TABLES OF MODIFIED GAUSSIAN QUADRATURE NODES AND WEIGHTS

10 Point Gauss-Legendre Rule for integrals of the form $\int_{-1}^{1} f(x)\,dx$	
NODES	WEIGHTS
-9.739065285171716e-01	6.667134430868814e-02
-8.650633666889845e-01	1.494513491505806e-01
-6.794095682990244e-01	2.190863625159820e-01
-4.333953941292472e-01	2.692667193099963e-01
-1.488743389816312e-01	2.955242247147529e-01
1.488743389816312e-01	2.955242247147529e-01
4.333953941292472e-01	2.692667193099963e-01
6.794095682990244e-01	2.190863625159820e-01
8.650633666889845e-01	1.494513491505806e-01
9.739065285171716e-01	6.667134430868814e-02

20 point quadrature rule for integrals of the form $\int_{-1}^{1} f(x) + g(x)\log\lvert x_1 - x\rvert\,dx$, where x_1 is a Gauss-Legendre node	
NODES	WEIGHTS
-9.981629455677877e-01	4.550772157144354e-03
-9.915520723139890e-01	8.062764683328619e-03
-9.832812993252168e-01	7.845621096866406e-03
-9.767801773920733e-01	4.375212351185101e-03
-9.717169387169078e-01	1.021414662954223e-02
-9.510630103726074e-01	3.157199356768625e-02
-9.075765988474132e-01	5.592493151946541e-02
-8.382582352569804e-01	8.310260847601852e-02
-7.408522006801963e-01	1.118164522164500e-01
-6.147619568252419e-01	1.401105427713687e-01
-4.615244999958006e-01	1.657233639623953e-01
-2.849772954295424e-01	1.863566566231937e-01
-9.117593460489747e-02	1.999093145144455e-01
1.119089520342051e-01	2.046841584582030e-01
3.148842536644393e-01	1.995580161940930e-01
5.075733846631832e-01	1.841025430283230e-01
6.797470718157004e-01	1.586456191174843e-01
8.218833662202629e-01	1.242680229936124e-01
9.258924858821892e-01	8.273794370795576e-02
9.857595961761246e-01	3.643931593123844e-02

20 point quadrature rule for integrals of the form $\int_{-1}^{1} f(x) + g(x) \log \lvert x_2 - x \rvert \, dx$, where x_2 is a Gauss-Legendre node	
NODES	WEIGHTS
-9.954896691005256e-01	1.141744473788874e-02
-9.775532683688947e-01	2.368593568061651e-02
-9.500346715183706e-01	3.027205199814611e-02
-9.192373372373420e-01	3.021809354380292e-02
-8.916563772395616e-01	2.397183723558556e-02
-8.727728136507039e-01	1.253574079839078e-02
-8.607963163061316e-01	2.070840476545303e-02
-8.201318720954396e-01	6.080709508468810e-02
-7.394732321355052e-01	1.002402801599464e-01
-6.204853512352519e-01	1.371499151597280e-01
-4.667290485167077e-01	1.693838059093582e-01
-2.840823320902124e-01	1.945292086962893e-01
-8.079364608026202e-02	2.103223087093422e-01
1.328455136645940e-01	2.149900928447852e-01
3.451233500669768e-01	2.074984762344433e-01
5.437321547508867e-01	1.877085225595498e-01
7.167077216635750e-01	1.564543949958065e-01
8.534299232009863e-01	1.156104890379952e-01
9.458275339169444e-01	6.859369195724087e-02
9.912353127269481e-01	2.390220989094312e-02

20 point quadrature rule for integrals of the form $\int_{-1}^{1} f(x) + g(x) \log \lvert x_3 - x \rvert \, dx$, where x_3 is a Gauss-Legendre node	
NODES	WEIGHTS
-9.930122613589740e-01	1.779185041193254e-02
-9.643941806993207e-01	3.870503119897836e-02
-9.175869559770760e-01	5.371120494602663e-02
-8.596474181980754e-01	6.073467932536858e-02
-7.990442708271941e-01	5.901993373645797e-02
-7.443700671611690e-01	4.905519963921684e-02
-7.031684479828371e-01	3.249237036645046e-02
-6.811221147275545e-01	1.335394660596527e-02
-6.579449960254029e-01	4.151626407911676e-02
-5.949471688137100e-01	8.451456165895121e-02
-4.893032793226841e-01	1.262522607368499e-01
-3.441659232382107e-01	1.628408264966550e-01
-1.665388322404095e-01	1.907085686614375e-01
3.344207582228461e-02	2.071802230953481e-01
2.434356263087524e-01	2.105274833603497e-01
4.498696863725133e-01	2.000282912446872e-01
6.389777518528792e-01	1.760212445284564e-01
7.978632877793501e-01	1.399000904426490e-01
9.155180703268415e-01	9.402669072995991e-02
9.837258757826489e-01	4.161927873514264e-02

20 point quadrature rule for integrals of the form $\int_{-1}^{1} f(x) + g(x) \log \lvert x_4 - x \rvert \, dx$, where x_4 is a Gauss-Legendre node	
NODES	WEIGHTS
-9.903478871133073e-01	2.462513260640712e-02
-9.504025146897784e-01	5.449201732062665e-02
-8.834986023815121e-01	7.799498604905293e-02
-7.974523551287549e-01	9.241688894090601e-02
-7.022255002503461e-01	9.619882322938848e-02
-6.087194789244920e-01	8.902783806614303e-02
-5.275278952351541e-01	7.181973054766198e-02
-4.677586540799037e-01	4.663017060126023e-02
-4.360689210457623e-01	1.794303974050253e-02
-4.121945474875853e-01	4.061799823415495e-02
-3.494226766911471e-01	8.507517518447759e-02
-2.425993523586304e-01	1.277525783357134e-01
-9.646839923908594e-02	1.628510773009247e-01
7.921243716767302e-02	1.863323765408308e-01
2.715178194484646e-01	1.958227701927855e-01
4.658440358656903e-01	1.903138548150517e-01
6.472213975763533e-01	1.700731513381802e-01
8.015601619414859e-01	1.365784674773513e-01
9.168056007307982e-01	9.239595239693155e-02
9.839468743284722e-01	4.103797108164931e-02

20 point quadrature rule for integrals of the form $\int_{-1}^{1} f(x) + g(x) \log \lvert x_5 - x \rvert \, dx$, where x_5 is a Gauss-Legendre node	
NODES	WEIGHTS
-9.883561797860961e-01	2.974603958509255e-02
-9.398305159297058e-01	6.657945456889164e-02
-8.572399919019390e-01	9.731775484182564e-02
-7.482086250804679e-01	1.190433988432928e-01
-6.228514167093102e-01	1.297088242013777e-01
-4.928317114329241e-01	1.282900896966494e-01
-3.702771193724617e-01	1.148917968875341e-01
-2.666412108172461e-01	9.074932908233864e-02
-1.916083010783277e-01	5.818196361216740e-02
-1.521937160593461e-01	2.224697059733435e-02
-1.233125650067164e-01	4.788826761346366e-02
-5.257959675044444e-02	9.237500180593534e-02
5.877314311857769e-02	1.287410543031414e-01
2.012559739993003e-01	1.541960911507042e-01
3.627988191760868e-01	1.665885274544506e-01
5.297121321076323e-01	1.648585116745725e-01
6.878399330187783e-01	1.491408089644010e-01
8.237603202215137e-01	1.207592726093190e-01
9.259297297557394e-01	8.212177982524418e-02
9.856881498392895e-01	3.657506268226379e-02

20 point quadrature rule for integrals of the form $\int_{-1}^{1} f(x) + g(x) \log \lvert x_6 - x \rvert \, dx$, where x_6 is a Gauss-Legendre node	
NODES	WEIGHTS
-9.856881498392895e-01	3.657506268226379e-02
-9.259297297557394e-01	8.212177982524418e-02
-8.237603202215137e-01	1.207592726093190e-01
-6.878399330187783e-01	1.491408089644010e-01
-5.297121321076323e-01	1.648585116745725e-01
-3.627988191760868e-01	1.665885274544506e-01
-2.012559739993003e-01	1.541960911507042e-01
-5.877314311857769e-02	1.287410543031414e-01
5.257959675044444e-02	9.237500180593534e-02
1.233125650067164e-01	4.788826761346366e-02
1.521937160593461e-01	2.224697059733435e-02
1.916083010783277e-01	5.818196361216740e-02
2.666412108172461e-01	9.074932908233864e-02
3.702771193724617e-01	1.148917968875341e-01
4.928317114329241e-01	1.282900896966494e-01
6.228514167093102e-01	1.297088242013777e-01
7.482086250804679e-01	1.190433988432928e-01
8.572399919019390e-01	9.731775484182564e-02
9.398305159297058e-01	6.657945456889164e-02
9.883561797860961e-01	2.974603958509255e-02

20 point quadrature rule for integrals of the form $\int_{-1}^{1} f(x) + g(x) \log \lvert x_7 - x \rvert \, dx$, where x_7 is a Gauss-Legendre node	
NODES	WEIGHTS
-9.839468743284722e-01	4.103797108164931e-02
-9.168056007307982e-01	9.239595239693155e-02
-8.015601619414859e-01	1.365784674773513e-01
-6.472213975763533e-01	1.700731513381802e-01
-4.658440358656903e-01	1.903138548150517e-01
-2.715178194484646e-01	1.958227701927855e-01
-7.921243716767302e-02	1.863323765408308e-01
9.646839923908594e-02	1.628510773009247e-01
2.425993523586304e-01	1.277525783357134e-01
3.494226766911471e-01	8.507517518447759e-02
4.121945474875853e-01	4.061799823415495e-02
4.360689210457623e-01	1.794303974050253e-02
4.677586540799037e-01	4.663017060126023e-02
5.275278952351541e-01	7.181973054766198e-02
6.087194789244920e-01	8.902783806614303e-02
7.022255002503461e-01	9.619882322938848e-02
7.974523551287549e-01	9.241688894090601e-02
8.834986023815121e-01	7.799498604905293e-02
9.504025146897784e-01	5.449201732062665e-02
9.903478871133073e-01	2.462513260640712e-02

20 point quadrature rule for integrals of the form $\int_{-1}^{1} f(x) + g(x) \log \lvert x_8 - x \rvert \, dx$, where x_8 is a Gauss-Legendre node	
NODES	WEIGHTS
-9.837258757826489e-01	4.161927873514264e-02
-9.155180703268415e-01	9.402669072995991e-02
-7.978632877793501e-01	1.399000904426490e-01
-6.389777518528792e-01	1.760212445284564e-01
-4.498696863725133e-01	2.000282912446872e-01
-2.434356263087524e-01	2.105274833603497e-01
-3.344207582228461e-02	2.071802230953481e-01
1.665388322404095e-01	1.907085686614375e-01
3.441659232382107e-01	1.628408264966550e-01
4.893032793226841e-01	1.262522607368499e-01
5.949471688137100e-01	8.451456165895121e-02
6.579449960254029e-01	4.151626407911676e-02
6.811221147275545e-01	1.335394660596527e-02
7.031684479828371e-01	3.249237036645046e-02
7.443700671611690e-01	4.905519963921684e-02
7.990442708271941e-01	5.901993373645797e-02
8.596474181980754e-01	6.073467932536858e-02
9.175869559770760e-01	5.371120494602663e-02
9.643941806993207e-01	3.870503119897836e-02
9.930122613589740e-01	1.779185041193254e-02

20 point quadrature rule for integrals of the form $\int_{-1}^{1} f(x) + g(x) \log \lvert x_9 - x \rvert \, dx$, where x_9 is a Gauss-Legendre node	
NODES	WEIGHTS
-9.912353127269481e-01	2.390220989094312e-02
-9.458275339169444e-01	6.859369195724087e-02
-8.534299232009863e-01	1.156104890379952e-01
-7.167077216635750e-01	1.564543949958065e-01
-5.437321547508867e-01	1.877085225595498e-01
-3.451233500669768e-01	2.074984762344433e-01
-1.328455136645940e-01	2.149900928447852e-01
8.079364608026202e-02	2.103223087093422e-01
2.840823320902124e-01	1.945292086962893e-01
4.667290485167077e-01	1.693838059093582e-01
6.204853512352519e-01	1.371499151597280e-01
7.394732321355052e-01	1.002402801599464e-01
8.201318720954396e-01	6.080709508468810e-02
8.607963163061316e-01	2.070840476545303e-02
8.727728136507039e-01	1.253574079839078e-02
8.916563772395616e-01	2.397183723558556e-02
9.192373372373420e-01	3.021809354380292e-02
9.500346715183706e-01	3.027205199814611e-02
9.775532683688947e-01	2.368593568061651e-02
9.954896691005256e-01	1.141744473788874e-02

20 point quadrature rule for integrals of the form $\int_{-1}^{1} f(x) + g(x) \log \lvert x_{10} - x \rvert \, dx$, where x_{10} is a Gauss-Legendre node	
NODES	WEIGHTS
-9.857595961761246e-01	3.643931593123844e-02
-9.258924858821892e-01	8.273794370795576e-02
-8.218833662202629e-01	1.242680229936124e-01
-6.797470718157004e-01	1.586456191174843e-01
-5.075733846631832e-01	1.841025430283230e-01
-3.148842536644393e-01	1.995580161940930e-01
-1.119089520342051e-01	2.046841584582030e-01
9.117593460489747e-02	1.999093145144455e-01
2.849772954295424e-01	1.863566566231937e-01
4.615244999958006e-01	1.657233639623953e-01
6.147619568252419e-01	1.401105427713687e-01
7.408522006801963e-01	1.118164522164500e-01
8.382582352569804e-01	8.310260847601852e-02
9.075765988474132e-01	5.592493151946541e-02
9.510630103726074e-01	3.157199356768625e-02
9.717169387169078e-01	1.021414662954223e-02
9.767801773920733e-01	4.375212351185101e-03
9.832812993252168e-01	7.845621096866406e-03
9.915520723139890e-01	8.062764683328619e-03
9.981629455677877e-01	4.550772157144354e-03

24 point quadrature rule for integrals of the form $\int_{0}^{1} f(x) + g(x) \log(x + \bar{x}) dx$, where $\bar{x} \geq 10^{-1}$	
NODES	WEIGHTS
3.916216329415252e-02	4.880755296918116e-02
8.135233983530081e-02	3.196002785163611e-02
1.123448211344994e-01	3.883416642507362e-02
1.595931983965030e-01	5.148898992140820e-02
2.085759027831349e-01	4.219328148763533e-02
2.426241962027560e-01	3.420686213633789e-02
2.886190312538522e-01	5.512488680719239e-02
3.469021762354675e-01	6.007112809843418e-02
4.072910101569611e-01	6.022350479415180e-02
4.664019722595442e-01	5.735022004401478e-02
5.182120817844112e-01	4.167923417118068e-02
5.501308436771654e-01	3.346089628879600e-02
5.970302980854608e-01	5.574716218423796e-02
6.548457960388209e-01	5.847838243344473e-02
7.119542126106005e-01	5.464156990092474e-02
7.607920420946340e-01	4.092186343704961e-02
7.953017051155684e-01	3.283728166050225e-02
8.303900341517088e-01	3.438233273473095e-02
8.612724919009394e-01	3.022585192226418e-02
8.954049128027080e-01	3.700769701277380e-02
9.315909369155358e-01	3.410213679365162e-02
9.621742249068356e-01	2.665791885274193e-02
9.843663446380599e-01	1.754420526360429e-02
9.970087425823398e-01	7.662283104388867e-03

24 point quadrature rule for integrals of the form $\int_0^1 f(x) + g(x)\log(x+\bar{x})dx$, where $10^{-2} \leq \bar{x} \leq 10^{-1}$	
NODES	WEIGHTS
1.940564616937581e-02	2.514022176052795e-02
4.545433992382339e-02	2.703526530535647e-02
7.378866604396420e-02	2.980872487617485e-02
1.054147718077606e-01	3.360626237885489e-02
1.412997888401000e-01	3.829678083416609e-02
1.822325567811081e-01	4.365651045780837e-02
2.287282121202408e-01	4.935846322319046e-02
2.809170925514041e-01	5.495967924055210e-02
3.384320962237970e-01	5.991162198705084e-02
4.003108031244078e-01	6.356960862248889e-02
4.648605571606025e-01	6.506868552467118e-02
5.290714994276687e-01	6.219588235225894e-02
5.829663557386375e-01	3.889986041695310e-02
6.128301889979477e-01	3.573431931940621e-02
6.606072156240962e-01	5.296315368353523e-02
7.139495966128518e-01	5.369033999927759e-02
7.677830914961244e-01	5.340793573367282e-02
8.187382423336450e-01	4.704756013998560e-02
8.587068551739496e-01	3.276576301747068e-02
8.906873285570645e-01	3.449175311880027e-02
9.267772492129903e-01	3.560168848238671e-02
9.592137652582382e-01	2.857367151127661e-02
9.830962712794008e-01	1.894042942442201e-02
9.967621546194148e-01	8.291994770212826e-03

24 point quadrature rule for integrals of the form $\int_0^1 f(x) + g(x)\log(x+\bar{x})dx$, where $10^{-3} \leq \bar{x} \leq 10^{-2}$	
NODES	WEIGHTS
7.571097817272427e-03	9.878088201321919e-03
1.800655325976786e-02	1.109316819462674e-02
3.003901004577040e-02	1.313311581321880e-02
4.462882147989575e-02	1.624262442061470e-02
6.295732618092606e-02	2.065168462990214e-02
8.644035241970913e-02	2.657795406825320e-02
1.166164809306920e-01	3.399052299072427e-02
1.546690628394902e-01	4.208214612865170e-02
1.999554346680615e-01	4.732516974042797e-02
2.434683359132119e-01	3.618419415803922e-02
2.800846274146029e-01	4.547346840583578e-02
3.368595257878888e-01	6.463153575242817e-02
4.044418359833648e-01	6.859104457897808e-02
4.685002493634456e-01	5.589917935916451e-02
5.185062817085154e-01	5.199232318335285e-02
5.811314144990846e-01	7.089840644422261e-02
6.545700991450585e-01	7.427400331494240e-02
7.276588861478224e-01	7.125308736931726e-02
7.960626077582168e-01	6.513697474660338e-02
8.572037183403355e-01	5.682298546820264e-02
9.091330485015775e-01	4.678000924507099e-02
9.503131649503738e-01	3.538488886617123e-02
9.795718963793163e-01	2.299723483013955e-02
9.961006479199827e-01	9.993597414733579e-03

24 point quadrature rule for integrals of the form $\int_0^1 f(x) + g(x)\log(x+\bar{x})dx$, where $10^{-4} \leq \bar{x} \leq 10^{-3}$	
NODES	WEIGHTS
2.625961371586153e-03	3.441901737135120e-03
6.309383772392260e-03	3.978799794732070e-03
1.073246133489697e-02	4.958449505644980e-03
1.645170499644402e-02	6.620822501994994e-03
2.433800511777796e-02	9.385496468197222e-03
3.582530925992294e-02	1.396512052439178e-02
5.315827372101662e-02	2.119383832447796e-02
7.917327903614484e-02	3.124989308824302e-02
1.162053707416708e-01	4.291481168916344e-02
1.648139164451449e-01	5.400832278279924e-02
2.231934088488800e-01	6.197424674301215e-02
2.864519293820641e-01	6.297221626131570e-02
3.466729491189400e-01	5.794981636764223e-02
4.076175535528108e-01	6.650501614478806e-02
4.800964107543535e-01	7.716379373230733e-02
5.594105009204460e-01	8.047814122759604e-02
6.395390292352857e-01	7.917822434973971e-02
7.167410782176877e-01	7.477646096014055e-02
7.882807127957939e-01	6.793424765652059e-02
8.519356675821297e-01	5.906852968947303e-02
9.058606177202579e-01	4.853108558910315e-02
9.485539755760567e-01	3.666228059710319e-02
9.788566874094059e-01	2.380850649522536e-02
9.959649506960162e-01	1.034186239262945e-02

24 point quadrature rule for integrals of the form $\int_0^1 f(x) + g(x)\log(x+\bar{x})dx$, where $10^{-5} \leq \bar{x} \leq 10^{-4}$	
NODES	WEIGHTS
7.759451679242260e-04	1.049591733965263e-03
1.952854410117286e-03	1.314968855711329e-03
3.429053832116395e-03	1.651475072547296e-03
5.301128540262913e-03	2.135645684467029e-03
7.878118775220067e-03	3.165043382856636e-03
1.205537050949829e-02	5.479528688655274e-03
1.965871512055557e-02	1.028817002915096e-02
3.403328641997047e-02	1.923291785614007e-02
5.947430305925957e-02	3.212643438782854e-02
9.873500543531440e-02	4.638626850049229e-02
1.518862681939413e-01	5.960676923068444e-02
2.171724325134259e-01	7.052360405410943e-02
2.919941878735093e-01	7.863451090237836e-02
3.734637353255530e-01	8.381771698595157e-02
4.586710018443288e-01	8.612755554083525e-02
5.448057416999684e-01	8.569938467103264e-02
6.292158981939618e-01	8.271051499695768e-02
7.094415843889587e-01	7.736692567834522e-02
7.832417328632321e-01	6.990012937760461e-02
8.486194141302759e-01	6.056687669667680e-02
9.038469149367938e-01	4.964868706783169e-02
9.474898150194623e-01	3.745026957972177e-02
9.784290662963747e-01	2.429741981889855e-02
9.958843370550371e-01	1.054906616108520e-02

24 point quadrature rule for integrals of the form $\int_0^1 f(x)+g(x)\log(x+\bar{x})dx$, where $10^{-6}\leq\bar{x}\leq 10^{-5}$	
NODES	WEIGHTS
3.126377187332637e-04	4.136479682893960e-04
7.671264269072188e-04	5.068714387414649e-04
1.359575160544077e-03	7.008932527842778e-04
2.238313285727558e-03	1.110264922990352e-03
3.770276623583326e-03	2.120108385941761e-03
7.146583956092048e-03	5.249076343206215e-03
1.635515250548719e-02	1.450809938905405e-02
3.828062855101241e-02	2.987724029376343e-02
7.628984500206759e-02	4.593298717863718e-02
1.294255336121595e-01	5.987634475538021e-02
1.949876755761554e-01	7.065953519392547e-02
2.693852297828856e-01	7.729918562776261e-02
3.469762441631538e-01	7.556635340171830e-02
4.122748928895491e-01	5.234123638339037e-02
4.662499202239145e-01	6.532130125393047e-02
5.421402737123784e-01	8.188272080198840e-02
6.248832413655412e-01	8.237354882288161e-02
7.053258496784840e-01	7.795795664563893e-02
7.798841313231049e-01	7.076514272025076e-02
8.461534275163378e-01	6.145788741452406e-02
9.022312524979976e-01	5.044339641339403e-02
9.465899812310277e-01	3.807817118430632e-02
9.780549563823810e-01	2.471549011101626e-02
9.958125149101927e-01	1.073289672726758e-02

24 point quadrature rule for integrals of the form $\int_0^1 f(x)+g(x)\log(x+\bar{x})dx$, where $10^{-7}\leq\bar{x}\leq 10^{-6}$	
NODES	WEIGHTS
1.019234906342863e-04	1.349775051746596e-04
2.506087227631447e-04	1.663411550150506e-04
4.461429005344285e-04	2.328782111562424e-04
7.422845421202523e-04	3.804721779784063e-04
1.289196091156456e-03	7.930350452911450e-04
2.739287668024851e-03	2.600694722423854e-03
9.075168969969708e-03	1.212249113599252e-02
2.968005234555358e-02	2.946708975720586e-02
6.781742979962609e-02	4.647771960691390e-02
1.217792474402805e-01	6.095376889009233e-02
1.886625378438471e-01	7.224844725827559e-02
2.650602155844836e-01	7.986429603884565e-02
3.465113608339080e-01	8.143206462900546e-02
4.178374197420536e-01	5.040529357007135e-02
4.597624982511183e-01	5.592137651001418e-02
5.348065111487157e-01	8.398073572656715e-02
6.194640153146728e-01	8.402586870225486e-02
7.013481004172354e-01	7.922223490159952e-02
7.770386175609082e-01	7.177919251691964e-02
8.442211768916794e-01	6.227551999401272e-02
9.010272836291835e-01	5.108407212719758e-02
9.459409782755001e-01	3.854783279333592e-02
9.777905486554876e-01	2.501496650831813e-02
9.957622871041650e-01	1.086176801402067e-02

24 point quadrature rule for integrals of the form $\int_0^1 f(x) + g(x)\log(x+\bar{x})dx$, where $10^{-8} \leq \bar{x} \leq 10^{-7}$	
NODES	WEIGHTS
3.421721832247593e-05	4.559730842497453e-05
8.533906255442380e-05	5.840391255974745e-05
1.563524616155011e-04	8.761580900682040e-05
2.746612401575526e-04	1.617264666294872e-04
5.408643931265062e-04	4.433543035169213e-04
1.782382096488333e-03	3.116175111368442e-03
1.101243912052365e-02	1.655494413772595e-02
3.553172024884285e-02	3.242539256461602e-02
7.554170435463801e-02	4.734426463929677e-02
1.295711894941649e-01	6.032614603579952e-02
1.953213037793089e-01	7.069975187373848e-02
2.699680545714222e-01	7.806973621204365e-02
3.503697281371090e-01	8.216350598137868e-02
4.330838596494367e-01	8.261286657092808e-02
5.141801680435878e-01	7.883476216668445e-02
5.895097016206093e-01	7.157205125318401e-02
6.582708672338614e-01	6.703064468754417e-02
7.252543617887320e-01	6.706137273719630e-02
7.914154485613720e-01	6.449984116349734e-02
8.528383935857844e-01	5.775434959088197e-02
9.059696536862878e-01	4.812600239023880e-02
9.484664124578303e-01	3.661415869304224e-02
9.787863313133854e-01	2.386304203446463e-02
9.959482975155097e-01	1.038268695581411e-02

24 point quadrature rule for integrals of the form $\int_0^1 f(x) + g(x)\log(x+\bar{x})dx$, where $10^{-9} \leq \bar{x} \leq 10^{-8}$	
NODES	WEIGHTS
6.538987938840374e-06	1.500332421093607e-05
2.613485075847413e-05	2.367234654253158e-05
5.664183720634991e-05	4.007286246706405e-05
1.179374114362569e-04	9.497743501485505e-05
3.299119431334128e-04	4.619067037944727e-04
3.626828607577001e-03	9.985382463808036e-03
2.265102906572155e-02	2.805741744607257e-02
5.896796231680340e-02	4.404106103008398e-02
1.092496277855923e-01	5.548413172821072e-02
1.666701689499393e-01	5.693235996372726e-02
2.196889385898800e-01	5.087307376046002e-02
2.770352260035617e-01	6.593729718379782e-02
3.483163928268329e-01	7.335680008972614e-02
4.153287664837260e-01	5.675029500743735e-02
4.695624219668608e-01	6.117926027541254e-02
5.421129318998841e-01	8.004805067067550e-02
6.238832212055707e-01	8.196991767042605e-02
7.041842972237081e-01	7.800219127200407e-02
7.788817007552110e-01	7.097175077519494e-02
8.453877637047045e-01	6.171193295041172e-02
9.017178251963006e-01	5.068671319716005e-02
9.462999385952402e-01	3.827738423897266e-02
9.779333485180249e-01	2.485063762733620e-02
9.957890687155009e-01	1.079284973329516e-02

24 point quadrature rule for integrals of the form $\int_0^1 f(x)+g(x)\log(x+\bar{x})dx$, where $10^{-10} \leq \bar{x} \leq 10^{-9}$	
NODES	WEIGHTS
6.725520559705825e-06	8.128391913974039e-05
6.986424152770461e-06	-7.773900735768282e-05
1.217363416714366e-05	1.287386499666193e-05
2.677746219601529e-05	1.895577251914526e-05
5.597036348896741e-05	4.732580352158076e-05
2.729343280943077e-04	9.857909615386162e-04
9.445526806263141e-03	1.756872897270054e-02
3.556725025161542e-02	3.439422017906772e-02
7.765556668177810e-02	4.944188361792970e-02
1.336848150648662e-01	6.219733934997792e-02
2.011576917683550e-01	7.228007436918939e-02
2.772736854314979e-01	7.944986391225688e-02
3.590124362607926e-01	8.347646288178011e-02
4.430074035214462e-01	8.380433020121207e-02
5.247388219574510e-01	7.832768209682506e-02
5.961053238782420e-01	6.300796225242940e-02
6.547331131213409e-01	5.923406014585053e-02
7.192258519628951e-01	6.834293563803810e-02
7.874251789073102e-01	6.660337204499726e-02
8.505852012775045e-01	5.911988751082552e-02
9.047824617894323e-01	4.893575310568894e-02
9.479045131744448e-01	3.708256438629509e-02
9.785770588866582e-01	2.411463784693618e-02
9.959104692340199e-01	1.048087156697020e-02

24 point quadrature rule for integrals of the form $\int_0^1 f(x)+g(x)\log(x+\bar{x})dx$, where $10^{-11} \leq \bar{x} \leq 10^{-10}$	
NODES	WEIGHTS
2.828736694877886e-08	1.665602686704325e-05
2.302233157554212e-06	2.577419924039251e-06
5.853587143444178e-06	4.957941112780975e-06
1.451588770083244e-05	1.537074702915107e-05
9.711965099273031e-05	4.640075239797995e-04
9.004761967373848e-03	1.705687938176189e-02
3.442077924035546e-02	3.349724914160473e-02
7.543926781582543e-02	4.820210872119093e-02
1.300373356318913e-01	6.054547286337976e-02
1.955182772803384e-01	6.984354388121057e-02
2.683608546664295e-01	7.498721497014774e-02
3.430029178740901e-01	7.240620145057083e-02
4.085056107803621e-01	5.774925310174693e-02
4.660198270439085e-01	6.238505554837956e-02
5.336124745634699e-01	6.940394677081842e-02
5.985245800106473e-01	5.910843483407385e-02
6.564089719608276e-01	6.059752321454190e-02
7.216666024232565e-01	6.823362237770209e-02
7.893712241343741e-01	6.593839664071163e-02
8.518883782001418e-01	5.853014420243146e-02
9.055688088881344e-01	4.849217100974983e-02
9.483163097840529e-01	3.677417821170115e-02
9.787413692715607e-01	2.392585642844202e-02
9.959413203611228e-01	1.040149939671874e-02

24 point quadrature rule for integrals of the form $\int_0^1 f(x) + g(x)\log(x+\bar{x})dx$, where $10^{-12} \leq \bar{x} \leq 10^{-11}$	
NODES	WEIGHTS
6.147063879573664e-07	8.763741095000331e-07
2.102921984985835e-06	1.784696796288373e-05
2.188366117432289e-06	-1.795398395983826e-05
3.482602942694880e-06	5.117514567175025e-06
2.768001888608636e-05	1.698863549284390e-04
8.942779215792784e-03	1.701975216672032e-02
3.432218364237253e-02	3.346025972593909e-02
7.530931328026620e-02	4.817949622196712e-02
1.298983048592572e-01	6.055152664710045e-02
1.954020797117703e-01	6.988313730886592e-02
2.682970870436427e-01	7.504602275463067e-02
3.429540704041702e-01	7.230942674874111e-02
4.080399755202422e-01	5.705952259766429e-02
4.652562798154792e-01	6.265021180818162e-02
5.333220999210325e-01	6.993669694523695e-02
5.986982369433125e-01	5.937130986945129e-02
6.564773600603511e-01	6.026572020863567e-02
7.215159032030418e-01	6.815292696374753e-02
7.892098210760941e-01	6.596804590657802e-02
8.517672777806986e-01	5.857483758149194e-02
9.054906995605498e-01	4.853209199396977e-02
9.482736017320823e-01	3.680469214176019e-02
9.787238593479314e-01	2.394561701705853e-02
9.959379852805677e-01	1.041005152890511e-02

24 point quadrature rule for integrals of the form $\int_0^1 f(x) + g(x)\log(x+\bar{x})dx$, where $10^{-13} \leq \bar{x} \leq 10^{-12}$	
NODES	WEIGHTS
4.523740015216508e-08	4.418138082366788e-07
4.281855233588279e-07	4.389108058643120e-07
1.036900153156159e-06	9.539585150737866e-07
7.825849325746907e-06	5.823980947200484e-05
8.617419723953112e-03	1.634464263521301e-02
3.268881163637599e-02	3.129682188728318e-02
6.988441391437043e-02	4.212468617589480e-02
1.142202307676442e-01	4.505120897719191e-02
1.596471081833281e-01	4.769069780026684e-02
2.135336418959620e-01	6.038503382768951e-02
2.781100275296151e-01	6.695343672694180e-02
3.433392803364457e-01	6.163298712826237e-02
4.019960595528027e-01	5.877742624357513e-02
4.656415679416787e-01	6.800053637773440e-02
5.334880548894250e-01	6.516918103589647e-02
5.943298528903542e-01	5.853785375926075e-02
6.562968737815924e-01	6.639396325654251e-02
7.250343344601498e-01	6.948738324081696e-02
7.928820737781136e-01	6.538801703374268e-02
8.546103048745466e-01	5.761503751629250e-02
9.073762310762705e-01	4.761344859555310e-02
9.493253659835347e-01	3.607033097268266e-02
9.791606801267259e-01	2.345690720840071e-02
9.960217573957566e-01	1.019557402722854e-02

24 point quadrature rule for integrals of the form $\int_0^1 f(x) + g(x)\log(x+\bar{x})dx$, where $10^{-14} \leq \bar{x} \leq 10^{-13}$	
NODES	WEIGHTS
6.025980282801020e-08	9.079353616441234e-07
6.411245262925473e-08	-8.390389042773805e-07
1.862815529429129e-07	2.782460677485016e-07
2.029190208906422e-06	1.821115881362725e-05
8.902881307076499e-03	1.695809650660321e-02
3.420089035164912e-02	3.336370146025145e-02
7.508687525931594e-02	4.807898681796971e-02
1.295858123029775e-01	6.047672723211479e-02
1.950409815188335e-01	6.986774906175534e-02
2.679751967812604e-01	7.515608233194288e-02
3.428525062164689e-01	7.264249904037610e-02
4.080941369413548e-01	5.672507168477261e-02
4.646644511900009e-01	6.220316364524964e-02
5.328071517215501e-01	7.032362652293805e-02
5.978508749698001e-01	5.742730804758014e-02
6.521214523350964e-01	5.644075454541152e-02
7.134921670665336e-01	6.318643666150391e-02
7.679317896479284e-01	3.945995610428228e-02
8.029718487208403e-01	4.324200884758527e-02
8.551101435866935e-01	5.478223695609097e-02
9.067319102017767e-01	4.740856250832772e-02
9.487765213293372e-01	3.633314063504751e-02
9.788979796532736e-01	2.372788917088821e-02
9.959684838634199e-01	1.033036588606145e-02