	1.94	24.7123	31.0285
1.04	0.3510	74.0576	1.96	25.2711	30.6774
1.06	0.6367	70.6300	1.98	25.8269	30.3347
1.08	0.9680	67.8084	2.00	26.3798	30.0000
1.10	1.3362	65.3800	2.02	26.9295	29.6730
1.12	1.7350	63.2345	2.04	27.4762	29.3535
1.14	2.1600	61.3056	2.06	28.0197	29.0411
1.16	2.6073	59.5497	2.08	28.5600	28.7357
1.18	3.0743	57.9362	2.10	29.0971	28.4369
1.20	3.5582	56.4427	2.12	29.6308	28.1446
1.22	4.0572	55.0520	2.14	30.1613	27.8585
1.24	4.5694	53.7507	2.16	30.6884	27.5785
1.26	5.0931	52.5280	2.18	31.2121	27.3043
1.28	5.6272	51.3752	2.20	31.7325	27.0357
1.30	6.1703	50.2849	2.22	32.2494	26.7726
1.32	6.7213	49.2509	2.24	32.7629	26.5148
1.34	7.2794	48.2682	2.26	33.2730	26.2621
1.36	7.8435	47.3321	2.28	33.7796	26.0144
1.38	8.4130	46.4387	2.30	34.2828	25.7715
1.40	8.9870	45.5847	2.32	34.7825	25.5332
1.42	9.5650	44.7670	2.34	35.2787	25.2995
1.44	10.1464	43.9830	2.36	35.7715	25.0702
1.46	10.7305	43.2302	2.38	36.2607	24.8452
1.48	11.3169	42.5066	2.40	36.7465	24.6243
1.50	11.9052	41.8103	2.42	37.2289	24.4075
1.52	12.4949	41.1395	2.44	37.7077	24.1945
1.54	13.0856	40.4927	2.46	38.1831	23.9854
1.56	13.6770	39.8683	2.48	38.6551	23.7800
1.58	14.2686	39.2652	2.50	39.1236	23.5782
1.60	14.8604	38.6822	2.52	39.5886	23.3799
1.62	15.4518	38.1181	2.54	40.0503	23.1850
1.64	16.0427	37.5719	2.56	40.5085	22.9934
1.66	16.6328	37.0427	2.58	40.9633	22.8051
1.68	17.2220	36.5296	2.60	41.4147	22.6199
1.70	17.8099	36.0319	2.62	41.8628	22.4377
1.72	18.3964	35.5487	2.64	42.3074	22.2586
1.74	18.9814	35.0795	2.66	42.7488	22.0824
1.76	19.5646	34.6235	2.68	43.1868	21.9090
1.78	20.1458	34.1802	2.70	43.6215	21.7385
1.80	20.7251	33.7490	2.72	44.0529	21.5706
1.82	21.3021	33.3293	2.74	44.4810	21.4053
1.84	21.8768	32.9207	2.76	44.9059	21.2427
1.86	22.4492	32.5227	2.78	45.3275	21.0825
1.88	23.0190	32.1349	2.80	45.7459	20.9248
1.90	23.5861	31.7569	2.82	46.1611	20.7695

TABLE E.1 (Continued)

M	ν	μ	M	ν	μ
2.84	46.5731	20.6166	3.94	64.9836	14.7029
2.86	46.9820	20.4659	3.96	65.2526	14.6270
2.88	47.3877	20.3175	3.98	65.5197	14.5519
2.90	47.7903	20.1713	4.00	65.7848	14.4775
2.92	48.1898	20.0272	4.02	66.0480	14.4039
2.94	48.5863	19.8852	4.04	66.3093	14.3311
2.96	48.9796	19.7452	4.06	66.5688	14.2590
2.98	49.3700	19.6072	4.08	66.8263	14.1876
3.00	49.7573	19.4712	4.10	67.0820	14.1170
3.02	50.1417	19.3371	4.12	67.3359	14.0470
3.04	50.5231	19.2049	4.14	67.5879	13.9778
3.06	50.9016	19.0745	4.16	67.8381	13.9092
3.08	51.2771	18.9459	4.18	68.0866	13.8414
3.10	51.6497	18.8191	4.20	68.3332	13.7741
3.12	52.0195	18.6939	4.22	68.5782	13.7076
3.14	52.3864	18.5705	4.24	68.8213	13.6417
3.16	52.7505	18.4487	4.26	69.0628	13.5764
3.18	53.1118	18.3285	4.28	69.3026	13.5118
3.20	53.4703	18.2100	4.30	69.5406	13.4477
3.22	53.8261	18.0929	4.32	69.7770	13.3843
3.24	54.1791	17.9774	4.34	70.0118	13.3215
3.26	54.5294	17.8634	4.36	70.2449	13.2593
3.28	54.8770	17.7508	4.38	70.4763	13.1976
3.30	55.2220	17.6397	4.40	70.7062	13.1366
3.32	55.5643	17.5300	4.42	70.9344	13.0761
3.34	55.9040	17.4216	4.44	71.1611	13.0161
3.36	56.2411	17.3147	4.46	71.3862	12.9567
3.38	56.5756	17.2090	4.48	71.6097	12.8979
3.40	56.9075	17.1046	4.50	71.8317	12.8396
3.42	57.2369	17.0016	4.52	72.0522	12.7818
3.44	57.5639	16.8997	4.54	72.2712	12.7246
3.46	57.8883	16.7991	4.56	72.4887	12.6678
3.48	58.2102	16.6997	4.58	72.7046	12.6116
3.50	58.5298	16.6015	4.60	72.9192	12.5559
3.52	58.8469	16.5045	4.62	73.1322	12.5006
3.54	59.1616	16.4086	4.64	73.3438	12.4459
3.56	59.4739	16.3139	4.66	73.5540	12.3916
3.58	59.7838	16.2202	4.68	73.7628	12.3378
3.60	60.0915	16.1276	4.70	73.9701	12.2845
3.62	60.3968	16.0361	4.72	74.1761	12.2316
3.64	60.6998	15.9456	4.74	74.3807	12.1792
3.66	61.0005	15.8562	4.76	74.5839	12.1273
3.68	61.2990	15.7678	4.78	74.7858	12.0758
3.70	61.5953	15.6804	4.80	74.9863	12.0247
3.72	61.8893	15.5939	4.82	75.1855	11.9741
3.74	62.1812	15.5084	4.84	75.3833	11.9239
3.76	62.4709	15.4239	4.86	75.5799	11.8741
3.78	62.7584	15.3402	4.88	75.7752	11.8247
3.80	63.0438	15.2575	4.90	75.9691	11.7757
3.82	63.3271	15.1757	4.92	76.1619	11.7272
3.84	63.6083	15.0948	4.94	76.3533	11.6790
3.86	63.8874	15.0147	4.96	76.5435	11.6313
3.88	64.1645	14.9355	4.98	76.7325	11.5839
3.90	64.4395	14.8572	5.00	76.9202	11.5370
3.92	64.7125	14.7796			