

Equivalent parameter sets for two parameter Beta and Kumaraswamy distributions

(Draft 1.0), 18pages

No guarantee whatsoever as this has been a short project of about a couple of hours of work!

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K. Ponnambalam

These parameters were derived using cdfs matching for parameters upto and including BetaA=BetaB=1.1 and later ones are derived using pdfs matching. Both matching were done with least-squares norm. When BetaA = 1 or BetaB =1 then the Kumaraswamy parameters match the beta parameters. So they are not shown here.

Beta A	Beta B	Kumarasway A	Kumaraswamy B
3.0000000e-01	3.0000000e-01	1.8458554e-01	3.2466957e-01
3.0000000e-01	5.0000000e-01	2.2522864e-01	5.2471656e-01
3.0000000e-01	7.0000000e-01	2.5877638e-01	7.1793214e-01
3.0000000e-01	9.0000000e-01	2.8728816e-01	9.0684596e-01
3.0000000e-01	1.1000000e+00	3.1198514e-01	1.0927360e+00
5.0000000e-01	3.0000000e-01	3.9986317e-01	3.1364995e-01
5.0000000e-01	5.0000000e-01	4.3604471e-01	5.1398941e-01
5.0000000e-01	7.0000000e-01	4.6515979e-01	7.1033722e-01
5.0000000e-01	9.0000000e-01	4.8935867e-01	9.0398130e-01
5.0000000e-01	1.1000000e+00	5.0988768e-01	1.0955857e+00
7.0000000e-01	3.0000000e-01	6.3462047e-01	3.0681840e-01
7.0000000e-01	5.0000000e-01	6.5807578e-01	5.0696182e-01
7.0000000e-01	7.0000000e-01	6.7738914e-01	7.0530323e-01
7.0000000e-01	9.0000000e-01	6.9315247e-01	9.0203717e-01
7.0000000e-01	1.1000000e+00	7.0641372e-01	1.0978360e+00
9.0000000e-01	3.0000000e-01	8.7700492e-01	3.0192556e-01
9.0000000e-01	5.0000000e-01	8.8532553e-01	5.0201827e-01
9.0000000e-01	7.0000000e-01	8.9213115e-01	7.0152928e-01
9.0000000e-01	9.0000000e-01	8.9783510e-01	9.0053275e-01
9.0000000e-01	1.1000000e+00	9.0202402e-01	1.0994301e+00
1.1000000e+00	3.0000000e-01	1.1235364e+00	2.9828209e-01
1.1000000e+00	5.0000000e-01	1.1149872e+00	4.9821881e-01
1.1000000e+00	7.0000000e-01	1.1081587e+00	6.9865619e-01
1.1000000e+00	9.0000000e-01	1.1022586e+00	8.9954015e-01
1.1000000e+00	1.1000000e+00	1.0979281e+00	1.1005316e+00
1.2500000e+00	1.2500000e+00	1.2395522e+00	1.2556727e+00
1.2500000e+00	1.5000000e+00	1.2328312e+00	1.5181791e+00
1.2500000e+00	1.7500000e+00	1.2280684e+00	1.7870216e+00
1.2500000e+00	2.0000000e+00	1.2244169e+00	2.0613074e+00
1.2500000e+00	2.2500000e+00	1.2214684e+00	2.3403017e+00
1.2500000e+00	2.5000000e+00	1.2189996e+00	2.6234649e+00

1.2500000e+00	2.7500000e+00	1.2168860e+00	2.9104186e+00
1.2500000e+00	3.0000000e+00	1.2150464e+00	3.2008793e+00
1.2500000e+00	3.2500000e+00	1.2134239e+00	3.4946171e+00
1.2500000e+00	3.5000000e+00	1.2119788e+00	3.7914466e+00
1.2500000e+00	3.7500000e+00	1.2106807e+00	4.0912062e+00
1.2500000e+00	4.0000000e+00	1.2095060e+00	4.3937531e+00
1.2500000e+00	4.2500000e+00	1.2084363e+00	4.6989597e+00
1.2500000e+00	4.5000000e+00	1.2074566e+00	5.0067106e+00
1.2500000e+00	4.7500000e+00	1.2065549e+00	5.3169006e+00
1.2500000e+00	5.0000000e+00	1.2057211e+00	5.6294304e+00
1.2500000e+00	5.2500000e+00	1.2049473e+00	5.9442178e+00
1.2500000e+00	5.5000000e+00	1.2042264e+00	6.2611787e+00
1.2500000e+00	5.7500000e+00	1.2035525e+00	6.5802377e+00
1.2500000e+00	6.0000000e+00	1.2029207e+00	6.9013254e+00
1.2500000e+00	6.2500000e+00	1.2023270e+00	7.2243815e+00
1.2500000e+00	6.5000000e+00	1.2017671e+00	7.5493363e+00
1.2500000e+00	6.7500000e+00	1.2012383e+00	7.8761411e+00
1.2500000e+00	7.0000000e+00	1.2007378e+00	8.2047422e+00
1.2500000e+00	7.2500000e+00	1.2002629e+00	8.5350896e+00
1.2500000e+00	7.5000000e+00	1.1998118e+00	8.8671400e+00
1.2500000e+00	7.7500000e+00	1.1993825e+00	9.2008498e+00
1.2500000e+00	8.0000000e+00	1.1989733e+00	9.5361789e+00
1.5000000e+00	1.2500000e+00	1.4741046e+00	1.2571490e+00
1.5000000e+00	1.5000000e+00	1.4568768e+00	1.5237255e+00
1.5000000e+00	1.7500000e+00	1.4444580e+00	1.7998466e+00
1.5000000e+00	2.0000000e+00	1.4349286e+00	2.0847774e+00
1.5000000e+00	2.2500000e+00	1.4272865e+00	2.3777548e+00
1.5000000e+00	2.5000000e+00	1.4209618e+00	2.6781293e+00
1.5000000e+00	2.7500000e+00	1.4156056e+00	2.9853803e+00
1.5000000e+00	3.0000000e+00	1.4109914e+00	3.2990970e+00
1.5000000e+00	3.2500000e+00	1.4069646e+00	3.6189510e+00
1.5000000e+00	3.5000000e+00	1.4034121e+00	3.9446636e+00
1.5000000e+00	3.7500000e+00	1.4002498e+00	4.2759959e+00
1.5000000e+00	4.0000000e+00	1.3974133e+00	4.6127372e+00
1.5000000e+00	4.2500000e+00	1.3948521e+00	4.9546983e+00
1.5000000e+00	4.5000000e+00	1.3925259e+00	5.3017068e+00
1.5000000e+00	4.7500000e+00	1.3904024e+00	5.6536082e+00
1.5000000e+00	5.0000000e+00	1.3884543e+00	6.0102500e+00
1.5000000e+00	5.2500000e+00	1.3866595e+00	6.3714963e+00
1.5000000e+00	5.5000000e+00	1.3850000e+00	6.7372250e+00
1.5000000e+00	5.7500000e+00	1.3834602e+00	7.1073174e+00
1.5000000e+00	6.0000000e+00	1.3820264e+00	7.4816572e+00
1.5000000e+00	6.2500000e+00	1.3806875e+00	7.8601394e+00
1.5000000e+00	6.5000000e+00	1.3794338e+00	8.2426674e+00
1.5000000e+00	6.7500000e+00	1.3782569e+00	8.6291456e+00
1.5000000e+00	7.0000000e+00	1.3771493e+00	9.0194846e+00
1.5000000e+00	7.2500000e+00	1.3761047e+00	9.4135996e+00

1.5000000e+00	7.5000000e+00	1.3751174e+00	9.8114098e+00
1.5000000e+00	7.7500000e+00	1.3741823e+00	1.0212837e+01
1.5000000e+00	8.0000000e+00	1.3732953e+00	1.0617811e+01
1.7500000e+00	1.2500000e+00	1.7061489e+00	1.2574976e+00
1.7500000e+00	1.5000000e+00	1.6762305e+00	1.5254577e+00
1.7500000e+00	1.7500000e+00	1.6543441e+00	1.8045524e+00
1.7500000e+00	2.0000000e+00	1.6374325e+00	2.0943784e+00
1.7500000e+00	2.2500000e+00	1.6238440e+00	2.3943510e+00
1.7500000e+00	2.5000000e+00	1.6126054e+00	2.7038964e+00
1.7500000e+00	2.7500000e+00	1.6031039e+00	3.0225063e+00
1.7500000e+00	3.0000000e+00	1.5949351e+00	3.3497530e+00
1.7500000e+00	3.2500000e+00	1.5878194e+00	3.6852836e+00
1.7500000e+00	3.5000000e+00	1.5815537e+00	4.0287939e+00
1.7500000e+00	3.7500000e+00	1.5759853e+00	4.3800152e+00
1.7500000e+00	4.0000000e+00	1.5709989e+00	4.7387167e+00
1.7500000e+00	4.2500000e+00	1.5665033e+00	5.1046868e+00
1.7500000e+00	4.5000000e+00	1.5624273e+00	5.4777411e+00
1.7500000e+00	4.7500000e+00	1.5587125e+00	5.8577062e+00
1.7500000e+00	5.0000000e+00	1.5553107e+00	6.2444172e+00
1.7500000e+00	5.2500000e+00	1.5521824e+00	6.6377243e+00
1.7500000e+00	5.5000000e+00	1.5492953e+00	7.0374920e+00
1.7500000e+00	5.7500000e+00	1.5466213e+00	7.4435874e+00
1.7500000e+00	6.0000000e+00	1.5441369e+00	7.8558873e+00
1.7500000e+00	6.2500000e+00	1.5418219e+00	8.2742749e+00
1.7500000e+00	6.5000000e+00	1.5396591e+00	8.6986398e+00
1.7500000e+00	6.7500000e+00	1.5376334e+00	9.1288774e+00
1.7500000e+00	7.0000000e+00	1.5357318e+00	9.5648890e+00
1.7500000e+00	7.2500000e+00	1.5339427e+00	1.0006577e+01
1.7500000e+00	7.5000000e+00	1.5322562e+00	1.0453853e+01
1.7500000e+00	7.7500000e+00	1.5306634e+00	1.0906629e+01
1.7500000e+00	8.0000000e+00	1.5291564e+00	1.1364824e+01
2.0000000e+00	1.2500000e+00	1.9369608e+00	1.2575248e+00
2.0000000e+00	1.5000000e+00	1.8931249e+00	1.5259332e+00
2.0000000e+00	1.7500000e+00	1.8606943e+00	1.8063299e+00
2.0000000e+00	2.0000000e+00	1.8354780e+00	2.0986064e+00
2.0000000e+00	2.2500000e+00	1.8151576e+00	2.4024027e+00
2.0000000e+00	2.5000000e+00	1.7983282e+00	2.7172739e+00
2.0000000e+00	2.7500000e+00	1.7841014e+00	3.0428052e+00
2.0000000e+00	3.0000000e+00	1.7718730e+00	3.3786045e+00
2.0000000e+00	3.2500000e+00	1.7612251e+00	3.7243439e+00
2.0000000e+00	3.5000000e+00	1.7518528e+00	4.0797315e+00
2.0000000e+00	3.7500000e+00	1.7435271e+00	4.4445039e+00
2.0000000e+00	4.0000000e+00	1.7360735e+00	4.8184303e+00
2.0000000e+00	4.2500000e+00	1.7293568e+00	5.2013088e+00
2.0000000e+00	4.5000000e+00	1.7232687e+00	5.5929523e+00
2.0000000e+00	4.7500000e+00	1.7177203e+00	5.9931805e+00
2.0000000e+00	5.0000000e+00	1.7126412e+00	6.4018399e+00

2.0000000e+00	5.2500000e+00	1.7079721e+00	6.8187801e+00
2.0000000e+00	5.5000000e+00	1.7036636e+00	7.2438624e+00
2.0000000e+00	5.7500000e+00	1.6996745e+00	7.6769585e+00
2.0000000e+00	6.0000000e+00	1.6959689e+00	8.1179403e+00
2.0000000e+00	6.2500000e+00	1.6925169e+00	8.5666935e+00
2.0000000e+00	6.5000000e+00	1.6892924e+00	9.0231050e+00
2.0000000e+00	6.7500000e+00	1.6862734e+00	9.4870751e+00
2.0000000e+00	7.0000000e+00	1.6834402e+00	9.9585015e+00
2.0000000e+00	7.2500000e+00	1.6807755e+00	1.0437287e+01
2.0000000e+00	7.5000000e+00	1.6782643e+00	1.0923337e+01
2.0000000e+00	7.7500000e+00	1.6758935e+00	1.1416572e+01
2.0000000e+00	8.0000000e+00	1.6736514e+00	1.1916905e+01
2.2500000e+00	1.2500000e+00	2.1671119e+00	1.2574598e+00
2.2500000e+00	1.5000000e+00	2.1086026e+00	1.5259504e+00
2.2500000e+00	1.7500000e+00	2.0649206e+00	1.8068894e+00
2.2500000e+00	2.0000000e+00	2.0307705e+00	2.1004169e+00
2.2500000e+00	2.2500000e+00	2.0031624e+00	2.4063693e+00
2.2500000e+00	2.5000000e+00	1.9802618e+00	2.7244564e+00
2.2500000e+00	2.7500000e+00	1.9608838e+00	3.0543621e+00
2.2500000e+00	3.0000000e+00	1.9442242e+00	3.3957755e+00
2.2500000e+00	3.2500000e+00	1.9297148e+00	3.7484116e+00
2.2500000e+00	3.5000000e+00	1.9169428e+00	4.1120194e+00
2.2500000e+00	3.7500000e+00	1.9055991e+00	4.4863710e+00
2.2500000e+00	4.0000000e+00	1.8954439e+00	4.8712495e+00
2.2500000e+00	4.2500000e+00	1.8862936e+00	5.2664767e+00
2.2500000e+00	4.5000000e+00	1.8779991e+00	5.6718742e+00
2.2500000e+00	4.7500000e+00	1.8704410e+00	6.0872827e+00
2.2500000e+00	5.0000000e+00	1.8635226e+00	6.5125599e+00
2.2500000e+00	5.2500000e+00	1.8571630e+00	6.9475671e+00
2.2500000e+00	5.5000000e+00	1.8512950e+00	7.3921764e+00
2.2500000e+00	5.7500000e+00	1.8458621e+00	7.8462701e+00
2.2500000e+00	6.0000000e+00	1.8408155e+00	8.3097267e+00
2.2500000e+00	6.2500000e+00	1.8361149e+00	8.7824465e+00
2.2500000e+00	6.5000000e+00	1.8317247e+00	9.2643247e+00
2.2500000e+00	6.7500000e+00	1.8276144e+00	9.7552649e+00
2.2500000e+00	7.0000000e+00	1.8237572e+00	1.0255173e+01
2.2500000e+00	7.2500000e+00	1.8201298e+00	1.0763960e+01
2.2500000e+00	7.5000000e+00	1.8167116e+00	1.1281540e+01
2.2500000e+00	7.7500000e+00	1.8134847e+00	1.1807832e+01
2.2500000e+00	8.0000000e+00	1.8104334e+00	1.2342764e+01
2.5000000e+00	1.2500000e+00	2.3968849e+00	1.2573789e+00
2.5000000e+00	1.5000000e+00	2.3232112e+00	1.5258024e+00
2.5000000e+00	1.7500000e+00	2.2677987e+00	1.8069250e+00
2.5000000e+00	2.0000000e+00	2.2242602e+00	2.1010695e+00
2.5000000e+00	2.2500000e+00	2.1889556e+00	2.4082481e+00
2.5000000e+00	2.5000000e+00	2.1596192e+00	2.7283095e+00
2.5000000e+00	2.7500000e+00	2.1347663e+00	3.0610410e+00

2.5000000e+00	3.0000000e+00	2.1133848e+00	3.4062181e+00
2.5000000e+00	3.2500000e+00	2.0947556e+00	3.7636220e+00
2.5000000e+00	3.5000000e+00	2.0783524e+00	4.1330477e+00
2.5000000e+00	3.7500000e+00	2.0637798e+00	4.5143065e+00
2.5000000e+00	4.0000000e+00	2.0507344e+00	4.9072274e+00
2.5000000e+00	4.2500000e+00	2.0389774e+00	5.3116485e+00
2.5000000e+00	4.5000000e+00	2.0283204e+00	5.7274282e+00
2.5000000e+00	4.7500000e+00	2.0186087e+00	6.1544240e+00
2.5000000e+00	5.0000000e+00	2.0097186e+00	6.5925167e+00
2.5000000e+00	5.2500000e+00	2.0015464e+00	7.0415875e+00
2.5000000e+00	5.5000000e+00	1.9940056e+00	7.5015271e+00
2.5000000e+00	5.7500000e+00	1.9870235e+00	7.9722324e+00
2.5000000e+00	6.0000000e+00	1.9805386e+00	8.4536063e+00
2.5000000e+00	6.2500000e+00	1.9744981e+00	8.9455580e+00
2.5000000e+00	6.5000000e+00	1.9688562e+00	9.4479958e+00
2.5000000e+00	6.7500000e+00	1.9635740e+00	9.9608406e+00
2.5000000e+00	7.0000000e+00	1.9586170e+00	1.0484009e+01
2.5000000e+00	7.2500000e+00	1.9539559e+00	1.1017433e+01
2.5000000e+00	7.5000000e+00	1.9495638e+00	1.1561033e+01
2.5000000e+00	7.7500000e+00	1.9454176e+00	1.2114740e+01
2.5000000e+00	8.0000000e+00	1.9414969e+00	1.2678489e+01
2.7500000e+00	1.2500000e+00	2.6264467e+00	1.2573031e+00
2.7500000e+00	1.5000000e+00	2.5372718e+00	1.5256060e+00
2.7500000e+00	1.7500000e+00	2.4697732e+00	1.8067314e+00
2.7500000e+00	2.0000000e+00	2.4165156e+00	2.1011493e+00
2.7500000e+00	2.2500000e+00	2.3732081e+00	2.4090129e+00
2.7500000e+00	2.5000000e+00	2.3371515e+00	2.7302910e+00
2.7500000e+00	2.7500000e+00	2.3065675e+00	3.0648719e+00
2.7500000e+00	3.0000000e+00	2.2802338e+00	3.4126137e+00
2.7500000e+00	3.2500000e+00	2.2572762e+00	3.7733639e+00
2.7500000e+00	3.5000000e+00	2.2370537e+00	4.1469740e+00
2.7500000e+00	3.7500000e+00	2.2190816e+00	4.5333023e+00
2.7500000e+00	4.0000000e+00	2.2029884e+00	4.9322136e+00
2.7500000e+00	4.2500000e+00	2.1884829e+00	5.3435918e+00
2.7500000e+00	4.5000000e+00	2.1753307e+00	5.7673146e+00
2.7500000e+00	4.7500000e+00	2.1633451e+00	6.2032819e+00
2.7500000e+00	5.0000000e+00	2.1523718e+00	6.6513937e+00
2.7500000e+00	5.2500000e+00	2.1422836e+00	7.1115580e+00
2.7500000e+00	5.5000000e+00	2.1329745e+00	7.5836896e+00
2.7500000e+00	5.7500000e+00	2.1243541e+00	8.0677034e+00
2.7500000e+00	6.0000000e+00	2.1163472e+00	8.5635290e+00
2.7500000e+00	6.2500000e+00	2.1088882e+00	9.0710892e+00
2.7500000e+00	6.5000000e+00	2.1019218e+00	9.5903195e+00
2.7500000e+00	6.7500000e+00	2.0953991e+00	1.0121154e+01
2.7500000e+00	7.0000000e+00	2.0892782e+00	1.0663531e+01
2.7500000e+00	7.2500000e+00	2.0835221e+00	1.1217391e+01
2.7500000e+00	7.5000000e+00	2.0780982e+00	1.1782676e+01

2.7500000e+00	7.7500000e+00	2.0729780e+00	1.2359335e+01
2.7500000e+00	8.0000000e+00	2.0681361e+00	1.2947315e+01
3.0000000e+00	1.2500000e+00	2.8558719e+00	1.2572398e+00
3.0000000e+00	1.5000000e+00	2.7509685e+00	1.5254051e+00
3.0000000e+00	1.7500000e+00	2.6711297e+00	1.8064470e+00
3.0000000e+00	2.0000000e+00	2.6078975e+00	2.1009449e+00
3.0000000e+00	2.2500000e+00	2.5563452e+00	2.4091675e+00
3.0000000e+00	2.5000000e+00	2.5133471e+00	2.7311881e+00
3.0000000e+00	2.7500000e+00	2.4768284e+00	3.0669840e+00
3.0000000e+00	3.0000000e+00	2.4453555e+00	3.4164893e+00
3.0000000e+00	3.2500000e+00	2.4178987e+00	3.7796164e+00
3.0000000e+00	3.5000000e+00	2.3936996e+00	4.1562722e+00
3.0000000e+00	3.7500000e+00	2.3721854e+00	4.5463639e+00
3.0000000e+00	4.0000000e+00	2.3529147e+00	4.9498039e+00
3.0000000e+00	4.2500000e+00	2.3355390e+00	5.3665048e+00
3.0000000e+00	4.5000000e+00	2.3197812e+00	5.7963855e+00
3.0000000e+00	4.7500000e+00	2.3054185e+00	6.2393777e+00
3.0000000e+00	5.0000000e+00	2.2922673e+00	6.6954150e+00
3.0000000e+00	5.2500000e+00	2.2801741e+00	7.1644224e+00
3.0000000e+00	5.5000000e+00	2.2690139e+00	7.6463525e+00
3.0000000e+00	5.7500000e+00	2.2586783e+00	8.1411398e+00
3.0000000e+00	6.0000000e+00	2.2490770e+00	8.6487366e+00
3.0000000e+00	6.2500000e+00	2.2401326e+00	9.1690948e+00
3.0000000e+00	6.5000000e+00	2.2317779e+00	9.7021669e+00
3.0000000e+00	6.7500000e+00	2.2239549e+00	1.0247907e+01
3.0000000e+00	7.0000000e+00	2.2166131e+00	1.0806275e+01
3.0000000e+00	7.2500000e+00	2.2097086e+00	1.1377233e+01
3.0000000e+00	7.5000000e+00	2.2032025e+00	1.1960743e+01
3.0000000e+00	7.7500000e+00	2.1970604e+00	1.2556770e+01
3.0000000e+00	8.0000000e+00	2.1912521e+00	1.3165280e+01
3.2500000e+00	1.2500000e+00	3.0852120e+00	1.2571883e+00
3.2500000e+00	1.5000000e+00	2.9644168e+00	1.5252167e+00
3.2500000e+00	1.7500000e+00	2.8720474e+00	1.8061342e+00
3.2500000e+00	2.0000000e+00	2.7986432e+00	2.1006037e+00
3.2500000e+00	2.2500000e+00	2.7386557e+00	2.4089861e+00
3.2500000e+00	2.5000000e+00	2.6885373e+00	2.7314440e+00
3.2500000e+00	2.7500000e+00	2.6459192e+00	3.0680334e+00
3.2500000e+00	3.0000000e+00	2.6091527e+00	3.4187550e+00
3.2500000e+00	3.2500000e+00	2.5770550e+00	3.7835833e+00
3.2500000e+00	3.5000000e+00	2.5487493e+00	4.1624779e+00
3.2500000e+00	3.7500000e+00	2.5235724e+00	4.5553933e+00
3.2500000e+00	4.0000000e+00	2.5010123e+00	4.9622856e+00
3.2500000e+00	4.2500000e+00	2.4806642e+00	5.3831054e+00
3.2500000e+00	4.5000000e+00	2.4622058e+00	5.8178080e+00
3.2500000e+00	4.7500000e+00	2.4453775e+00	6.2663581e+00
3.2500000e+00	5.0000000e+00	2.4299655e+00	6.7287196e+00
3.2500000e+00	5.2500000e+00	2.4157910e+00	7.2048493e+00

3.2500000e+00	5.5000000e+00	2.4027074e+00	7.6947227e+00
3.2500000e+00	5.7500000e+00	2.3905894e+00	8.1983085e+00
3.2500000e+00	6.0000000e+00	2.3793310e+00	8.7155801e+00
3.2500000e+00	6.2500000e+00	2.3688414e+00	9.2465130e+00
3.2500000e+00	6.5000000e+00	2.3590426e+00	9.7910855e+00
3.2500000e+00	6.7500000e+00	2.3498665e+00	1.0349274e+01
3.2500000e+00	7.0000000e+00	2.3412540e+00	1.0921060e+01
3.2500000e+00	7.2500000e+00	2.3331542e+00	1.1506430e+01
3.2500000e+00	7.5000000e+00	2.3255211e+00	1.2105363e+01
3.2500000e+00	7.7500000e+00	2.3183147e+00	1.2717845e+01
3.2500000e+00	8.0000000e+00	2.3114995e+00	1.3343864e+01
3.5000000e+00	1.2500000e+00	3.3144956e+00	1.2571468e+00
3.5000000e+00	1.5000000e+00	3.1776901e+00	1.5250461e+00
3.5000000e+00	1.7500000e+00	3.0726416e+00	1.8058229e+00
3.5000000e+00	2.0000000e+00	2.9889144e+00	2.1002034e+00
3.5000000e+00	2.2500000e+00	2.9203388e+00	2.4086228e+00
3.5000000e+00	2.5000000e+00	2.8629546e+00	2.7313183e+00
3.5000000e+00	2.7500000e+00	2.8140990e+00	3.0684139e+00
3.5000000e+00	3.0000000e+00	2.7719130e+00	3.4199721e+00
3.5000000e+00	3.2500000e+00	2.7350556e+00	3.7860211e+00
3.5000000e+00	3.5000000e+00	2.7025342e+00	4.1665730e+00
3.5000000e+00	3.7500000e+00	2.6735914e+00	4.5616216e+00
3.5000000e+00	4.0000000e+00	2.6476470e+00	4.9711699e+00
3.5000000e+00	4.2500000e+00	2.6242374e+00	5.3952007e+00
3.5000000e+00	4.5000000e+00	2.6029974e+00	5.8337155e+00
3.5000000e+00	4.7500000e+00	2.5836269e+00	6.2867010e+00
3.5000000e+00	5.0000000e+00	2.5658811e+00	6.7541497e+00
3.5000000e+00	5.2500000e+00	2.5495585e+00	7.2360618e+00
3.5000000e+00	5.5000000e+00	2.5344890e+00	7.7324318e+00
3.5000000e+00	5.7500000e+00	2.5205293e+00	8.2432579e+00
3.5000000e+00	6.0000000e+00	2.5075580e+00	8.7685395e+00
3.5000000e+00	6.2500000e+00	2.4954709e+00	9.3082774e+00
3.5000000e+00	6.5000000e+00	2.4841785e+00	9.8624757e+00
3.5000000e+00	6.7500000e+00	2.4736021e+00	1.0431130e+01
3.5000000e+00	7.0000000e+00	2.4636748e+00	1.1014250e+01
3.5000000e+00	7.2500000e+00	2.4543372e+00	1.1611841e+01
3.5000000e+00	7.5000000e+00	2.4455374e+00	1.2223911e+01
3.5000000e+00	7.7500000e+00	2.4372285e+00	1.2850458e+01
3.5000000e+00	8.0000000e+00	2.4293702e+00	1.3491496e+01
3.7500000e+00	1.2500000e+00	3.5437397e+00	1.2571137e+00
3.7500000e+00	1.5000000e+00	3.3908323e+00	1.5248919e+00
3.7500000e+00	1.7500000e+00	3.2729964e+00	1.8055264e+00
3.7500000e+00	2.0000000e+00	3.1788243e+00	2.0997851e+00
3.7500000e+00	2.2500000e+00	3.1015365e+00	2.4081626e+00
3.7500000e+00	2.5000000e+00	3.0367667e+00	2.7309631e+00
3.7500000e+00	2.7500000e+00	2.9815600e+00	3.0683680e+00
3.7500000e+00	3.0000000e+00	2.9338466e+00	3.4204940e+00

3.7500000e+00	3.2500000e+00	2.8921298e+00	3.7874192e+00
3.7500000e+00	3.5000000e+00	2.8552972e+00	4.1691972e+00
3.7500000e+00	3.7500000e+00	2.8225027e+00	4.5658703e+00
3.7500000e+00	4.0000000e+00	2.7930919e+00	4.9774742e+00
3.7500000e+00	4.2500000e+00	2.7665448e+00	5.4040299e+00
3.7500000e+00	4.5000000e+00	2.7424506e+00	5.8455738e+00
3.7500000e+00	4.7500000e+00	2.7204701e+00	6.3021210e+00
3.7500000e+00	5.0000000e+00	2.7003294e+00	6.7737022e+00
3.7500000e+00	5.2500000e+00	2.6817993e+00	7.2603402e+00
3.7500000e+00	5.5000000e+00	2.6646888e+00	7.7620626e+00
3.7500000e+00	5.7500000e+00	2.6488351e+00	8.2788889e+00
3.7500000e+00	6.0000000e+00	2.6341009e+00	8.8108445e+00
3.7500000e+00	6.2500000e+00	2.6203695e+00	9.3579616e+00
3.7500000e+00	6.5000000e+00	2.6075387e+00	9.9202630e+00
3.7500000e+00	6.7500000e+00	2.5955207e+00	1.0497775e+01
3.7500000e+00	7.0000000e+00	2.5842392e+00	1.1090531e+01
3.7500000e+00	7.2500000e+00	2.5736262e+00	1.1698550e+01
3.7500000e+00	7.5000000e+00	2.5636235e+00	1.2321869e+01
3.7500000e+00	7.7500000e+00	2.5541782e+00	1.2960508e+01
3.7500000e+00	8.0000000e+00	2.5452444e+00	1.3614503e+01
4.0000000e+00	1.2500000e+00	3.7729638e+00	1.2570891e+00
4.0000000e+00	1.5000000e+00	3.6038807e+00	1.5247559e+00
4.0000000e+00	1.7500000e+00	3.4731739e+00	1.8052522e+00
4.0000000e+00	2.0000000e+00	3.3684503e+00	2.0993682e+00
4.0000000e+00	2.2500000e+00	3.2823523e+00	2.4076596e+00
4.0000000e+00	2.5000000e+00	3.2100998e+00	2.7304791e+00
4.0000000e+00	2.7500000e+00	3.1484462e+00	3.0680565e+00
4.0000000e+00	3.0000000e+00	3.0951143e+00	3.4205573e+00
4.0000000e+00	3.2500000e+00	3.0484514e+00	3.7881036e+00
4.0000000e+00	3.5000000e+00	3.0072271e+00	4.1707912e+00
4.0000000e+00	3.7500000e+00	2.9705041e+00	4.5686995e+00
4.0000000e+00	4.0000000e+00	2.9375556e+00	4.9819013e+00
4.0000000e+00	4.2500000e+00	2.9078047e+00	5.4104520e+00
4.0000000e+00	4.5000000e+00	2.8807934e+00	5.8544192e+00
4.0000000e+00	4.7500000e+00	2.8561447e+00	6.3138488e+00
4.0000000e+00	5.0000000e+00	2.8335531e+00	6.7888012e+00
4.0000000e+00	5.2500000e+00	2.8127632e+00	7.2793272e+00
4.0000000e+00	5.5000000e+00	2.7935613e+00	7.7854791e+00
4.0000000e+00	5.7500000e+00	2.7757671e+00	8.3073084e+00
4.0000000e+00	6.0000000e+00	2.7592271e+00	8.8448665e+00
4.0000000e+00	6.2500000e+00	2.7438099e+00	9.3982062e+00
4.0000000e+00	6.5000000e+00	2.7294014e+00	9.9673727e+00
4.0000000e+00	6.7500000e+00	2.7159041e+00	1.0552423e+01
4.0000000e+00	7.0000000e+00	2.7032317e+00	1.1153405e+01
4.0000000e+00	7.2500000e+00	2.6913094e+00	1.1770369e+01
4.0000000e+00	7.5000000e+00	2.6800715e+00	1.2403373e+01
4.0000000e+00	7.7500000e+00	2.6694586e+00	1.3052457e+01

4.000000e+00	8.000000e+00	2.6594196e+00	1.3717679e+01
4.250000e+00	1.250000e+00	4.0021586e+00	1.2570680e+00
4.250000e+00	1.500000e+00	3.8168557e+00	1.5246348e+00
4.250000e+00	1.750000e+00	3.6732030e+00	1.8049960e+00
4.250000e+00	2.000000e+00	3.5578566e+00	2.0989676e+00
4.250000e+00	2.250000e+00	3.4628665e+00	2.4071449e+00
4.250000e+00	2.500000e+00	3.3830412e+00	2.7299192e+00
4.250000e+00	2.750000e+00	3.3148594e+00	3.0675720e+00
4.250000e+00	3.000000e+00	3.2558316e+00	3.4203081e+00
4.250000e+00	3.250000e+00	3.2041498e+00	3.7882889e+00
4.250000e+00	3.500000e+00	3.1584651e+00	4.1716477e+00
4.250000e+00	3.750000e+00	3.1177492e+00	4.5704992e+00
4.250000e+00	4.000000e+00	3.0812002e+00	4.9849435e+00
4.250000e+00	4.250000e+00	3.0481878e+00	5.4150790e+00
4.250000e+00	4.500000e+00	3.0182042e+00	5.8609939e+00
4.250000e+00	4.750000e+00	2.9908352e+00	6.3227667e+00
4.250000e+00	5.000000e+00	2.9657436e+00	6.8004851e+00
4.250000e+00	5.250000e+00	2.9426475e+00	7.2942274e+00
4.250000e+00	5.500000e+00	2.9213109e+00	7.8040719e+00
4.250000e+00	5.750000e+00	2.9015345e+00	8.3300956e+00
4.250000e+00	6.000000e+00	2.8831488e+00	8.8723762e+00
4.250000e+00	6.250000e+00	2.8660075e+00	9.4309832e+00
4.250000e+00	6.500000e+00	2.8499862e+00	1.0006000e+01
4.250000e+00	6.750000e+00	2.8349755e+00	1.0597495e+01
4.250000e+00	7.000000e+00	2.8208806e+00	1.1205545e+01
4.250000e+00	7.250000e+00	2.8076184e+00	1.1830223e+01
4.250000e+00	7.500000e+00	2.7951155e+00	1.2471601e+01
4.250000e+00	7.750000e+00	2.7833074e+00	1.3129754e+01
4.250000e+00	8.000000e+00	2.7721364e+00	1.3804751e+01
4.500000e+00	1.250000e+00	4.2313357e+00	1.2570512e+00
4.500000e+00	1.500000e+00	4.0297783e+00	1.5245279e+00
4.500000e+00	1.750000e+00	3.8731222e+00	1.8047615e+00
4.500000e+00	2.000000e+00	3.7470892e+00	2.0985887e+00
4.500000e+00	2.250000e+00	3.6431290e+00	2.4066308e+00
4.500000e+00	2.500000e+00	3.5556664e+00	2.7293248e+00
4.500000e+00	2.750000e+00	3.4808873e+00	3.0669854e+00
4.500000e+00	3.000000e+00	3.4160985e+00	3.4198566e+00
4.500000e+00	3.250000e+00	3.3593334e+00	3.7881318e+00
4.500000e+00	3.500000e+00	3.3091269e+00	4.1719791e+00
4.500000e+00	3.750000e+00	3.2643579e+00	4.5715441e+00
4.500000e+00	4.000000e+00	3.2241561e+00	4.9869608e+00
4.500000e+00	4.250000e+00	3.1878302e+00	5.4183557e+00
4.500000e+00	4.500000e+00	3.1548239e+00	5.8658360e+00
4.500000e+00	4.750000e+00	3.1246893e+00	6.3295240e+00
4.500000e+00	5.000000e+00	3.0970540e+00	6.8095222e+00
4.500000e+00	5.250000e+00	3.0716102e+00	7.3059372e+00
4.500000e+00	5.500000e+00	3.0480997e+00	7.8188730e+00

4.5000000e+00	5.7500000e+00	3.0263034e+00	8.3484288e+00
4.5000000e+00	6.0000000e+00	3.0060358e+00	8.8947049e+00
4.5000000e+00	6.2500000e+00	2.9871375e+00	9.4578042e+00
4.5000000e+00	6.5000000e+00	2.9694707e+00	1.0037821e+01
4.5000000e+00	6.7500000e+00	2.9529164e+00	1.0634857e+01
4.5000000e+00	7.0000000e+00	2.9373695e+00	1.1249002e+01
4.5000000e+00	7.2500000e+00	2.9227388e+00	1.1880352e+01
4.5000000e+00	7.5000000e+00	2.9089450e+00	1.2529011e+01
4.5000000e+00	7.7500000e+00	2.8959158e+00	1.3195065e+01
4.5000000e+00	8.0000000e+00	2.8835884e+00	1.3878609e+01
4.7500000e+00	1.2500000e+00	4.4604982e+00	1.2570379e+00
4.7500000e+00	1.5000000e+00	4.2426487e+00	1.5244308e+00
4.7500000e+00	1.7500000e+00	4.0729505e+00	1.8045462e+00
4.7500000e+00	2.0000000e+00	3.9361747e+00	2.0982304e+00
4.7500000e+00	2.2500000e+00	3.8231906e+00	2.4061313e+00
4.7500000e+00	2.5000000e+00	3.7280290e+00	2.7287183e+00
4.7500000e+00	2.7500000e+00	3.6465954e+00	3.0663401e+00
4.7500000e+00	3.0000000e+00	3.5759845e+00	3.4192688e+00
4.7500000e+00	3.2500000e+00	3.5140808e+00	3.7877333e+00
4.7500000e+00	3.5000000e+00	3.4592997e+00	4.1719301e+00
4.7500000e+00	3.7500000e+00	3.4104293e+00	4.5720345e+00
4.7500000e+00	4.0000000e+00	3.3665246e+00	4.9882073e+00
4.7500000e+00	4.2500000e+00	3.3268389e+00	5.4206004e+00
4.7500000e+00	4.5000000e+00	3.2907686e+00	5.8693517e+00
4.7500000e+00	4.7500000e+00	3.2578269e+00	6.3346064e+00
4.7500000e+00	5.0000000e+00	3.2276087e+00	6.8164901e+00
4.7500000e+00	5.2500000e+00	3.1997792e+00	7.3151321e+00
4.7500000e+00	5.5000000e+00	3.1740595e+00	7.8306657e+00
4.7500000e+00	5.7500000e+00	3.1502100e+00	8.3632105e+00
4.7500000e+00	6.0000000e+00	3.1280293e+00	8.9128923e+00
4.7500000e+00	6.2500000e+00	3.1073429e+00	9.4798280e+00
4.7500000e+00	6.5000000e+00	3.0880018e+00	1.0064144e+01
4.7500000e+00	6.7500000e+00	3.0698749e+00	1.0665953e+01
4.7500000e+00	7.0000000e+00	3.0528496e+00	1.1285378e+01
4.7500000e+00	7.2500000e+00	3.0368257e+00	1.1922533e+01
4.7500000e+00	7.5000000e+00	3.0217158e+00	1.2577537e+01
4.7500000e+00	7.7500000e+00	3.0074422e+00	1.3250504e+01
4.7500000e+00	8.0000000e+00	2.9939357e+00	1.3941546e+01
5.0000000e+00	1.2500000e+00	4.6896485e+00	1.2570273e+00
5.0000000e+00	1.5000000e+00	4.4554796e+00	1.5243432e+00
5.0000000e+00	1.7500000e+00	4.2727038e+00	1.8043483e+00
5.0000000e+00	2.0000000e+00	4.1251411e+00	2.0978944e+00
5.0000000e+00	2.2500000e+00	4.0030841e+00	2.4056509e+00
5.0000000e+00	2.5000000e+00	3.9001724e+00	2.7281144e+00
5.0000000e+00	2.7500000e+00	3.8120313e+00	3.0656623e+00
5.0000000e+00	3.0000000e+00	3.7355497e+00	3.4185949e+00
5.0000000e+00	3.2500000e+00	3.6684588e+00	3.7871688e+00

5.0000000e+00	3.5000000e+00	3.6090564e+00	4.1716077e+00
5.0000000e+00	3.7500000e+00	3.5560392e+00	4.5721131e+00
5.0000000e+00	4.0000000e+00	3.5083897e+00	4.9888706e+00
5.0000000e+00	4.2500000e+00	3.4653036e+00	5.4220577e+00
5.0000000e+00	4.5000000e+00	3.4261313e+00	5.8718394e+00
5.0000000e+00	4.7500000e+00	3.3903435e+00	6.3383728e+00
5.0000000e+00	5.0000000e+00	3.3575080e+00	6.8218221e+00
5.0000000e+00	5.2500000e+00	3.3272603e+00	7.3223300e+00
5.0000000e+00	5.5000000e+00	3.2992985e+00	7.8400527e+00
5.0000000e+00	5.7500000e+00	3.2733661e+00	8.3751373e+00
5.0000000e+00	6.0000000e+00	3.2492423e+00	8.9277208e+00
5.0000000e+00	6.2500000e+00	3.2267405e+00	9.4979525e+00
5.0000000e+00	6.5000000e+00	3.2056983e+00	1.0085973e+01
5.0000000e+00	6.7500000e+00	3.1859741e+00	1.0691918e+01
5.0000000e+00	7.0000000e+00	3.1674455e+00	1.1315930e+01
5.0000000e+00	7.2500000e+00	3.1500053e+00	1.1958152e+01
5.0000000e+00	7.5000000e+00	3.1335573e+00	1.2618711e+01
5.0000000e+00	7.7500000e+00	3.1180177e+00	1.3297747e+01
5.0000000e+00	8.0000000e+00	3.1033120e+00	1.3995395e+01
5.2500000e+00	1.2500000e+00	4.9187884e+00	1.2570192e+00
5.2500000e+00	1.5000000e+00	4.6682769e+00	1.5242637e+00
5.2500000e+00	1.7500000e+00	4.4723946e+00	1.8041660e+00
5.2500000e+00	2.0000000e+00	4.3140081e+00	2.0975800e+00
5.2500000e+00	2.2500000e+00	4.1828366e+00	2.4051920e+00
5.2500000e+00	2.5000000e+00	4.0721308e+00	2.7275222e+00
5.2500000e+00	2.7500000e+00	3.9772376e+00	3.0649726e+00
5.2500000e+00	3.0000000e+00	3.8948416e+00	3.4178685e+00
5.2500000e+00	3.2500000e+00	3.8225208e+00	3.7864913e+00
5.2500000e+00	3.5000000e+00	3.7584558e+00	4.1710890e+00
5.2500000e+00	3.7500000e+00	3.7012521e+00	4.5718868e+00
5.2500000e+00	4.0000000e+00	3.6498207e+00	4.9890940e+00
5.2500000e+00	4.2500000e+00	3.6032970e+00	5.4229085e+00
5.2500000e+00	4.5000000e+00	3.5609865e+00	5.8735184e+00
5.2500000e+00	4.7500000e+00	3.5223217e+00	6.3411079e+00
5.2500000e+00	5.0000000e+00	3.4868355e+00	6.8258535e+00
5.2500000e+00	5.2500000e+00	3.4541399e+00	7.3279293e+00
5.2500000e+00	5.5000000e+00	3.4239084e+00	7.8475056e+00
5.2500000e+00	5.7500000e+00	3.3958636e+00	8.3847461e+00
5.2500000e+00	6.0000000e+00	3.3697711e+00	8.9398192e+00
5.2500000e+00	6.2500000e+00	3.3454285e+00	9.5128879e+00
5.2500000e+00	6.5000000e+00	3.3226607e+00	1.0104113e+01
5.2500000e+00	6.7500000e+00	3.3013168e+00	1.0713656e+01
5.2500000e+00	7.0000000e+00	3.2812633e+00	1.1341672e+01
5.2500000e+00	7.2500000e+00	3.2623845e+00	1.1988322e+01
5.2500000e+00	7.5000000e+00	3.2445778e+00	1.2653759e+01
5.2500000e+00	7.7500000e+00	3.2277526e+00	1.3338141e+01
5.2500000e+00	8.0000000e+00	3.2118287e+00	1.4041624e+01

5.5000000e+00	1.2500000e+00	5.1479196e+00	1.2570130e+00
5.5000000e+00	1.5000000e+00	4.8810453e+00	1.5241912e+00
5.5000000e+00	1.7500000e+00	4.6720322e+00	1.8039978e+00
5.5000000e+00	2.0000000e+00	4.5027911e+00	2.0972859e+00
5.5000000e+00	2.2500000e+00	4.3624695e+00	2.4047557e+00
5.5000000e+00	2.5000000e+00	4.2439340e+00	2.7269484e+00
5.5000000e+00	2.7500000e+00	4.1422477e+00	3.0642839e+00
5.5000000e+00	3.0000000e+00	4.0538987e+00	3.4171133e+00
5.5000000e+00	3.2500000e+00	3.9763102e+00	3.7857389e+00
5.5000000e+00	3.5000000e+00	3.9075461e+00	4.1704304e+00
5.5000000e+00	3.7500000e+00	3.8461207e+00	4.5714346e+00
5.5000000e+00	4.0000000e+00	3.7908727e+00	4.9889820e+00
5.5000000e+00	4.2500000e+00	3.7408796e+00	5.4232906e+00
5.5000000e+00	4.5000000e+00	3.6954001e+00	5.8745712e+00
5.5000000e+00	4.7500000e+00	3.6538284e+00	6.3430275e+00
5.5000000e+00	5.0000000e+00	3.6156633e+00	6.8288511e+00
5.5000000e+00	5.2500000e+00	3.5804920e+00	7.3322429e+00
5.5000000e+00	5.5000000e+00	3.5479632e+00	7.8533864e+00
5.5000000e+00	5.7500000e+00	3.5177822e+00	8.3924714e+00
5.5000000e+00	6.0000000e+00	3.4896966e+00	8.9496818e+00
5.5000000e+00	6.2500000e+00	3.4634904e+00	9.5252018e+00
5.5000000e+00	6.5000000e+00	3.4389753e+00	1.0119208e+01
5.5000000e+00	6.7500000e+00	3.4159889e+00	1.0731879e+01
5.5000000e+00	7.0000000e+00	3.3943903e+00	1.1363400e+01
5.5000000e+00	7.2500000e+00	3.3740538e+00	1.2013940e+01
5.5000000e+00	7.5000000e+00	3.3548696e+00	1.2683675e+01
5.5000000e+00	7.7500000e+00	3.3367408e+00	1.3372780e+01
5.5000000e+00	8.0000000e+00	3.3195806e+00	1.4081428e+01
5.7500000e+00	1.2500000e+00	5.3770345e+00	1.2570074e+00
5.7500000e+00	1.5000000e+00	5.0937885e+00	1.5241249e+00
5.7500000e+00	1.7500000e+00	4.8716282e+00	1.8038431e+00
5.7500000e+00	2.0000000e+00	4.6915022e+00	2.0970108e+00
5.7500000e+00	2.2500000e+00	4.5420003e+00	2.4043420e+00
5.7500000e+00	2.5000000e+00	4.4155999e+00	2.7263938e+00
5.7500000e+00	2.7500000e+00	4.3070888e+00	3.0636049e+00
5.7500000e+00	3.0000000e+00	4.2127528e+00	3.4163460e+00
5.7500000e+00	3.2500000e+00	4.1298633e+00	3.7849392e+00
5.7500000e+00	3.5000000e+00	4.0563674e+00	4.1696736e+00
5.7500000e+00	3.7500000e+00	3.9906885e+00	4.5708158e+00
5.7500000e+00	4.0000000e+00	3.9315936e+00	4.9886155e+00
5.7500000e+00	4.2500000e+00	3.8781025e+00	5.4233104e+00
5.7500000e+00	4.5000000e+00	3.8294257e+00	5.8751292e+00
5.7500000e+00	4.7500000e+00	3.7849179e+00	6.3442908e+00
5.7500000e+00	5.0000000e+00	3.7440503e+00	6.8310176e+00
5.7500000e+00	5.2500000e+00	3.7063767e+00	7.3355119e+00
5.7500000e+00	5.5000000e+00	3.6715277e+00	7.8579885e+00
5.7500000e+00	5.7500000e+00	3.6391881e+00	8.3986536e+00

5.7500000e+00	6.0000000e+00	3.6090867e+00	8.9577008e+00
5.7500000e+00	6.2500000e+00	3.5809953e+00	9.5353413e+00
5.7500000e+00	6.5000000e+00	3.5547123e+00	1.0131766e+01
5.7500000e+00	6.7500000e+00	3.5300652e+00	1.0747177e+01
5.7500000e+00	7.0000000e+00	3.5069019e+00	1.1381766e+01
5.7500000e+00	7.2500000e+00	3.4850890e+00	1.2035727e+01
5.7500000e+00	7.5000000e+00	3.4645105e+00	1.2709260e+01
5.7500000e+00	7.7500000e+00	3.4450612e+00	1.3402550e+01
5.7500000e+00	8.0000000e+00	3.4266491e+00	1.4115789e+01
6.0000000e+00	1.2500000e+00	5.6061515e+00	1.2570043e+00
6.0000000e+00	1.5000000e+00	5.3065094e+00	1.5240640e+00
6.0000000e+00	1.7500000e+00	5.0711804e+00	1.8036986e+00
6.0000000e+00	2.0000000e+00	4.8801482e+00	2.0967522e+00
6.0000000e+00	2.2500000e+00	4.7214428e+00	2.4039502e+00
6.0000000e+00	2.5000000e+00	4.5871466e+00	2.7258601e+00
6.0000000e+00	2.7500000e+00	4.4717831e+00	3.0629411e+00
6.0000000e+00	3.0000000e+00	4.3714302e+00	3.4155782e+00
6.0000000e+00	3.2500000e+00	4.2832098e+00	3.7841121e+00
6.0000000e+00	3.5000000e+00	4.2049530e+00	4.1688497e+00
6.0000000e+00	3.7500000e+00	4.1349924e+00	4.5700752e+00
6.0000000e+00	4.0000000e+00	4.0720230e+00	4.9880561e+00
6.0000000e+00	4.2500000e+00	4.0150069e+00	5.4230475e+00
6.0000000e+00	4.5000000e+00	3.9631066e+00	5.8752938e+00
6.0000000e+00	4.7500000e+00	3.9156411e+00	6.3450379e+00
6.0000000e+00	5.0000000e+00	3.8720439e+00	6.8325066e+00
6.0000000e+00	5.2500000e+00	3.8318473e+00	7.3379335e+00
6.0000000e+00	5.5000000e+00	3.7946560e+00	7.8615423e+00
6.0000000e+00	5.7500000e+00	3.7601361e+00	8.4035586e+00
6.0000000e+00	6.0000000e+00	3.7279994e+00	8.9641925e+00
6.0000000e+00	6.2500000e+00	3.6980037e+00	9.5436735e+00
6.0000000e+00	6.5000000e+00	3.6699342e+00	1.0142207e+01
6.0000000e+00	6.7500000e+00	3.6436077e+00	1.0760013e+01
6.0000000e+00	7.0000000e+00	3.6188627e+00	1.1397303e+01
6.0000000e+00	7.2500000e+00	3.5955577e+00	1.2054288e+01
6.0000000e+00	7.5000000e+00	3.5735677e+00	1.2731177e+01
6.0000000e+00	7.7500000e+00	3.5527826e+00	1.3428184e+01
6.0000000e+00	8.0000000e+00	3.5331036e+00	1.4145513e+01
6.2500000e+00	1.2500000e+00	5.8352631e+00	1.2570025e+00
6.2500000e+00	1.5000000e+00	5.5192104e+00	1.5240077e+00
6.2500000e+00	1.7500000e+00	5.2706976e+00	1.8035641e+00
6.2500000e+00	2.0000000e+00	5.0687465e+00	2.0965115e+00
6.2500000e+00	2.2500000e+00	4.9008087e+00	2.4035794e+00
6.2500000e+00	2.5000000e+00	4.7585938e+00	2.7253499e+00
6.2500000e+00	2.7500000e+00	4.6363494e+00	3.0622960e+00
6.2500000e+00	3.0000000e+00	4.5299528e+00	3.4148179e+00
6.2500000e+00	3.2500000e+00	4.4363749e+00	3.7832721e+00
6.2500000e+00	3.5000000e+00	4.3533311e+00	4.1679817e+00

6.2500000e+00	3.7500000e+00	4.2790633e+00	4.5692469e+00
6.2500000e+00	4.0000000e+00	4.2121946e+00	4.9873512e+00
6.2500000e+00	4.2500000e+00	4.1516296e+00	5.4225659e+00
6.2500000e+00	4.5000000e+00	4.0964831e+00	5.8751509e+00
6.2500000e+00	4.7500000e+00	4.0460362e+00	6.3453663e+00
6.2500000e+00	5.0000000e+00	3.9996893e+00	6.8334532e+00
6.2500000e+00	5.2500000e+00	3.9569483e+00	7.3396626e+00
6.2500000e+00	5.5000000e+00	3.9173956e+00	7.8642369e+00
6.2500000e+00	5.7500000e+00	3.8806751e+00	8.4074085e+00
6.2500000e+00	6.0000000e+00	3.8464847e+00	8.9694128e+00
6.2500000e+00	6.2500000e+00	3.8145661e+00	9.5504904e+00
6.2500000e+00	6.5000000e+00	3.7846935e+00	1.0150869e+01
6.2500000e+00	6.7500000e+00	3.7566709e+00	1.0770776e+01
6.2500000e+00	7.0000000e+00	3.7303283e+00	1.1410445e+01
6.2500000e+00	7.2500000e+00	3.7055152e+00	1.2070102e+01
6.2500000e+00	7.5000000e+00	3.6820996e+00	1.2749974e+01
6.2500000e+00	7.7500000e+00	3.6599640e+00	1.3450287e+01
6.2500000e+00	8.0000000e+00	3.6390040e+00	1.4171263e+01
6.5000000e+00	1.2500000e+00	6.0643701e+00	1.2570018e+00
6.5000000e+00	1.5000000e+00	5.7318937e+00	1.5239557e+00
6.5000000e+00	1.7500000e+00	5.4701838e+00	1.8034385e+00
6.5000000e+00	2.0000000e+00	5.2572941e+00	2.0962847e+00
6.5000000e+00	2.2500000e+00	5.0801073e+00	2.4032283e+00
6.5000000e+00	2.5000000e+00	4.9299519e+00	2.7248622e+00
6.5000000e+00	2.7500000e+00	4.8008013e+00	3.0616706e+00
6.5000000e+00	3.0000000e+00	4.6883391e+00	3.4140705e+00
6.5000000e+00	3.2500000e+00	4.5893800e+00	3.7824299e+00
6.5000000e+00	3.5000000e+00	4.5015255e+00	4.1670871e+00
6.5000000e+00	3.7500000e+00	4.4229268e+00	4.5683567e+00
6.5000000e+00	4.0000000e+00	4.3521365e+00	4.9865371e+00
6.5000000e+00	4.2500000e+00	4.2880012e+00	5.4219152e+00
6.5000000e+00	4.5000000e+00	4.2295875e+00	5.8747640e+00
6.5000000e+00	4.7500000e+00	4.1761382e+00	6.3453584e+00
6.5000000e+00	5.0000000e+00	4.1270225e+00	6.8339577e+00
6.5000000e+00	5.2500000e+00	4.0817180e+00	7.3408241e+00
6.5000000e+00	5.5000000e+00	4.0397847e+00	7.8662163e+00
6.5000000e+00	5.7500000e+00	4.0008468e+00	8.4103813e+00
6.5000000e+00	6.0000000e+00	3.9645859e+00	8.9735715e+00
6.5000000e+00	6.2500000e+00	3.9307283e+00	9.5560400e+00
6.5000000e+00	6.5000000e+00	3.8990355e+00	1.0158027e+01
6.5000000e+00	6.7500000e+00	3.8693015e+00	1.0779782e+01
6.5000000e+00	7.0000000e+00	3.8413468e+00	1.1421553e+01
6.5000000e+00	7.2500000e+00	3.8150114e+00	1.2083577e+01
6.5000000e+00	7.5000000e+00	3.7901562e+00	1.2766100e+01
6.5000000e+00	7.7500000e+00	3.7666568e+00	1.3469361e+01
6.5000000e+00	8.0000000e+00	3.7444028e+00	1.4193599e+01
6.7500000e+00	1.2500000e+00	6.2934734e+00	1.2570020e+00

6.7500000e+00	1.5000000e+00	5.9445557e+00	1.5239067e+00
6.7500000e+00	1.7500000e+00	5.6696423e+00	1.8033211e+00
6.7500000e+00	2.0000000e+00	5.4457998e+00	2.0960714e+00
6.7500000e+00	2.2500000e+00	5.2593467e+00	2.4028959e+00
6.7500000e+00	2.5000000e+00	5.1012312e+00	2.7243964e+00
6.7500000e+00	2.7500000e+00	4.9651560e+00	3.0610682e+00
6.7500000e+00	3.0000000e+00	4.8466036e+00	3.4133396e+00
6.7500000e+00	3.2500000e+00	4.7422423e+00	3.7815930e+00
6.7500000e+00	3.5000000e+00	4.6495563e+00	4.1661789e+00
6.7500000e+00	3.7500000e+00	4.5666073e+00	4.5674254e+00
6.7500000e+00	4.0000000e+00	4.4918747e+00	4.9856438e+00
6.7500000e+00	4.2500000e+00	4.4241485e+00	5.4211345e+00
6.7500000e+00	4.5000000e+00	4.3624483e+00	5.8741848e+00
6.7500000e+00	4.7500000e+00	4.3059780e+00	6.3450827e+00
6.7500000e+00	5.0000000e+00	4.2540753e+00	6.8341026e+00
6.7500000e+00	5.2500000e+00	4.2061908e+00	7.3415220e+00
6.7500000e+00	5.5000000e+00	4.1618590e+00	7.8676057e+00
6.7500000e+00	5.7500000e+00	4.1206865e+00	8.4126200e+00
6.7500000e+00	6.0000000e+00	4.0823392e+00	8.9768362e+00
6.7500000e+00	6.2500000e+00	4.0465271e+00	9.5605132e+00
6.7500000e+00	6.5000000e+00	4.0130009e+00	1.0163916e+01
6.7500000e+00	6.7500000e+00	3.9815413e+00	1.0787298e+01
6.7500000e+00	7.0000000e+00	3.9519604e+00	1.1430926e+01
6.7500000e+00	7.2500000e+00	3.9240893e+00	1.2095050e+01
6.7500000e+00	7.5000000e+00	3.8977817e+00	1.2779934e+01
6.7500000e+00	7.7500000e+00	3.8729058e+00	1.3485828e+01
6.7500000e+00	8.0000000e+00	3.8493463e+00	1.4212991e+01
7.0000000e+00	1.2500000e+00	6.5225735e+00	1.2570031e+00
7.0000000e+00	1.5000000e+00	6.1572085e+00	1.5238617e+00
7.0000000e+00	1.7500000e+00	5.8690757e+00	1.8032109e+00
7.0000000e+00	2.0000000e+00	5.6342680e+00	2.0958705e+00
7.0000000e+00	2.2500000e+00	5.4385335e+00	2.4025810e+00
7.0000000e+00	2.5000000e+00	5.2724407e+00	2.7239517e+00
7.0000000e+00	2.7500000e+00	5.1294224e+00	3.0604879e+00
7.0000000e+00	3.0000000e+00	5.0047623e+00	3.4126285e+00
7.0000000e+00	3.2500000e+00	4.8949792e+00	3.7807675e+00
7.0000000e+00	3.5000000e+00	4.7974423e+00	4.1652672e+00
7.0000000e+00	3.7500000e+00	4.7101231e+00	4.5664677e+00
7.0000000e+00	4.0000000e+00	4.6314292e+00	4.9846911e+00
7.0000000e+00	4.2500000e+00	4.5600932e+00	5.4202531e+00
7.0000000e+00	4.5000000e+00	4.4950900e+00	5.8734542e+00
7.0000000e+00	4.7500000e+00	4.4355818e+00	6.3445919e+00
7.0000000e+00	5.0000000e+00	4.3808752e+00	6.8339547e+00
7.0000000e+00	5.2500000e+00	4.3303937e+00	7.3418331e+00
7.0000000e+00	5.5000000e+00	4.2836487e+00	7.8685050e+00
7.0000000e+00	5.7500000e+00	4.2402275e+00	8.4142503e+00
7.0000000e+00	6.0000000e+00	4.1997791e+00	8.9793534e+00

7.0000000e+00	6.2500000e+00	4.1619988e+00	9.5640865e+00
7.0000000e+00	6.5000000e+00	4.1266236e+00	1.0168723e+01
7.0000000e+00	6.7500000e+00	4.0934259e+00	1.0793540e+01
7.0000000e+00	7.0000000e+00	4.0622060e+00	1.1438812e+01
7.0000000e+00	7.2500000e+00	4.0327870e+00	1.2104806e+01
7.0000000e+00	7.5000000e+00	4.0050146e+00	1.2791794e+01
7.0000000e+00	7.7500000e+00	3.9787510e+00	1.3500045e+01
7.0000000e+00	8.0000000e+00	3.9538742e+00	1.4229831e+01
7.2500000e+00	1.2500000e+00	6.7516712e+00	1.2570050e+00
7.2500000e+00	1.5000000e+00	6.3698482e+00	1.5238198e+00
7.2500000e+00	1.7500000e+00	6.0684867e+00	1.8031074e+00
7.2500000e+00	2.0000000e+00	5.8227026e+00	2.0956810e+00
7.2500000e+00	2.2500000e+00	5.6176758e+00	2.4022831e+00
7.2500000e+00	2.5000000e+00	5.4435898e+00	2.7235279e+00
7.2500000e+00	2.7500000e+00	5.2936108e+00	3.0599297e+00
7.2500000e+00	3.0000000e+00	5.1628251e+00	3.4119381e+00
7.2500000e+00	3.2500000e+00	5.0476028e+00	3.7799568e+00
7.2500000e+00	3.5000000e+00	4.9451975e+00	4.1643589e+00
7.2500000e+00	3.7500000e+00	4.8534897e+00	4.5654935e+00
7.2500000e+00	4.0000000e+00	4.7708197e+00	4.9837013e+00
7.2500000e+00	4.2500000e+00	4.6958574e+00	5.4192988e+00
7.2500000e+00	4.5000000e+00	4.6275339e+00	5.8726053e+00
7.2500000e+00	4.7500000e+00	4.5649721e+00	6.3439283e+00
7.2500000e+00	5.0000000e+00	4.5074462e+00	6.8335684e+00
7.2500000e+00	5.2500000e+00	4.4543528e+00	7.3418277e+00
7.2500000e+00	5.5000000e+00	4.4051793e+00	7.8689938e+00
7.2500000e+00	5.7500000e+00	4.3594966e+00	8.4153685e+00
7.2500000e+00	6.0000000e+00	4.3169331e+00	8.9812368e+00
7.2500000e+00	6.2500000e+00	4.2771714e+00	9.5668893e+00
7.2500000e+00	6.5000000e+00	4.2399362e+00	1.0172615e+01
7.2500000e+00	6.7500000e+00	4.2049868e+00	1.0798694e+01
7.2500000e+00	7.0000000e+00	4.1721154e+00	1.1445420e+01
7.2500000e+00	7.2500000e+00	4.1411374e+00	1.2113078e+01
7.2500000e+00	7.5000000e+00	4.1118892e+00	1.2801947e+01
7.2500000e+00	7.7500000e+00	4.0842268e+00	1.3512310e+01
7.2500000e+00	8.0000000e+00	4.0580226e+00	1.4244456e+01
7.5000000e+00	1.2500000e+00	6.9807669e+00	1.2570076e+00
7.5000000e+00	1.5000000e+00	6.5824760e+00	1.5237806e+00
7.5000000e+00	1.7500000e+00	6.2678730e+00	1.8030091e+00
7.5000000e+00	2.0000000e+00	6.0111070e+00	2.0955018e+00
7.5000000e+00	2.2500000e+00	5.7967729e+00	2.4019994e+00
7.5000000e+00	2.5000000e+00	5.6146805e+00	2.7231224e+00
7.5000000e+00	2.7500000e+00	5.4577268e+00	3.0593927e+00
7.5000000e+00	3.0000000e+00	5.3208019e+00	3.4112691e+00
7.5000000e+00	3.2500000e+00	5.2001231e+00	3.7791620e+00
7.5000000e+00	3.5000000e+00	5.0928331e+00	4.1634570e+00
7.5000000e+00	3.7500000e+00	4.9967232e+00	4.5645148e+00

7.5000000e+00	4.0000000e+00	4.9100593e+00	4.9826811e+00
7.5000000e+00	4.2500000e+00	4.8314578e+00	5.4182899e+00
7.5000000e+00	4.5000000e+00	4.7597986e+00	5.8716646e+00
7.5000000e+00	4.7500000e+00	4.6941691e+00	6.3431275e+00
7.5000000e+00	5.0000000e+00	4.6338095e+00	6.8329880e+00
7.5000000e+00	5.2500000e+00	4.5780894e+00	7.3415587e+00
7.5000000e+00	5.5000000e+00	4.5264760e+00	7.8691460e+00
7.5000000e+00	5.7500000e+00	4.4785176e+00	8.4160547e+00
7.5000000e+00	6.0000000e+00	4.4338267e+00	8.9825848e+00
7.5000000e+00	6.2500000e+00	4.3920716e+00	9.5690399e+00
7.5000000e+00	6.5000000e+00	4.3529634e+00	1.0175716e+01
7.5000000e+00	6.7500000e+00	4.3162518e+00	1.0802912e+01
7.5000000e+00	7.0000000e+00	4.2817188e+00	1.1450933e+01
7.5000000e+00	7.2500000e+00	4.2491701e+00	1.2120070e+01
7.5000000e+00	7.5000000e+00	4.2184356e+00	1.2810619e+01
7.5000000e+00	7.7500000e+00	4.1893646e+00	1.3522880e+01
7.5000000e+00	8.0000000e+00	4.1618224e+00	1.4257144e+01
7.7500000e+00	1.2500000e+00	7.2098611e+00	1.2570108e+00
7.7500000e+00	1.5000000e+00	6.7950930e+00	1.5237439e+00
7.7500000e+00	1.7500000e+00	6.4672447e+00	1.8029171e+00
7.7500000e+00	2.0000000e+00	6.1994839e+00	2.0953323e+00
7.7500000e+00	2.2500000e+00	5.9758320e+00	2.4017299e+00
7.7500000e+00	2.5000000e+00	5.7857201e+00	2.7227353e+00
7.7500000e+00	2.7500000e+00	5.6217792e+00	3.0588767e+00
7.7500000e+00	3.0000000e+00	5.4787010e+00	3.4106218e+00
7.7500000e+00	3.2500000e+00	5.3525521e+00	3.7783873e+00
7.7500000e+00	3.5000000e+00	5.2403633e+00	4.1625694e+00
7.7500000e+00	3.7500000e+00	5.1398375e+00	4.5635392e+00
7.7500000e+00	4.0000000e+00	5.0491646e+00	4.9816466e+00
7.7500000e+00	4.2500000e+00	4.9669090e+00	5.4172421e+00
7.7500000e+00	4.5000000e+00	4.8919007e+00	5.8706535e+00
7.7500000e+00	4.7500000e+00	4.8231896e+00	6.3422165e+00
7.7500000e+00	5.0000000e+00	4.7599836e+00	6.8322502e+00
7.7500000e+00	5.2500000e+00	4.7016251e+00	7.3410773e+00
7.7500000e+00	5.5000000e+00	4.6475589e+00	7.8690158e+00
7.7500000e+00	5.7500000e+00	4.5973122e+00	8.4163783e+00
7.7500000e+00	6.0000000e+00	4.5504822e+00	8.9834792e+00
7.7500000e+00	6.2500000e+00	4.5067219e+00	9.5706308e+00
7.7500000e+00	6.5000000e+00	4.4657305e+00	1.0178144e+01
7.7500000e+00	6.7500000e+00	4.4272458e+00	1.0806326e+01
7.7500000e+00	7.0000000e+00	4.3910401e+00	1.1455493e+01
7.7500000e+00	7.2500000e+00	4.3569110e+00	1.2125950e+01
7.7500000e+00	7.5000000e+00	4.3246806e+00	1.2818006e+01
7.7500000e+00	7.7500000e+00	4.2941913e+00	1.3531969e+01
7.7500000e+00	8.0000000e+00	4.2653025e+00	1.4268147e+01
8.0000000e+00	1.2500000e+00	7.4389543e+00	1.2570145e+00
8.0000000e+00	1.5000000e+00	7.0077001e+00	1.5237095e+00

8.0000000e+00	1.7500000e+00	6.6665993e+00	1.8028300e+00
8.0000000e+00	2.0000000e+00	6.3878359e+00	2.0951716e+00
8.0000000e+00	2.2500000e+00	6.1548545e+00	2.4014729e+00
8.0000000e+00	2.5000000e+00	5.9567164e+00	2.7223659e+00
8.0000000e+00	2.7500000e+00	5.7857761e+00	3.0583826e+00
8.0000000e+00	3.0000000e+00	5.6365276e+00	3.4099945e+00
8.0000000e+00	3.2500000e+00	5.5048977e+00	3.7776330e+00
8.0000000e+00	3.5000000e+00	5.3877990e+00	4.1616993e+00
8.0000000e+00	3.7500000e+00	5.2828410e+00	4.5625689e+00
8.0000000e+00	4.0000000e+00	5.1881487e+00	4.9806068e+00
8.0000000e+00	4.2500000e+00	5.1022237e+00	5.4161658e+00
8.0000000e+00	4.5000000e+00	5.0238544e+00	5.8695894e+00
8.0000000e+00	4.7500000e+00	4.9520493e+00	6.3412192e+00
8.0000000e+00	5.0000000e+00	4.8859848e+00	6.8313848e+00
8.0000000e+00	5.2500000e+00	4.8249762e+00	7.3404186e+00
8.0000000e+00	5.5000000e+00	4.7684445e+00	7.8686466e+00
8.0000000e+00	5.7500000e+00	4.7158999e+00	8.4163981e+00
8.0000000e+00	6.0000000e+00	4.6669190e+00	8.9839870e+00
8.0000000e+00	6.2500000e+00	4.6211437e+00	9.5717472e+00
8.0000000e+00	6.5000000e+00	4.5782585e+00	1.0179993e+01
8.0000000e+00	6.7500000e+00	4.5379912e+00	1.0809048e+01
8.0000000e+00	7.0000000e+00	4.5001030e+00	1.1459232e+01
8.0000000e+00	7.2500000e+00	4.4643839e+00	1.2130867e+01
8.0000000e+00	7.5000000e+00	4.4306477e+00	1.2824268e+01
8.0000000e+00	7.7500000e+00	4.3987315e+00	1.3539764e+01
8.0000000e+00	8.0000000e+00	4.3684873e+00	1.4277667e+01