

Supplement to Gaussian Quadrature Involving Einstein and Fermi Functions with an Application to Summation of Series

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TABLE 5. Nodes and weights for n-point Gaussian quadrature with respect to the weight function $e_1(t) = t/(e^t - 1)$ on $(0, \infty)$, $n=5(5)40$.

n	zero(n)	weight(n)
1	3.479535131203533535888906d-01	7.413801893864949064648418d-01
2	1.789519270251396059078587d+00	7.112793968534230324727631d-01
3	4.317073039784563286568702d+00	1.810544213015127812690667d-01
4	8.1243164356746011205701546d+00	1.113156581019995660932093d-02
5	1.399259503591182245471045d+01	8.849349659575965642269187d-05
n	zero(n)	weight(n)
1	1.712764587800172362970467d-01	4.017581983871970550764847d-01
2	8.916728564071628155969295d-01	6.178151502068598877652466d-01
3	2.154696241995276926728150d+00	4.309238491671243158403736d-01
4	3.940962194432075308546014d+00	1.601831853477292223382136d-01
5	6.273054978120200583717756d+00	3.111600156831707548706688d-02
6	9.219833208404748987213936d+00	3.002950279906314058385099d-03
7	1.289612902426177067770092d+01	1.324400356318608169220646d-04
8	1.749262020229698453921089d+01	2.280734015322767264428365d-06
9	2.337506876689075787489480d+01	1.111475587288852659683946d-08
10	3.148092990870547794581304d+01	6.689509433931585817256954d-12
n	zero(n)	weight(n)
1	1.122689742882840428560134d-01	2.717674922677317952221318d-01
2	5.872942570832169304369100d-01	4.852206727225164096245477d-01
3	1.427134594172779508922935d+00	4.581586361360587417881249d-01
4	2.616230204390486070960179d+00	2.806056660239435321238224d-01
5	4.148505367683641117556727d+00	1.135140668971388075471236d-01
6	6.033516951668504802085092d+00	2.998304918534276590192265d-02
7	8.294299990936086527007386d+00	5.098666065215486743990180d-03
8	1.096384343614386146477958d+01	5.482040128082603574763532d-04
9	1.408587628929527609167703d+01	3.618564942449709026477206d-05
10	1.771999691156769233871477d+01	1.398222595231963340037460d-06
11	2.195126297803758949286577d+01	2.936603420052541839075062d-08
12	2.690847821599200481688143d+01	2.982123035751269147999240d-10
13	3.280454835374218314720542d+01	1.203079310277072656860401d-12
14	4.004648974077095940531751d+01	1.324544206896025265830478d-15
15	4.967641464169027902025467d+01	1.546415245123910288693076d-19

n	zero(n)	weight(n)	n	zero(n)	weight(n)
1	8.310292185949766711575308d-02	2.042884291812021802679753d-01	1	5.438298822278427196906899d-02	1.357138453603449491466130d-01
2	4.357281165840647789931564d-01	3.91883245125899283439544d-01	2	2.857467537931680134315893d-01	2.7895166726160523272409648d-01
3	1.0622298836914052847414280d+00	4.266391827938016622411210d-01	3	6.989451402730449420372059d-01	3.473596887059682223506285d-01
4	1.953010688780890432077174d+00	3.292145738679349588649743d-01	4	1.289651593396428793118676d+00	3.322002097366456999996702d-01
5	3.100288899803218102852714d+00	1.863502498233567425985823d-01	5	2.05319750811542729345059d+00	2.565131689266101146922356d-01
6	4.502988516694598635090355d+00	7.72593302038122067320656d-02	6	2.98613396786968037654315d+00	1.6146634611487835177272120d-01
7	6.167227138864963620977259d+00	2.33085073824742435868682d-02	7	4.087345268609994654098197d+00	8.272396766696146553790681d-02
8	1.04499198625121833900601d+00	5.091890520845775753402728d-03	8	5.3526260173629374790484118d+00	3.439688237385421005464031d-02
9	1.032987653878065449569074d+01	8.00960068426226638689036d-04	9	8.202276146445903399492389d+00	1.159349029881943122340784d-02
10	1.286176513603133059409178d+01	9.9872691932941929611494005d-05	10	8.42401182348675576706189d+00	3.167396639249583312498733d-03
11	1.894161127745808319064855d+01	7.0841644335968157886615965d-06	11	1.0222887854658243893869d+01	7.01275727275453398891369d-04
12	2.255471484465903653050310d+01	3.833781117822285638861755d-08	12	1.22229858700230609162806d+01	1.256479583772951428226714d-04
13	6.61301517888907086410276d+01	1.3196278781308189585959d-10	13	1.44133324102031603625903d+01	2.107708512228129625597429d-06
14	3.1730479024146040224455702d-12	4.369634506146040224455702d-12	14	1.680793832500298891840948d+01	1.950612468920813042699543d-07
15	3.1730479024146040224455702d-12	4.369634506146040224455702d-12	15	1.94160608521381697433139d+01	1.427172431764471949458532d-08
16	3.633840853025501505029207d+01	3.3084718565662932021471409d-14	16	2.24868269538485933109707d+01	8.16593532927490242419892d-10
17	4.224332445094454135160503d+01	1.20739094520327320241239d-16	17	2.531839526125405106673303d+01	3.605285081298255945450259d-11
18	4.911888324720829614936405d+01	1.7100046274348871397620661d-19	18	2.864029526125405106673303d+01	3.605285081298255945450259d-11
19	5.740463788076877647913530d+01	6.232029670607160676256261d-23	19	3.22323310629715974370605d+01	1.208198954085659939100711d-12
20	6.822792243365916314681691d+01	2.07808092700654764130737d-27	20	3.61161610081239397761262d+01	3.011808510085431938146972d-14
21	6.580211243706955269712202d-02	1.6323388619906017392323208d-01	21	4.031827149828725997661205d+01	5.445762450080303536410332d-16
22	3.454652594576145288681572d-01	3.2649957998929148959356456d-01	22	4.487160564738557667455811d+01	6.9253482259346319295907108d-18
23	4.392031952833733017310d-01	3.857158381140828939152248d-01	23	4.98180045910902226883170d+01	1.947504364226864778884078d-20
24	1.55480908018003402826055d+00	3.393033944559530835035084d-01	24	5.5212032088996736860439654d+01	3.273850494393105235962204d-22
25	4.72008898233262172612265d+00	2.322254373965805954514862d-01	25	6.112730532615825917058112d+01	1.07616340160380972222333d-24
26	3.592182833295968701819289d+00	1.242619519141019415678124d-01	26	6.766772661286989119602791d+01	1.911811384059167009209599d-27
27	4.916087171674104398653230d+00	5.17857734643480753408984d-02	27	7.498937960848706986085132d+01	1.580539289072827435074363d-30
28	6.448177589619150521745999d+00	1.675412483075005200877970d-02	28	8.334928063050538234499482d+01	4.758938328794456297386651d-34
29	8.195373758039527369202545d+00	4.20150233995202097620475d-03	29	9.323887482644421453248618d+01	3.278868027717845751183225d-38
30	1.016617647647802845156764d+01	8.153224371438445572934396d-04	30	1.0592158138760886650104625d+02	1.597134527231257314226753d-43
31	1.237050694986010251583211d+01	1.219925831618615103005953d-04			
32	1.481999855601003537028629d+01	1.398394699790744018773638d-05			
33	1.7528474287333446383239151d+01	1.2162914421199694143718963d-06			
34	2.051254710040080042443374d+01	7.92201470946587202280668d-08			
35	2.379240204967078747496408d+01	3.797765233289787730875644d-09			
36	2.739287494718190101850715d+01	1.310579890517022475000169d-10			
37	3.134500527047852044652511d+01	3.163994915105993772717716d-12			
38	3.568836197390127479014987d+01	5.149346723069955469878620d-14			
39	4.04746851326080356395514d+01	3.375336645242428759468085d-16			
40	4.577391101972662823594952d+01	1.157520085223180333835459d-20			
41	5.168485163634880208342662d+01	1.883313662154686817783069d-23			
42	5.835600876969833602313894d+01	1.15269692425101367352195d-26			
43	6.603187127498733594994263d+01	1.709778656000940470955466d-30			
44	7.517958424699324236963953d+01	2.02772929396362327764551d-35			
45	8.699847675132852164052276d+01				

n	zero(n)	weight(n)	n	zero(n)	weight(n)
1	6.580211243706955269712202d-02	1.6323388619906017392323208d-01	1	5.438298822278427196906899d-02	1.357138453603449491466130d-01
2	3.454652594576145288681572d-01	3.2649957998929148959356456d-01	2	2.857467537931680134315893d-01	2.7895166726160523272409648d-01
3	4.392031952833733017310d-01	3.857158381140828939152248d-01	3	6.989451402730449420372059d-01	3.473596887059682223506285d-01
4	1.55480908018003402826055d+00	3.393033944559530835035084d-01	4	1.289651593396428793118676d+00	3.322002097366456999996702d-01
5	4.72008898233262172612265d+00	2.322254373965805954514862d-01	5	2.05319750811542729345059d+00	2.565131689266101146922356d-01
6	3.592182833295968701819289d+00	1.242619519141019415678124d-01	6	2.98613396786968037654315d+00	1.6146634611487835177272120d-01
7	4.916087171674104398653230d+00	5.17857734643480753408984d-02	7	4.087345268609994654098197d+00	8.272396766696146553790681d-02
8	6.448177589619150521745999d+00	1.675412483075005200877970d-02	8	5.3526260173629374790484118d+00	3.439688237385421005464031d-02
9	8.195373758039527369202545d+00	4.20150233995202097620475d-03	9	8.202276146445903399492389d+00	1.159349029881943122340784d-02
10	1.016617647647802845156764d+01	8.153224371438445572934396d-04	10	8.42401182348675576706189d+00	3.167396639249583312498733d-03
11	1.237050694986010251583211d+01	1.219925831618615103005953d-04	11	1.0222887854658243893869d+01	7.01275727275453398891369d-04
12	1.481999855601003537028629d+01	1.398394699790744018773638d-05	12	1.22229858700230609162806d+01	1.256479583772951428226714d-04
13	1.7528474287333446383239151d+01	1.2162914421199694143718963d-06	13	1.44133324102031603625903d+01	2.107708512228129625597429d-06
14	2.051254710040080042443374d+01	7.92201470946587202280668d-08	14	1.680793832500298891840948d+01	1.950612468920813042699543d-07
15	2.379240204967078747496408d+01	3.797765233289787730875644d-09	15	1.94160608521381697433139d+01	1.427172431764471949458532d-08
16	2.739287494718190101850715d+01	1.310579890517022475000169d-10	16	2.24868269538485933109707d+01	8.16593532927490242419892d-10
17	3.134500527047852044652511d+01	3.163994915105993772717716d-12	17	2.531839526125405106673303d+01	3.605285081298255945450259d-11
18	3.568836197390127479014987d+01	5.149346723069955469878620d-14	18	2.864029526125405106673303d+01	3.605285081298255945450259d-11
19	4.04746851326080356395514d+01	3.375336645242428759468085d-16	19	3.22323310629715974370605d+01	1.208198954085659939100711d-12
20	4.577391101972662823594952d+01	1.157520085223180333835459d-20	20	3.61161610081239397761262d+01	3.011808510085431938146972d-14
21	5.168485163634880208342662d+01	1.883313662154686817783069d-23	21	4.031827149828725997661205d+01	5.445762450080303536410332d-16
22	5.835600876969833602313894d+01	1.15269692425101367352195d-26	22	4.487160564738557667455811d+01	6.9253482259346319295907108d-18
23	6.603187127498733594994263d+01	1.709778656000940470955466d-30	23	4.98180045910902226883170d+01	1.947504364226864778884078d-20
24	7.517958424699324236963953d+01	2.02772929396362327764551d-35	24	5.5212032088996736860439654d+01	3.273850494393105235962204d-22
25	8.699847675132852164052276d+01		25	6.112730532615825917058112d+01	1.07616340160380972222333d-24

n	zero(n)	weight(n)	n	zero(n)	weight(n)
1	4.629638939053648038050651d-02	1.160209721623326198032415d-01	1	4.027642627155319821611575d-02	1.012506051465152916650888d-01
2	4.33904147160421617309784d-01	2.43074730863587867483734d-01	2	2.1182460203636128424007515d-01	2.151444132056384166857345d-01
3	5.958749242961976279508479d-01	3.139717028027611572136353d-01	3	5.189310444998214893778066d-01	2.85463083396965889297312452d-01
4	1.00675650339954374976659d+00	3.180795038074999420777409d-01	4	9.593309679596621840623494d-01	3.0159446665553676861626754d-01
5	1.754232144962755052615577d+00	2.667967644360623268843548d-01	5	1.530270420924644511228282d+00	2.686014565316910854064714d-01
6	2.553429448937758146494195d+00	1.877433975811020473360214d-01	6	2.22916692592364240026338d+00	2.048976213393355510343493d-01
7	3.496748492225542316861257d+00	1.10897736354443404591220214d-01	7	3.054218137136504801017125d+00	1.342056407759111522820005d-01
8	5.81688104466406297127484d+00	5.485738454352494804263826d-02	8	4.004788848679656080174188d+00	7.535366169639820594945359d-02
9	7.197878900330683364810d+00	7.84757707524087508819466d-03	9	5.081441733319194673021165d+00	3.620814226369889303100710d-02
10	8.730956821623130233856306d+00	2.2707943534512355343556d-03	10	6.285674930576647782518233d+00	4.4882697918640494340189226d-02
11	1.041845102630181566375126d+01	5.499590543717915066542827d-04	11	7.619577840391830212326278d+00	5.235830715035084833561301d-03
12	1.226566853756708545624715d+01	1.114233638605873369589965d-04	12	9.086641439176956753867776d+01	1.578000855457045420602561d-03
13	1.427686097043186801966903d+01	1.88549567711124704733198d-05	13	1.068641439176956753867776d+01	4.07656245510819046206243d-04
14	1.645722197494663245449914d+01	1.857646940748796140287716d-06	14	1.43045870580093474732245d+01	9.0264174642588374502766313d-05
15	1.881263305194291614620277d+01	3.108293117147894495241371d-07	15	1.63287937630415712661978d+01	1.711562059346546718527925d-05
16	2.34678077068441211138443d+01	3.0014786089896661296181900d-08	16	1.850165951750648238532631d+01	2.774724343437925977672114d-06
17	2.4076293815358523488926d+01	2.378229258946371630897019d-09	17	2.08276426437096965764641d+01	3.836750211834510437712391d-07
18	2.700091384220627023014107d+01	1.53472007453715562134844d-10	18	2.595991763063820649488716d+01	4.510980458194090910046308d-08
19	3.013369987724727425180674d+01	7.994271050953016312060418d-12	19	2.87781649769548535124655d+01	3.771708688566651183233181d-10
20	3.348630118917629414329745d+01	3.32573001824023245833866d-13	20	3.177380472381961100602984d+01	2.655285589157410645976151d-11
21	3.70722999101217867258582d+01	1.0911134125824956115534d-13	21	3.495498572319566470559896d+01	1.574445086103597703637020d-12
22	4.090766589626646993896714d+01	2.780949805724146314572690d-16	22	3.833099108361494609627730d+01	7.554755258624329790837550d-14
23	4.501136564961883091181934d+01	5.407815604966620528353139d-18	23	4.191245526011892013505405d+01	3.004667882004250624715945d-15
24	4.94061964834566469582332d+01	7.850102427722866261318025d-22	24	4.571164091189630387686372d+01	9.700657747585684672018333d-17
25	5.411995858335901150140966d+01	8.28207426413662778144285d-24	25	4.974279700440313472170786d+01	2.512927040287052377555357d-18
26	5.918715180760433137455737d+01	6.142676714874854430029805d-24	26	5.402262986790775217742416d+01	5.152466570907834873189349d-20
27	6.465127170602335847002689d+01	9.78205550675524953183605d-26	27	6.857312535277132112204206d+01	8.228694077810317697645022d-22
28	7.057005035712926094870030d+01	1.84749004966457493180480d-31	28	7.409177811039529842285109d+01	1.004218339166596189187859d-23
29	7.701956252078358581005311d+01	1.860110826692011930658905d-34	29	8.001283852609810920099214d+01	6.056696194902923498784023d-28
30	8.41084553132440353372289d+01	8.541357066349362681535743d-38	30	8.639544071447261524679636d+01	2.810967130230393373637464d-30
31	9.199957444155928132540000d+01	1.38380788149187843432343d-41	31	9.331929260130560330924497d+01	8.7545305871644438583366578d-33
32	1.0096118068795630022942656d+02	4.859893585546290985803390d-46	32	1.008968075268575692181308d+02	1.72762033772138246420970d-35
33	1.115066088129493003159297d+02	1.077617385348555641940888d-51	33	1.092971451672944711207374d+02	1.999659865537470059739780d-38
34	1.249570787009553413876718d+02		34	1.1879867445791287005373570d+02	1.217653152769588993200903d-41
35			35	1.299348055424420054617866d+02	3.314395211422655127230551d-45
			36		3.0879251177375722168786105d-49
			37		5.923930360584484378128208d-54
			38		6.4630592524378411999104798d-60
			39		
			40		

TABLE 6. Nodes and weights for n-point Gaussian quadrature with respect to the weight function $\epsilon_2(t) = (t/(e^t - 1))^2$ on $(0, \infty)$, $n=5(5)40$.

n	zero(n)	weight(n)	n	zero(n)	weight(n)
1	1.89807370266614777344148d-01	4.000443325694873604454372d-01	1	3.473879599608822756850785d-02	8.604751937956299235210134d-02
2	9.85246529583020658444203d-01	3.789807995295453817651591d-01	2	1.825810378477627506190486d-01	1.7146357770709952264963952d-01
3	3.86351536307239750743d+00	9.98634537233989916707744d-02	3	4.467825233964248999518352d-01	2.023187252913960828682173d-01
4	4.453912921316011937594606d+00	6.80359185806610509044422d-02	4	8.247261276327444685170238d-01	1.7971936075750338661116125d-01
5	7.550985366733906815277973d+00	6.214969676652317356882237d-05	5	1.3132426291674000314704288d+00	1.26693924987843383486239d-01
1	9.218444915847623408842165d-02	2.15126348183836553821037d-01	6	1.909462657433770000539649d+00	7.161947935962774433592696d-02
2	4.81831122550832794907274d-01	3.278582165177493713894802d-01	7	2.611503360606579850659441d+00	3.23199630344449094958463d-02
3	1.16958193968495966928908d+00	3.20781538388429613196686d-01	8	4.333670681949199061245233d+00	1.152947558053457061039521d-02
4	2.14250285696612914951185d+00	9.037289742159522489319234d-02	9	4.333670681949199061245233d+00	3.2163794822842257530184009d-03
5	3.399803720241797979939689d+00	1.935853121469371412693503d-02	10	5.3585990612149033758679610d+00	6.947593652514107107807361d-04
6	4.9635181074330186623714098d+00	2.112865650206771784597161d-03	11	6.498613561663519079429314d+00	1.151634356949272038048939d-04
7	6.88572252985468662018593d+00	1.055919317024719322030657d-04	12	7.75974119152006281707787d+00	1.45185908282432567927315d-05
8	9.26649446481825982303340d+00	2.04039028370036053687250d-06	13	9.14921747988008093672390d+00	1.377934341404420155109902d-06
9	1.22897102757992330087306d+01	1.103688450137012215348459d-08	14	1.0675646187123325230812377d+01	9.720434786198905889352163d-08
10	1.643210790952451312966226d+01	7.335277386514835213297919d-12	15	1.234935696700792582952194d+01	5.013548115981089825960037d-09
1	5.99063586949196012652180d-02	1.445847660833525195950892d-01	16	1.418295775791143700024736d+01	1.850665796283232066806673d-10
2	3.140944137190932919811536d-01	2.5647754859891026730900137743d-01	17	1.619213438830104361815679d+01	4.755276534674546067661151d-12
3	7.656625634114071645775741d-01	2.426561880927630900137743d-01	18	1.839683466609540608637058d+01	8.201758957685863289299896d-14
4	1.40715015277607880539302d+00	1.52788870665435845385567d-01	19	2.08231078702769602102935d+01	9.047676947483441205002167d-16
5	2.232216083248390562234387d+00	6.591188478346777095059630d-02	20	2.350613762826782931457482d+01	5.976122862555179389301388d-18
6	3.239273065284613014155018d+00	1.919234516671951948178906d-02	21	2.649561524439854564942495d+01	2.152187890258746774521606d-20
7	4.433961262010600369110395d+00	4.436791797142676918325025d-04	22	2.986620369867253140474932d+01	3.670607806987329381519991d-23
8	8.29950093808595874314557d+00	3.274454113134714518531911d-06	23	3.374081744018900607330814d+01	2.352670889315316071588252d-26
9	7.448951175551751132974575d+00	1.399975194989153761735665d-06	24	3.83543173889886802162502d+01	3.655503861945212462881914d-30
10	9.3217348873663395989223634d+00	3.220340227573899025899518d-08	25	4.430975321425087314231387d+01	4.5566352758355118117498272d-35
11	1.149194483040244252742309d+01	3.551326096260661806934017d-10			
12	1.402502605277714060373648d+01	1.545898275491262367181264d-12			
13	1.702862422926365522975520d+01	1.545898275491262367181264d-12			
14	2.07081596154848543986447d+01	1.829404207132906750864674d-15			
15	2.558937739675150719038965d+01	2.2976011772202429916770029d-19			

n	zero(n)	weight(n)	n	zero(n)	weight(n)
1	2.860640901456362637799111d-02	7.130539982408217286171465d-02	1	2.428074203069907885185755d-02	6.07209657163345842205187d-02
2	1.504341720728152755339148d-01	1.461179748774203396983343d-01	2	1.27737964797144626640095d-01	1.270433964674679252321842d-01
3	3.684663044413001527742493d-01	1.816802818934565184375873d-01	3	1.13068780607323326287209d-01	1.638430941301040030504776d-01
4	6.809623160797577952208421d-01	1.7484500853874804646978833d-01	4	5.7907123980324483490749472d-01	1.666802061486795685481485d-01
5	1.080516335833035119665680104d+00	1.378998913528624936492702d-01	5	9.241519906276529404763306d-01	1.420159343778880946689078d-01
6	1.580516335833035119665680104d+00	0.951044698135047630133255d-02	6	1.346598595370026449001051d+00	1.032341388981420811530714d-01
7	2.165084059380290701536838d+00	4.9452423216853888466281302d-02	7	1.844842689801304491014122d+00	6.424892186934357586530160d-02
8	2.83365722929667601134378d+00	4.236225154400458416065426d-02	8	2.41772199061028623853653890d+00	3.413390546176088211682739d-02
9	3.5909648676575768641899d+00	8.305358380102895049477451d-03	9	3.064686870116931556218450d+00	1.539534251940080102071079d-02
10	4.436543341114572236154238d+00	2.514537636342839147244811d-03	10	3.78599001579978483773838d+00	5.8979813529157027922611d-03
11	5.372514329548322186860777d+00	6.16654782414533575599615d-04	11	4.5822756248111424615531234d+00	1.8722073079086601422971858d-03
12	6.401830458571104124098364d+00	1.218332021165389908047881d-04	12	5.455298766674760541528843d+00	4.999576073271208305370189d-04
13	7.528118070753035780103836d+00	1.929550212682811571788852d-05	13	6.40699132903181114993392d+00	1.112052215274855591563746d-04
14	8.755604506442210194979299d+00	2.436564945403720514292225d-06	14	7.43976221947603014732147d+00	2.054082466077517813793733d-05
15	1.008914327937006438000951d+01	2.43740543839766393321592d-06	15	8.5636040737119852290630d+00	3.140941637055136776705470d-06
16	1.153432128133382661558995d+01	1.915972348522048275662482d-08	16	9.759871944678018560148919d+00	3.9615624385129115149812566d-07
17	1.308762995089980926784434d+01	1.171473333287377625326594d-09	17	1.105375923180274321952876d+01	4.1027426035986459788882632d-08
18	1.478668959928948707327453d+01	5.500679400329088201870841d-11	18	1.244192970622515877492698d+01	3.459247242292601601824639d-09
19	1.66108520048577443057678d+01	1.952329201827177056263897d-12	19	1.39282647838102842634906d+01	2.3786578556459215239928d-10
20	1.858021127574214808602102d+01	5.133576954065947191411005d-14	20	1.551954046127039744867627d+01	1.311270687631934414625853d-11
21	2.070890471466796700767933d+01	9.769074528131669839915588d-16	21	1.721994951561154054876938d+01	5.752912221041274570876418d-13
22	2.301323249737803854595930d+01	1.302842449737954189014431d-17	22	1.903689510602646029965903d+01	1.98426520263172198542600d-14
23	2.551422559442156059772148d+01	1.17075150057969791979888d-19	23	2.097841232081683712347278d+01	5.302004583436491884911551d-16
24	2.823930112809702682917979d+01	6.729258950878586266489658d-22	24	2.305403671870407116149415d+01	1.078213248691522612322110d-17
25	3.122544214013721936443025d+01	2.305782849193269830790908d-24	25	2.527523237559770181823149d+01	1.633168017763392389667646d-19
26	3.452484043976085701619996d+01	4.264192841118205726492252598d-30	26	2.7655937671523053637894509d+01	1.7943744926641765723517140d-21
27	3.821589591048057010775138d+01	3.666635118205726492252598d-30	27	3.021350331908568937982211d+01	1.383560180992861460203028227d-23
28	4.24377082292576741407471d+01	1.14799191032868233818289d-33	28	3.296988458608106457170767d+01	7.178377890918460203028227d-26
29	4.7407147413328947499199d+01	8.23175883744290535809790d-38	29	3.59536875659047328668638d+01	2.37234090771668832836256d-28
30	5.378894858716608878833679d+01	4.188057588893487641081942d-43	30	3.920347789850128045773566d+01	4.637815760997783024379569d-31
31			31	4.277366743948944633781523d+01	4.8324242424612440657130648d-34
32			32	4.674600104688064175905114d+01	2.295544807280109227912596d-37
33			33	5.125514437260774360531020d+01	3.848042108225123295435789d-41
34			34	5.655880683833651186920020d+01	1.399884877347256801887049d-45
35			35	6.332034919124863493736705d+01	3.227087466699955233382607d-51

TABLE 7. Nodes and weights for n-point Gaussian quadrature with respect to the weight function $\varphi_1(t) = 1/(e^{t+1})$ on $(0, \infty)$, $n=5(5)40$.

n	zero(n)	weight(n)
1	2.107122415875405432950260d-02	5.2930006347738729484442244d-01
2	1.108802295594737919381199d-01	1.122289319782701205987228d-01
3	1.188544009861194366394268d-01	1.48682967807320161381116576d-01
4	5.032080305491193766972285d-01	1.57530313672358617352065d-01
5	8.036614283569114549868471d-01	1.4119788399057008694682473d-01
6	1.179181619281483184835470d+00	1.11125033628626476045894064d-01
7	1.6068096468549460129277d+00	7.59684450178019474458890d-02
8	1.206861033019083901765705d+00	4.53231243977816379059209d-02
9	1.67173586404966140444393d+00	2.350797913872039853856268d-02
10	3.3010564025226037985754230d+00	1.05496909195420112912299d-02
11	3.995084421552483527954961d+00	4.0774870661504003322781d-03
12	4.7545616319054185390408871d+00	1.352083202236284148677429d-03
13	5.80634498219478390996316d+00	3.835184783235378840191116d-04
14	6.474767187990186026292537d+00	9.284526472348263891340798d-05
15	7.438671465553397178603586d+00	1.91469246096036681104745d-05
16	8.47426763994645944695824d+00	3.357210712039626033972880d-06
17	9.583676997489169758674940d+00	4.993904867556843885220076d-07
18	1.076923847224280488935923d+01	6.284886915234548384997596d-08
19	1.20335412525267486930294d+01	6.669154278885996195346666d-09
20	1.337946775194512341564506d+01	5.942133032026464210420038d-10
21	1.481024483501139175694213d+01	4.423008604214924181219659d-11
22	1.632950418762419031071571d+01	2.733915292092100669576874d-12
23	1.794135447507406394582320d+01	1.393364966895785343922130d-13
24	1.965048954337058080641830d+01	5.805924915338567576616571d-15
25	2.14821983696785249632303d+01	1.959755539699216703648509d-16
26	2.338270458410598728896819d+01	5.295148972819567550560714d-18
27	2.541914655815918202371198d+01	1.130182936991427282118170d-19
28	2.757991401494335194206524d+01	1.87551476565115788552522d-21
29	2.987494501632429233739842d+01	2.374494685332581147594847d-23
30	3.231616011586124766368597d+01	2.241758122024917515548811d-25
31	3.491807237036103918351326d+01	1.534839876375531299089044d-27
32	3.76986705790760166097761d+01	7.361229626894632779666997d-30
33	4.068074489154412218196942d+01	2.366843765286919654623311d-32
34	4.3893965348300968415433090d+01	4.818092505080013533498314d-35
35	4.73783389317067432439057d+01	5.749145023602755508793047d-38
36	5.119024862171344545962118d+01	3.607636088813268495198225d-41
37	5.541453424344415940651811d+01	1.011862613298862545194640d-44
38	6.019093685095815679629147d+01	9.715869912618708570394217d-49
39	6.578709385378800806174934d+01	1.92429817798657448786877d-53
40	7.289258967365214392215361d+01	2.1747719265510650760869381d-59

n	zero(n)	weight(n)
1	1.015344947424081604384304d-01	1.232847930051943814144765d-01
2	5.284147334178625858839336d-01	2.191419693960621668637524d-01
3	1.277500608985740155930766d+00	1.97447381032153581315779d-01
4	2.341631360175820408352211d+00	1.07508492806252351848804d-01
5	3.736677838673560594660599d+00	3.653196034048860960425289d-02
6	5.489384374387769008471691d+00	7.981783672638808167238000d-03
7	7.626652177618868734025796d+00	1.139263265855043039011488d-03
8	1.017917884716605448603816d+01	1.052279928403015415272377d-04
9	1.318821869929745007410421d+01	6.094811325272586846679807d-06
10	1.671169970119415402442587d+01	2.102060824464642500115663d-07
11	2.083332592708516009621035d+01	3.993479898278182027664792d-09
12	2.568041606189490025072245d+01	3.7061747906622194560001491d-11
13	3.14637924722626717984324d+01	1.37676823292052325346496d-13
14	3.85867598706670329976784d+01	1.402123870626300200937861d-16
15	4.808199052039756280799851d+01	1.513547476275948700658963d-20

n	zero(n)	weight(n)	n	zero(n)	weight(n)
1	7.596881766097743017172034d-02	9.358078357935277102759111d-02	1	5.0404507167189771766001156d-02	6.2972738830060004939207042d-02
2	3.968958634428517822305818d-01	1.791589107707744955793377d-01	2	2.64289352108690107708105d-01	1.293911824192700571048905d-01
3	6.33855961453675912482977d-01	1.89432341806090363744589d-01	3	6.4451025965584113343740445347d-01	1.588959471413343740445347d-01
4	1.7672851741338716245065076d+00	1.34572985968616245065076d+00	4	1.186003146963259320706762d+00	1.452835813677946735989001d-01
5	2.8113783607544002051569433d+00	6.2341722327674551531564508d-02	5	1.886313672514671387996753d+00	1.027074423315998531968227d-01
6	4.107840574994487055281519d+00	2.3090720311438662166000433d-02	6	2.747535641374060256880807d+00	5.681078623739962109364464d-02
7	5.670433458031239331907516d+00	5.8383507844786194181718d-03	7	3.77482897519031700333358d+00	2.494340855333646793765132d-03
8	7.511843531087685760682423d+00	1.08444779437876060604086d-03	8	3.97368743806014829066442d+00	8.836722190655821430607667d-03
9	6.64579798701257747959729d+00	1.478588541109183445280375d-04	9	6.34885051806538348114462d+00	2.556995766078445323656236d-03
10	1.20893498925565012286601d+01	1.46383819196463747695172d-05	10	7.904649016104312487968213d+00	6.077963923687135943529345d-04
11	1.4864277399847442923775d+01	1.0333504557209622103046d-06	11	9.645846866103479960271023d+00	1.187491249519852727293219d-04
12	1.799848289542225970977647d+01	5.07174476516357466931819d-08	12	1.157803036082931845862712d+01	1.901832231552473745155275d-05
13	1.52808176369330745043338d+01	6.73311091018691301030526d-09	13	1.3707816102202307674876666d+01	2.484763821812509994524717d-06
14	2.5500709685205040808777d+01	3.5469439226133970717617910d-11	14	1.604298794934608600107228d+01	2.631164891607756387598505d-07
15	2.98814510924888682108873d+01	4.5398972247230707035301348d-13	15	1.859266790556139440636720d+01	2.239991420812601002200258d-08
16	3.506218120122073977501572d+01	3.12294519193455727524076d-15	16	2.136755310373746743174465d+01	1.518147628917858568489713d-09
17	4.088168547635075808213746d+01	1.10017251704646314602555d-17	17	2.438023609276789351450600d+01	8.095065612140086577355995d-11
18	4.766852218954259646594355d+01	1.46657732613403143116721d-20	18	2.76456334402043559335367d+01	3.348133811654913340483603d-12
19	5.589223636727246285291701d+01	5.036421857158181368343071d-24	19	3.500954416821835702361876d+01	1.055922194814784349630519d-13
20	6.657277603310332733193395d+01	1.578247292006709082172119d-28	20	3.915590445910245128426502d+01	2.487042653480436610984178d-15
21			21	4.36534098707029196125651d+01	4.264531155388917424181303d-17
22			22	4.854368877367801695649898d+01	5.156706731850473561357608d-19
23			23	5.388104032349570489754357d+01	4.2228713999464646464331533d-21
24			24	5.973873453383896646064016d+01	2.221526785632768346122970d-23
25			25	6.622019256883790355730170d+01	6.992010147400156993163816d-26
26			26	7.348077923233389253963821d+01	1.191061944156162937940958d-28
27			27	8.117631962449666168698358d+01	9.45114260908736222082326d-32
28			28	9.159594584745020959003182d+01	2.732206601373369156465250d-35
29			29	1.04196973885462618525074d+02	1.805881912022076050273723d-39
30			30	1.04196973885462618525074d+02	8.407655695306122618928261d-45

n	zero(n)	weight(n)	n	zero(n)	weight(n)
1	6.062364769497890137808309d-02	7.531648952613585327528696d-02	7	5.31648952613585327528696d-02	7.531648952613585327528696d-02
2	3.174277094109304155168326d-01	1.50513206517006932964395d-01	8	1.50513206517006932964395d-01	1.50513206517006932964395d-01
3	7.726164522677417040814321d-01	1.743536211305756610984920d-01	9	1.743536211305756610984920d-01	1.743536211305756610984920d-01
4	1.419597404207377884170178d+00	1.444496712076123342121589d-02	10	1.444496712076123342121589d-02	1.444496712076123342121589d-02
5	2.257074769210105025728954d+00	8.850066821876197618736240d-02	11	8.850066821876197618736240d-02	8.850066821876197618736240d-02
6	3.2905050507140251114510d+00	4.0715477844253428922120d-02	12	4.0715477844253428922120d-02	4.0715477844253428922120d-02
7	4.528252692969609161093324d+00	1.434454913209106043489963d-02	13	1.434454913209106043489963d-02	1.434454913209106043489963d-02
8	5.978108058543093755110909d+00	3.938024943331725811041528d-03	14	3.938024943331725811041528d-03	3.938024943331725811041528d-03
9	7.64710955889595515755076d+00	8.498842705471418638485438d-04	15	8.498842705471418638485438d-04	8.498842705471418638485438d-04
10	9.542836096350437709399811d+00	1.442746674296213899491800d-04	16	1.442746674296213899491800d-04	1.442746674296213899491800d-04
11	1.167430951683146213256351d+01	1.917032731124740410636517d-05	17	1.917032731124740410636517d-05	1.917032731124740410636517d-05
12	1.40528500295877990419192d+01	1.976679061797751381319017d-06	18	1.976679061797751381319017d-06	1.976679061797751381319017d-06
13	1.669166861549475965315763d+01	1.563268261586071969284727d-07	19	1.563268261586071969284727d-07	1.563268261586071969284727d-07
14	1.960717799848195177550952d+01	9.342307432824581026824956d-09	20	9.342307432824581026824956d-09	9.342307432824581026824956d-09
15	2.63526850718335813275190d+01	4.140893799436666994664001d-10	21	4.140893799436666994664001d-10	4.140893799436666994664001d-10
16	3.52696507196026964585240d+01	1.32984782727529265890180d-11	22	1.32984782727529265890180d-11	1.32984782727529265890180d-11
17	3.0238071614630686459607256d+01	3.004375882913555342723256d-13	23	3.004375882913555342723256d-13	3.004375882913555342723256d-13
18	3.453147688745424519731948d+01	4.59729038102168045328445d-15	24	4.59729038102168045328445d-15	4.59729038102168045328445d-15
19	3.923418849537430405508670d+01	4.533852618413037437203013d-17	25	4.533852618413037437203013d-17	4.533852618413037437203013d-17
20	4.446585119066577297326098d+01	2.6943716707815844424283d-19	26	2.6943716707815844424283d-19	2.6943716707815844424283d-19
21	5.030800957070147691026168d+01	8.775309548872633997186416d-22	27	8.775309548872633997186416d-22	8.775309548872633997186416d-22
22	5.69083432020749844405702d+01	1.3586971236037089014675966d-24	28	1.3586971236037089014675966d-24	1.3586971236037089014675966d-24
23	6.450999433837322938598566d+01	7.9228122787327931944475966d-28	29	7.9228122787327931944475966d-28	7.9228122787327931944475966d-28
24	7.357751057649323128007488d+01	1.119371184690237910969420d-31	30	1.119371184690237910969420d-31	1.119371184690237910969420d-31
25	8.530338477216826033367785d+01	1.260156803723669397820879d-36	31	1.260156803723669397820879d-36	1.260156803723669397820879d-36

n	zero(n)	weight(n)	n	zero(n)	weight(n)
1	4.31162529815533092115226857d-02	5.40812761833651144933884858d-02	1	3.7658983513035151499793936d-02	4.7375767595052520942115953q-02
2	2.2628876094018272151345166d-01	1.13298017904233050506649300d-01	2	1.9778091182296220001064496d-01	1.006772333988791706955734q-01
3	5.259588108906011201069153d-01	1.448476139633340682442725d-01	3	4.834750523434215629828185d-01	1.354003351691579578707760q-01
4	1.0181567760525162372029201d+00	1.417401813012807738841296d-01	4	8.9171488156382181597109102d-01	1.3623391168368907590030235q-01
5	1.620532003280291589581841d+00	1.1071653646208098397160d-01	5	1.420069077123022149533092d+00	1.144667928048648758466431q-01
6	2.359582152340324049994485d+00	6.979113494879413340148455d-02	6	2.068094922841440096490332d+00	7.949739404964049767471899q-02
7	3.238937999119084618666826d+00	3.58990469873333211348341d-02	7	2.873539313639126961724309d+00	4.5983569740976084121119543d-02
8	4.262429847654813830265623d+00	1.5237300677448882131893240d-02	8	3.731302821415197954865389d+00	2.239274136756231052922941q-02
9	5.436493590432783000301866d+00	5.418330011341999201493347d-03	9	4.75225235685066717435989631d+00	9.289032468262322200568865d-03
10	6.7556315553389355276307d+00	1.6261824155488956975439d-04	10	5.903782957037931818095000d+00	1.02139565084149087327774q-03
11	8.231308193070097907129711d+00	4.134302374066732176479030d-04	11	7.18496503811233879318970d+00	1.32139565084149087327774q-03
12	9.863921381629021601287148d+00	8.906502734298616558901317d-05	12	8.6090502771686101273138d+00	2.798375611569368015564871d-04
13	1.165723147125795606757042d+01	1.6230809425668875282868549d-05	13	1.0152953465235754859648865d+01	6.315101298167375471782637d-05
14	1.361560309644100894609941d+01	2.494504919140735608090232d-06	14	1.18438073883801334102885d+01	1.2650796107317052595679473d-05
15	1.574406184894257842684446d+01	3.220210657711016400727810d-07	15	1.3676548666317237693906730d+01	2.188781066365698513869048d-06
16	1.804836478976993178341478d+01	3.474413793832852242036223d-08	16	1.565466966119245398819520d+01	3.261807932626922299132494d-07
17	2.053509717295651878639006d+01	3.114660492583068152156181d-09	17	1.77821065375187751118109d+01	4.1172991819655887985835368d-08
18	2.321179262925539653099893d+01	2.30368833860662821208483d-10	18	2.006328511096150575638081d+01	4.565361171076153896111967d-09
19	2.60871284315616790887993d+01	1.394463728435840760300d-11	19	2.250318011654342608796604d+01	4.251838224924662451469842d-10
20	2.917106539614440203763129d+01	6.84263270671273414842753d-13	20	2.51073889390165901884537d+01	3.353468034976004604689052d-11
21	3.247517870061158720483140d+01	2.691827397875862077594352d-14	21	2.226601712132509255092974d-12	2.226601712132509255092974d-12
22	3.601296768522506242395725d+01	8.37937755854986178417711d-16	22	3.08348140291253721409430d+01	1.2361376484792227116198721d-13
23	3.980031429400657081005284d+01	2.032459625013638463172266d-17	23	3.99732819440227184995277d+01	5.69559492486987208360422d-15
24	4.385608913702713387861264d+01	3.71138058774736860636679d-19	24	4.084599437980906621974558d+01	6.646920169818948577420818d-16
25	4.820298206837352982280554d+01	5.295455024216409632972776d-23	25	4.46030622111366605591678d+01	1.647814294089093893702100d-19
26	5.286866943217371464701207d+01	3.771641591408798097144057d-25	26	4.85921850001580906069545d+01	3.240208493416014892884862d-21
27	5.788750403693733393637191d+01	1.813237532209624065732971d-27	27	5.289299911562655405839829d+01	4.972204516681383944384177d-23
28	6.3305099973855434724711d+01	5.86730970653854038187351d-30	28	5.733622119589304025236735d+01	5.840568830342964253659090d-25
29	6.917206260822987283425533d+01	1.013337732175270171756572d-32	29	6.213450986958493309718827d+01	5.13133553836617578137483d-27
30	7.55710578516555461168219d+01	9.845721000564209080756017d-36	30	6.72367720797071946087450d+01	3.278102293760797692173300d-29
31	8.260800439588389947687678d+01	4.3647322266863940282433307d-39	31	7.273844381611606452594318d+01	1.47043015115041722891797d-31
32	9.04452960716686282352094d+01	6.8260672808403635957876d-43	32	7.860706646535855452824676d+01	4.430830081593078864002377d-34
33	1.098325267801648258227396d+02	2.3114770168745916798998309d-47	33	8.4945475904442530572550275d+01	8.467156939137209166218888d-37
34	1.232097838366346314762228d+02	4.923607461580222862991821d-53	34	9.182410204282397304666716d+01	9.496718283697582149609150d-40
35			35	9.935501981875536026882213d+01	5.606033326700028658875738d-46
			37	1.077066364642577295808418d+02	1.4794404722428321020882207107d-50
			38	1.171564906848706503547970d+02	1.335544695612020882207107d-50
			39	1.282360087672191006539915d+02	2.480418248656812303549148d-55
			40	1.423141962304817578670821d+02	2.609693350887971079543663d-61

TABLE 8. Nodes and weights for n-point Gaussian quadrature with respect to the weight function $\varphi_2^2(t) = (t/(e^t + 1))^2$ on $(0, \infty)$, $n = 5(5)40$.

n	zero(n)	weight(n)	n	zero(n)	weight(n)
1	1.604529491791710058718722d-01	8.6318051511398033615070134d-02	1	3.924952811040474293220020d-02	2.4167073127449337085105696d-02
2	1.190824785378458206624539d-01	8.432196783413862269761421d-02	2	2.05535549600076264190848d-01	4.659417540479442227430852d-02
3	1.965204786152459839458304d+00	2.127617454306622112828681d-02	3	5.086202976670718258766096d-02	5.086202976670718258766096d-02
4	3.71044814625348560460453d+00	1.222415708583266206721724d-03	4	8.900719010556601853864306d-02	8.900719010556601853864306d-02
5	6.471896055974964518244494d+00	8.570962759163143908037842d-06	5	1.137765010070449425904613d-02	1.137765010070449425904613d-02
			6	3.81533360357980324570602d-03	3.81533360357980324570602d-03
			7	2.331066666159820017916186d-03	2.331066666159820017916186d-03
			8	4.608387287157064474561513d-04	4.608387287157064474561513d-04
			9	6.505169495024564521387378d-06	6.505169495024564521387378d-06
			10	4.6648962443832922651114354d-07	4.6648962443832922651114354d-07
			11	2.99259539895929426371020d-08	2.99259539895929426371020d-08
			12	7.604106339080994924029968d-10	7.604106339080994924029968d-10
			13	1.081158384204804204190754d+01	1.081158384204804204190754d+01
			14	1.279724735404886788128895d+01	1.279724735404886788128895d+01
			15	1.5037079963084669952965262d+01	1.5037079963084669952965262d+01
			16	1.75705540774110036730398d+01	1.75705540774110036730398d+01
			17	2.048649349428092497133558d+01	2.048649349428092497133558d+01
			18	2.387965202919089107679167d+01	2.387965202919089107679167d+01
			19	2.797478633178220721348314d+01	2.797478633178220721348314d+01
			20	3.333135280393978452397030d+01	3.333135280393978452397030d+01
			n	zero(n)	weight(n)
1	3.121087279556392754264106d-02	4.820782179516603075897624d+00	1	1.93831744469296599153152385d-02	1.93831744469296599153152385d-02
2	1.637077318295095540375901d-01	5.884172438071302190379825d+00	2	3.892074986800699002464612d-02	3.892074986800699002464612d-02
3	3.993277382431304713636465d-01	7.071584702479441872559716d+00	3	6.0982114880205034743090d-02	6.0982114880205034743090d-02
4	7.344694287773035077230955d-01	8.38970738950290159995621d+00	4	4.03369588227719026748055d-02	4.03369588227719026748055d-02
5	1.16601469101588565368099d+00	9.846561640369370473796d+00	5	2.704586990228823885489638d-02	2.704586990228823885489638d-02
6	1.692956740138681352203814d+00	1.14519853834155055714438d+01	6	1.388419358505250583834336d-02	1.388419358505250583834336d-02
7	2.31716095303701636304702d+00	1.321818743299352885146678d+01	7	5.425374046462233668348211d-03	5.425374046462233668348211d-03
8	3.042880542502996863083933d+00	1.51605079036701651910319d+01	8	1.613001621467984217799249d-03	1.613001621467984217799249d-03
9	3.875545262158331259834461d+00	1.72985588026543413925513d+01	9	3.667200049033622944079004d-04	3.667200049033622944079004d-04
10	4.820782179516603075897624d+00	1.96580240020038686224081d+01	10	6.415233422725829237450751d-05	6.415233422725829237450751d-05
11	5.884172438071302190379825d+00	2.27365395799281169060772d+01	11	8.661020961214747272497028d-06	8.661020961214747272497028d-06
12	7.071584702479441872559716d+00	2.519456114957459420610655d+01	12	9.00354341602824822424151505d-07	9.00354341602824822424151505d-07
13	8.38970738950290159995621d+00	2.8494573247747372928009286d+01	13	1.1509522028800217859210855d-08	1.1509522028800217859210855d-08
14	9.846561640369370473796d+00	3.228297379109543693608720d+01	14	4.283890563454500596134834d-09	4.283890563454500596134834d-09
15	1.14519853834155055714438d+01	3.654706026006947238027236d-28	15	1.901726225089109761509094d-10	1.901726225089109761509094d-10
16	1.321818743299352885146678d+01	4.164801699912889517789875d-32	16	6.114004801135598647234925d-12	6.114004801135598647234925d-12
17	1.51605079036701651910319d+01	4.43219282219283336d-33	17	1.382392492976275098901009d-13	1.382392492976275098901009d-13
18	1.72985588026543413925513d+01	4.7152323271212305918812d-19	18	2.116686265621842812644185d-15	2.116686265621842812644185d-15
19	1.96580240020038686224081d+01	5.01575636846656583219283336d-37	19	2.088557064011649516163751d-17	2.088557064011649516163751d-17
20	2.27365395799281169060772d+01		20	1.2417152323271212305918812d-19	1.2417152323271212305918812d-19
21	2.519456114957459420610655d+01		21	4.045603364017561693252695d-22	4.045603364017561693252695d-22
22	2.8494573247747372928009286d+01		22	6.265819966590795570616000d-25	6.265819966590795570616000d-25
23	3.228297379109543693608720d+01		23	1.654706026006947238027236d-28	1.654706026006947238027236d-28
24	3.654706026006947238027236d-28		24	5.164801699912889517789875d-32	5.164801699912889517789875d-32
25	4.269173563936784184321899d+01		25	5.81575636846656583219283336d-37	5.81575636846656583219283336d-37

n	zero(n)	weight(n)
1	1.926725198293165539086514d-02	1.211780827808369378801333d-02
2	1.012833860417829779737532d-01	2.5804215233983747950311401d-02
3	2.47925212211687191542970d-01	3.430531284889673801122604d-02
4	4.578693233636184973669477d-01	3.619703842425420449190008d-02
5	7.295702609357231543006807d-01	3.196650858652573934240452d-02
6	1.061724229582277059602416d+00	2.391184506299137961529284d-02
7	1.453660472531233979530630d+00	1.513783808104638642760602d-02
8	1.905580131294302039598793d+00	8.08388104026013142573799d-03
9	2.418525074360187850665731d+00	3.637222518000239045330928d-03
10	1.1898876383291878145d+00	1.381853805685300144088182d-03
11	3.634187557582421986089124d+00	4.453701593806042173026581d-04
12	4.340572570642393026236902d+00	1.224284277624888380716307d-04
13	5.1149642556224282573537631d+00	2.883436613217079876345959d-05
14	5.95897149681102234334175d+00	5.834767889841534044096909d-06
15	6.874211009052206279307203d+00	1.01533524729895550120880d-06
16	7.86240798792308753055355d+00	1.518146070888699702017363d-07
17	8.925475328662601173521146d+00	1.946170600066721905994366d-08
18	1.006556967918263552898532d+01	2.131965090285474637846248d-09
19	1.128513345719231016163977d+01	1.987390987008604596390884d-10
20	1.458693320218243576313126d+01	1.568563681380054200966251d-11
21	1.397410230638119527324308d+01	1.04204832230607061229912d-12
22	1.545019350035196560499432d+01	5.787690017218026243761970d-14
23	1.70192451043717809608526d+01	2.666770575887979707420303d-15
24	1.868586505633208750235391d+01	1.010322832860164334191684d-16
25	2.045533786280068563642717d+01	3.115097616272839234220647d-18
26	2.233376175544780240654170d+01	7.724315980258908140632105d-20
27	2.432822664401331944393443d+01	1.519191334504022533008767d-21
28	2.64470485111702531441641d+01	2.331662438857378743465974d-23
29	2.87008382379384117225437d+01	2.739303773429876347396108d-25
30	3.109916042561744272121772d+01	2.407001778716015914963974d-27
31	3.365868314823430639512617d+01	1.5378825914645351893377425d-29
32	3.639651079432945101265431d+01	6.899192127391925099777609d-32
33	3.933527240585366520919229d+01	2.079121967974517981322435d-34
34	4.250443113070104506108465d+01	3.973502203886383104633128d-37
35	4.594370178026164200683050d+01	4.457046053249068157458682d-40
36	4.970912124445061578754660d+01	2.631262925830146845010222d-43
37	5.388489249505677871197940d+01	6.94446688409045677007158d-47
38	5.860978425774107840639148d+01	6.269473904053579229201078d-51
39	6.414950868827129965198764d+01	1.164469609911003577649664d-55
40	7.118856642362202733156693d+01	1.225249298874748097459912d-61