

$\int_0^{\infty} e^{-x} f(x) dx \approx \sum_{i=1}^n w_i f(x_i)$			$\int_0^{\infty} g(x) dx \approx \sum_{i=1}^n w_i e^{x_i} g(x_i)$		
Abscissas = x_i (Zeros of Laguerre Polynomials)			Weight Factors = w_i		
x_i	w_i	$w_i e^{x_i}$	x_i	w_i	$w_i e^{x_i}$
n=2					
0.58578 64376 27	(-1)8.53553 390593	1.53332 603312	0.15232 22277 32	(-1)3.36126 421798	0.39143 11243 16
3.41421 35623 73	(-1)1.46446 609407	4.45095 733505	0.80722 00227 42	(-1)4.11213 980424	0.92180 50285 29
n=3					
0.41577 45567 83	(-1)7.11093 009929	1.07769 285927	1.80834 29017 40	(-1)1.99287 525371	1.48012 790994
2.29428 03602 79	(-1)2.78517 733569	2.76214 296190	3.78347 39733 31	(-2)4.74605 627657	2.08677 080755
6.28994 50829 37	(-2)1.03892 565016	5.60109 462543	6.20495 67778 77	(-3)5.59962 661079	2.77292 138971
n=4					
0.32254 76896 19	(-1)6.03154 104342	0.83273 91238 38	9.37298 52516 88	(-4)3.05249 767093	3.59162 606809
1.74576 11011 58	(-1)3.57418 692438	2.04810 243845	13.46623 69110 92	(-6)6.59212 302608	4.64876 600214
4.53662 02969 21	(-2)3.88879 085150	3.63114 630582	18.83359 77889 92	(-8)4.11076 933035	6.21227 541975
9.39507 09123 01	(-4)5.39294 705561	6.48714 508441	26.37407 18909 27	(-11)3.29087 403035	9.36321 823771
n=5					
0.26356 03197 18	(-1)5.21755 610583	0.67909 40422 08	0.13779 34705 40	(-1)3.08441 115765	0.35400 97386 07
1.41340 30591 07	(-1)3.98666 811083	1.63848 787360	0.72945 45495 03	(-1)4.01119 929155	0.83190 23010 44
3.59642 57710 41	(-2)7.59424 496817	2.76944 324237	1.80834 29017 40	(-1)2.18068 287612	1.33028 856175
7.08581 00058 59	(-3)3.61175 867992	4.31565 690092	3.40143 36978 55	(-2)6.20874 560987	1.86306 390311
12.64080 08442 76	(-5)2.33699 723858	7.21918 635435	5.55249 61400 64	(-3)9.50151 697518	2.45025 555808
n=6					
0.22284 66041 79	(-1)4.58964 673950	0.57353 55074 23	8.33015 27467 64	(-4)7.53008 388588	3.12276 415514
1.18893 21016 73	(-1)4.17000 830772	1.36925 259071	11.84378 58379 00	(-5)2.82592 334960	3.93415 269556
2.99273 63260 59	(-1)1.13373 382074	2.26068 459338	16.27925 78313 78	(-7)4.24931 398496	4.99241 487219
5.77514 35691 05	(-2)1.03991 974531	3.35052 458236	21.99658 58119 81	(-9)1.83956 482398	6.57220 248513
9.83746 74183 83	(-4)2.61017 202815	4.88682 680021	29.92069 70122 74	(-13)9.91182 721961	9.78469 584037
15.98287 39806 02	(-7)8.98547 906430	7.84901 594560			
n=7					
0.19304 36765 60	(-1)4.09318 951701	0.49647 75975 40	0.11572 21173 58	(-1)2.64731 371055	0.29720 90630 44
1.02666 48953 39	(-1)4.21831 277862	1.17764 306086	0.61175 74845 15	(-1)3.77759 275873	0.69646 29804 31
2.56787 67449 51	(-1)1.47126 348658	1.91824 978166	1.51261 02697 76	(-1)2.44082 011320	1.10778 139462
4.90035 30845 26	(-2)2.06335 144687	2.77184 863623	2.83375 13377 44	(-2)9.04492 222117	1.53846 423904
8.18215 34445 63	(-3)1.07401 014328	3.84124 912249	4.59922 76394 18	(-2)2.01023 811546	1.99832 760627
12.73418 02917 98	(-5)1.58654 643486	5.38067 820792	6.84452 54531 15	(-3)2.66397 354187	2.50074 576910
19.39572 78622 63	(-8)3.17031 547900	8.40543 248683	9.62131 68424 57	(-4)2.03231 592663	3.06532 151828
n=8					
0.17027 96323 05	(-1)3.69188 589342	0.43772 34104 93	13.00605 49933 06	(-6)8.36505 585682	3.72328 911078
0.90370 17767 99	(-1)4.18786 780814	1.03386 934767	17.11685 51874 62	(-7)1.66849 387654	4.52981 402998
2.25108 66298 66	(-1)1.75794 986637	1.66970 976566	22.15109 03793 97	(-9)1.34239 103052	5.59725 846184
4.26670 01702 88	(-2)3.33434 922612	2.37692 470176	28.48796 72509 84	(-12)3.06160 163504	7.21299 546093
7.04590 54023 93	(-3)2.79453 623523	3.20854 091335	37.09912 10444 67	(-16)8.14807 746743	10.54383 74619
10.75851 60101 81	(-5)9.07650 877336	4.26857 551083			
15.74067 86412 78	(-7)8.48574 671627	5.81808 336867			
22.86313 17368 89	(-9)1.04800 117487	8.90622 621529			
n=9					
0.15232 22277 32	(-1)3.36126 421798	0.39143 11243 16	0.09330 78120 17	(-1)2.18234 885940	0.23957 81703 11
0.80722 00227 42	(-1)4.11213 980424	0.92180 50285 29	0.49269 17403 02	(-1)3.42210 177923	0.56010 08427 93
2.00513 51556 19	(-1)1.99287 525371	1.48012 790994	1.21559 54120 71	(-1)2.63027 577942	0.88700 82629 19
3.78347 39733 31	(-2)4.74605 627657	2.08677 080755	2.26994 95262 04	(-1)1.26425 818106	1.22366 440215
6.20495 67778 77	(-3)5.59962 661079	2.77292 138971	3.66762 27217 51	(-2)4.02068 649210	1.57444 872163
9.37298 52516 88	(-4)3.05249 767093	3.59162 606809	5.42533 66274 14	(-3)8.56387 780361	1.94475 197653
13.46623 69110 92	(-6)6.59212 302608	4.64876 600214	7.56591 62266 13	(-3)1.21243 614721	2.34150 205664
18.83359 77889 92	(-8)4.11076 933035	6.21227 541975	10.12022 85680 19	(-4)1.11674 392344	2.77404 192683
26.37407 18909 27	(-11)3.29087 403035	9.36321 823771	13.13028 24821 76	(-6)6.45992 676202	3.25564 334640
			16.65440 77083 30	(-7)2.22631 690710	3.80631 171423
			20.77647 88994 49	(-9)4.22743 038498	4.45847 775384
			25.62389 42267 29	(-11)3.92189 726704	5.27001 778443
			31.40751 91697 54	(-13)1.45651 526407	6.35956 346973
			38.53068 33064 86	(-16)1.48302 705111	8.03178 763212
			48.02608 55726 86	(-20)1.60059 490621	11.52777 21009

Table 5.3: Abscissas and weight factors for Laguerre integration.

$\int_{-\infty}^{\infty} e^{-x^2} f(x) dx = \sum_{i=1}^n w_i f(x_i)$				$\int_{-\infty}^{\infty} g(x) dx = \sum_{i=1}^n w_i e^{x_i^2} g(x_i)$			
Abscissas = $\pm x_i$ (Zeros of Hermite Polynomials)				Weight Factors = w_i			
$\pm x_i$			w_i	$\pm x_i$			$w_i e^{x_i^2}$
n=2				n=10			
0.70710	67811	86548	(-1)8.86226 92545 28	1.46114	11826	611	0.34290 13272 23705 (-1)6.10862 63373 53
n=3				n=12			
0.00000	00000	00000	{ 0}1.18163 59006 04	1.18163	59006	037	1.03661 08297 89514 (-1)2.40138 61108 23
1.22474	48713	91589	{-1}2.95408 97515 09	1.32393	11752	136	1.75668 36492 99882 (-2)3.38743 94455 48
n=4				n=16			
0.52464	76232	75290	(-1)8.04914 09000 55	1.05996	44828	950	2.53273 16742 32790 (-3)1.34364 57467 81
1.65068	01238	85785	(-2)8.13128 35447 25	1.24022	58176	958	3.43615 91188 37738 (-6)7.64043 28552 33
n=5				n=20			
0.00000	00000	00000	(-1)9.45308 72048 29	0.94530	87204	829	0.31424 03762 54359 (-1)5.70135 23626 25
0.95857	24646	13819	(-1)3.93619 32315 22	0.98658	09967	514	0.94778 83912 40164 (-1)2.60492 31026 42
2.02018	28704	56086	(-2)1.99532 42059 05	1.18148	86255	360	1.59768 26351 52605 (-2)5.16079 85615 88
n=6				n=25			
0.43607	74119	27617	(-1)7.24629 59522 44	0.87640	13344	362	2.27950 70805 01060 (-3)3.90539 05846 29
1.33584	90740	13697	(-1)1.57067 32032 29	0.93558	05576	312	3.02063 70251 20890 (-5)8.57368 70435 88
2.35060	49736	74492	(-3)4.53000 99055 09	1.13690	83326	745	3.88972 48978 69782 (-7)2.65855 16843 56
n=7				n=32			
0.00000	00000	00000	(-1)8.10264 61755 68	0.81026	46175	568	0.27348 10461 3815 (-1)5.07929 47901 66
0.81628	78828	58965	(-1)4.25607 25261 01	0.82868	73032	836	0.82295 14491 4466 (-1)2.80647 45852 85
1.67355	16287	67471	(-2)5.45155 82819 13	0.89718	46002	252	1.23407 62153 953 (-2)8.38100 41398 99
2.65196	13568	35233	(-4)9.71781 24509 95	1.10133	37296	103	1.38025 85391 9888 (-2)1.28803 11535 51
n=8				n=40			
0.38118	69902	07322	(-1)6.61147 01255 82	0.76454	41286	517	1.95178 79909 1625 (-4)9.32284 00862 42
1.15719	37124	46780	(-1)2.07802 32581 49	0.79289	00483	864	2.54620 21578 4748 (-5)2.71186 00925 38
1.98165	67566	95843	(-2)1.70779 83007 41	0.86675	26065	634	3.17699 91619 7996 (-7)2.32098 08448 65
2.93063	74202	57244	(-4)1.99604 07221 14	1.07193	01442	480	4.86944 79048 6012 (-10)2.65480 74740 11
n=9				n=50			
0.00000	00000	00000	(-1)7.20235 21560 61	0.72023	52156	061	0.24534 07083 009 (-1)4.62243 66960 06
0.72355	10187	52838	(-1)4.32651 55900 26	0.73030	24527	451	0.73747 37285 454 (-1)2.86675 50536 28
1.46855	32892	16668	(-2)8.84745 27394 38	0.76460	81250	946	1.23407 62153 953 (-1)1.09017 20602 00
2.26658	05845	31843	(-3)4.94362 42755 37	0.84175	27014	787	1.73853 77121 166 (-2)2.48105 20887 46
3.19099	32017	81528	(-5)3.96069 77263 26	1.04700	35809	767	2.25497 40020 893 (-3)3.24377 33422 38
n=10				n=64			
0.00000	00000	00000	(-1)7.20235 21560 61	0.72023	52156	061	2.78880 60584 281 (-4)2.28338 36301 63
0.72355	10187	52838	(-1)4.32651 55900 26	0.73030	24527	451	3.34785 45673 832 (-6)7.80255 64785 32
1.46855	32892	16668	(-2)8.84745 27394 38	0.76460	81250	946	3.94476 40401 156 (-7)1.08606 93707 69
2.26658	05845	31843	(-3)4.94362 42755 37	0.84175	27014	787	4.60368 24495 507 (-10)4.39934 09922 73
3.19099	32017	81528	(-5)3.96069 77263 26	1.04700	35809	767	5.38748 08900 112 (-13)2.22939 36455 34

Table 5.4: Abscissas and weight factors for Hermite integration.