Applied Physical Chemistry

Homework 1

Diego Alba

- THF-Water Solution

  In MATLAB

- Water and EtOH

  In Maple

- Dissociation

  In Maple

- Data Tables for THF-Water

THC & Water Solution

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Prompt

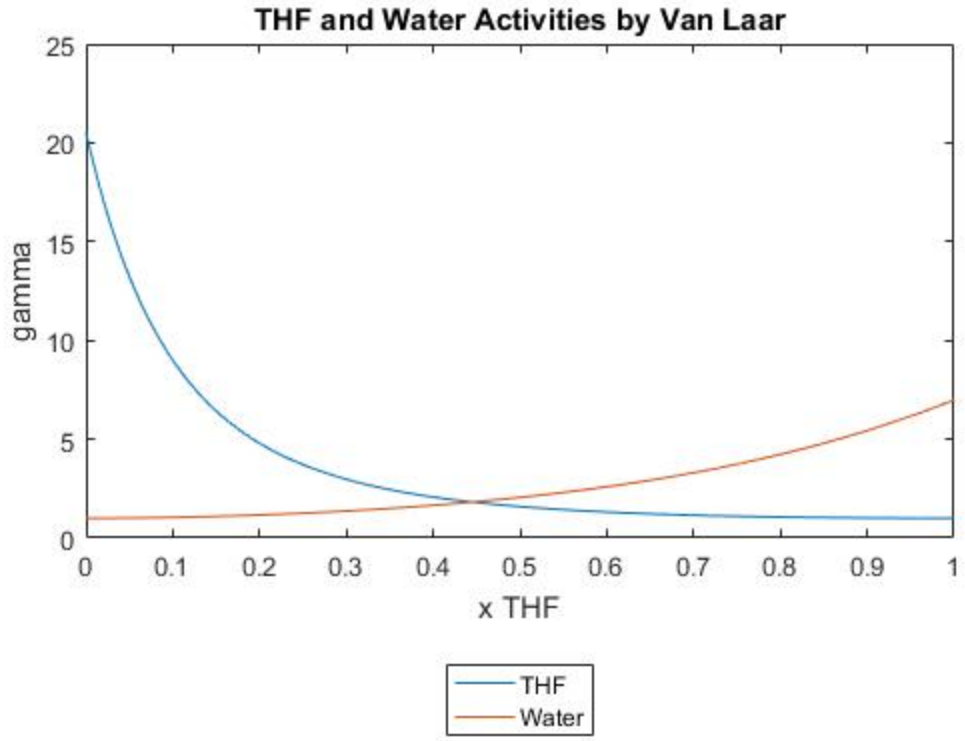
The past decade has witnessed significant research on clathrate hydrates. Clathrate hydrates have found applications in the storage and transportation of various gases, and can be also be used in CO2 sequestration. Tetrahydrofuran (THF) is a heterocyclic ether which is readily miscible with water, and stands out as a potential material for hydrate formation. To understand the conditions that lead to the formation of hydrates, it is imperative to investigate the thermodynamics of a THF-water mixture. Under the assumption that van Laar correlations apply to the non-ideality of a THF-water mixture, plot the (a) P vs x, y and (b) T vs x, y diagram at room temperature and pressure. Use the van Laar equation for activity coefficients.

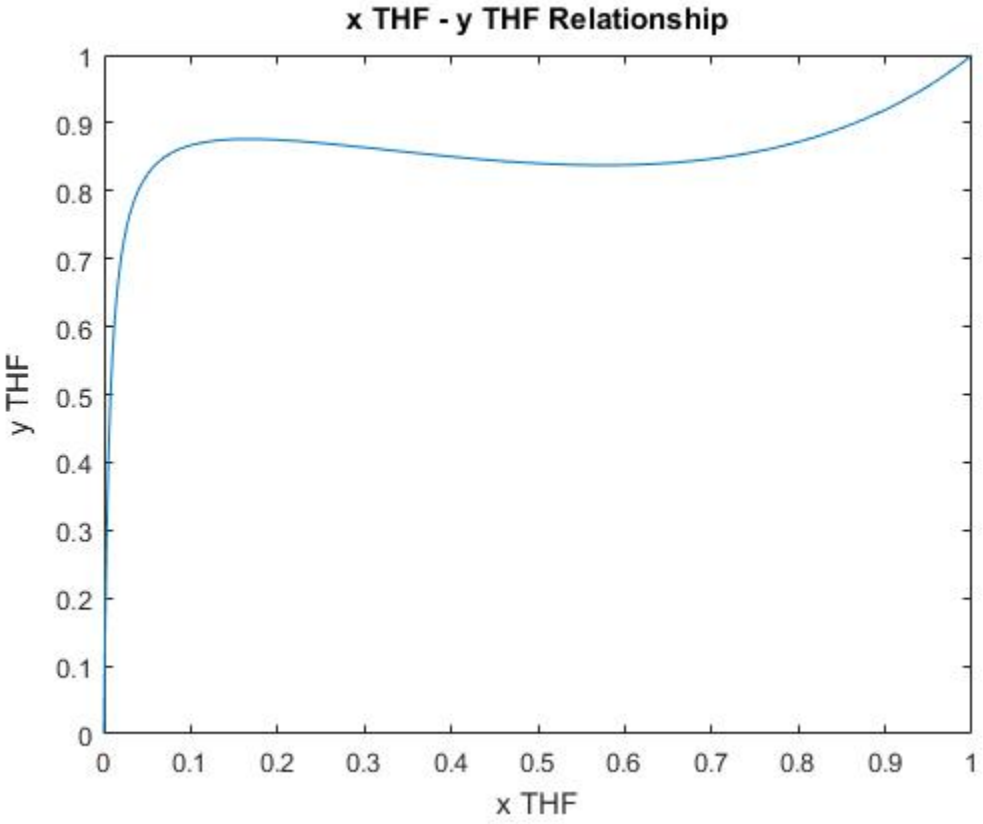
All of the plots will be at the end of the code for each section. Tables with all the values will be presented at the end of the last problem (end of the file).

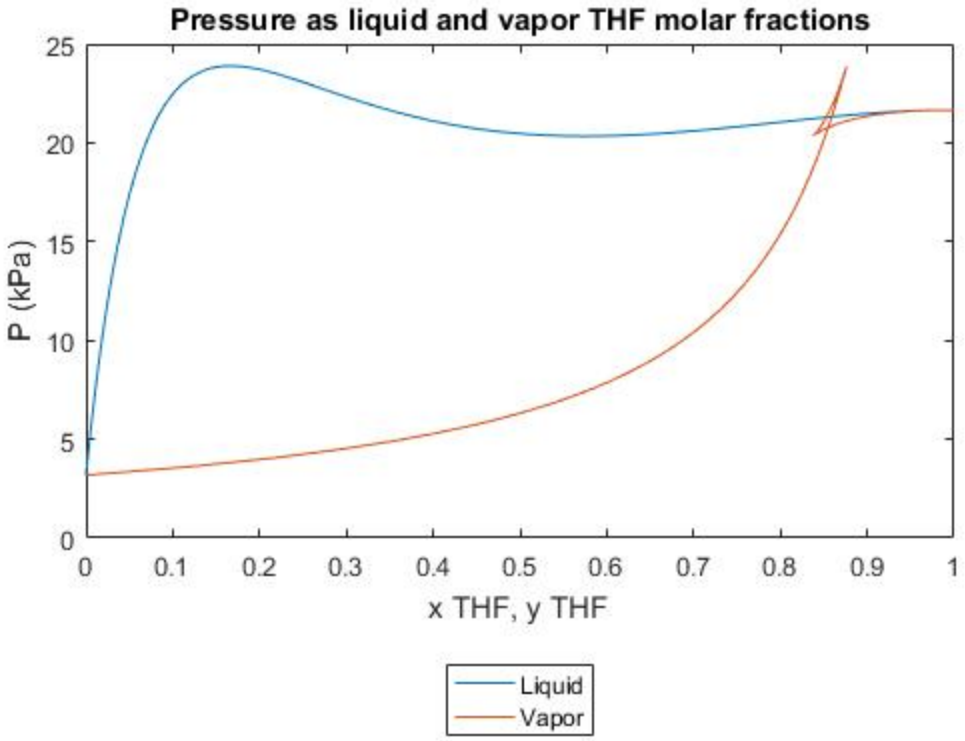
P-xy Diagram

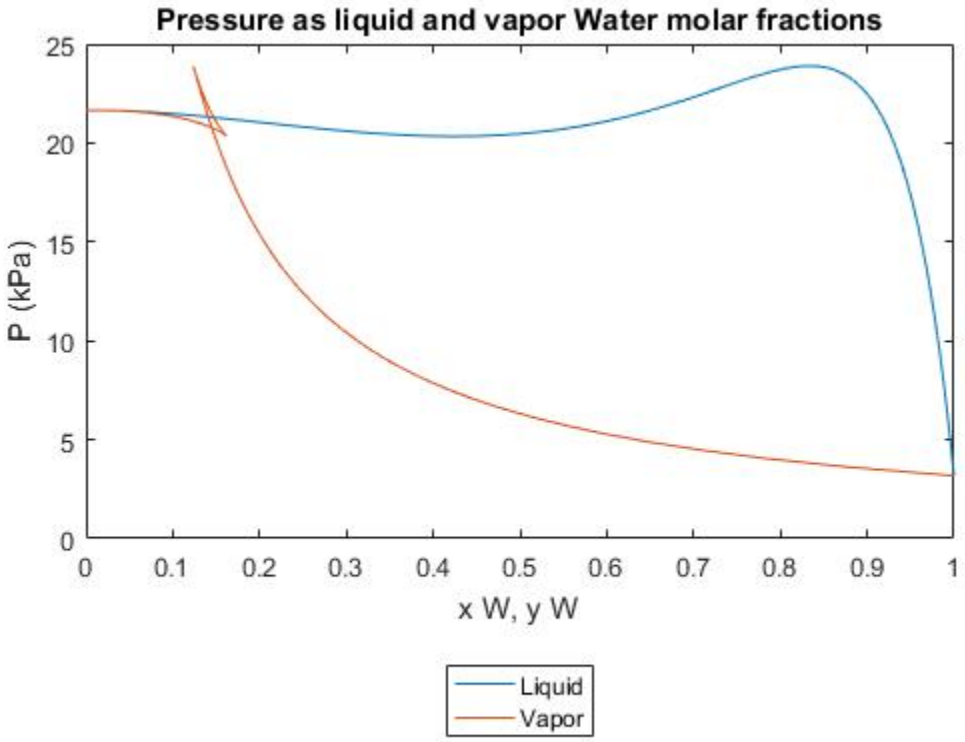
```
% First, we define the liquid molar fraction of THF and water as a
 linearly-spaced, 1000-element vector from 0 to 1.

    xTHF = linspace(0,1,1000);
    xW = 1 - xTHF;

% From Perry's Handbook, we find the Van Laar coeffiecients for a THF
 and water solution, and the vapor preassure for both components at
 room temperature.

% <https://accessengineeringlibrary.com/browse/perrys-chemical-
engineers-handbook-eighth-edition/p200139d899713_6001>

    alpha = 3.0216;
    beta = 1.9436;

    VpTHF = 21.65; % in kPA
    VpW = 3.18;

% With these values, we find the Van Laar activity coefficients for
 both components. The activity of THF and water is plotted against the
 liquid molar fraction of THF.

    gammaTHF = exp(alpha./(1+alpha.*xTHF./beta./xW).^2);
    gammaW = exp(beta./(1+beta.*xW./alpha./xTHF).^2);

    figure
    plot(xTHF,gammaTHF,xTHF,gammaW)
    title('THF and Water Activities by Van Laar')
    xlabel('x_ THF')
```

```
    ylabel('gamma')
    legend('THF','Water','Location', 'southoutside')

% We define the total pressure as the sum of partial pressures, as by
 Dalton's Law of Partial Pressures, and use Raoult's Law to express
 the partial pressures as the activity times the vapor pressure.

    P = VpTHF.*gammaTHF.*xTHF + VpW.*gammaW.*xW;

% We then define the vapor molar fraction of THF as the fraction
 of partial pressure of THF and the toal pressure. The relationship
 between the liquid and vapor molar fractions is plotted.

    yTHF = VpTHF.*gammaTHF.*xTHF./P;

    figure
    plot(xTHF,yTHF)
    title('x_ THF - y_ THF Relationship')
    xlabel('x_ THF')
    ylabel('y_ THF')

% In this section we will generate Pressure diagrams for both
 components.

    figure
    plot(xTHF, P, yTHF, P)
    title('Pressure as liquid and vapor THF molar fractions')
    xlabel('x_ THF, y_ THF')
    ylabel('P (kPa)')
    legend('Liquid','Vapor','Location', 'southoutside')
    figure
    plot(xW, P, 1-yTHF, P)
    title('Pressure as liquid and vapor Water molar fractions')
    xlabel('x_ W, y_ W')
    ylabel('P (kPa)')
    legend('Liquid','Vapor','Location', 'southoutside')
```


THF and Water Activities by Van Laar
gamma
x THF
THF
Water


x THF - y THF Relationship
y THF
x THF

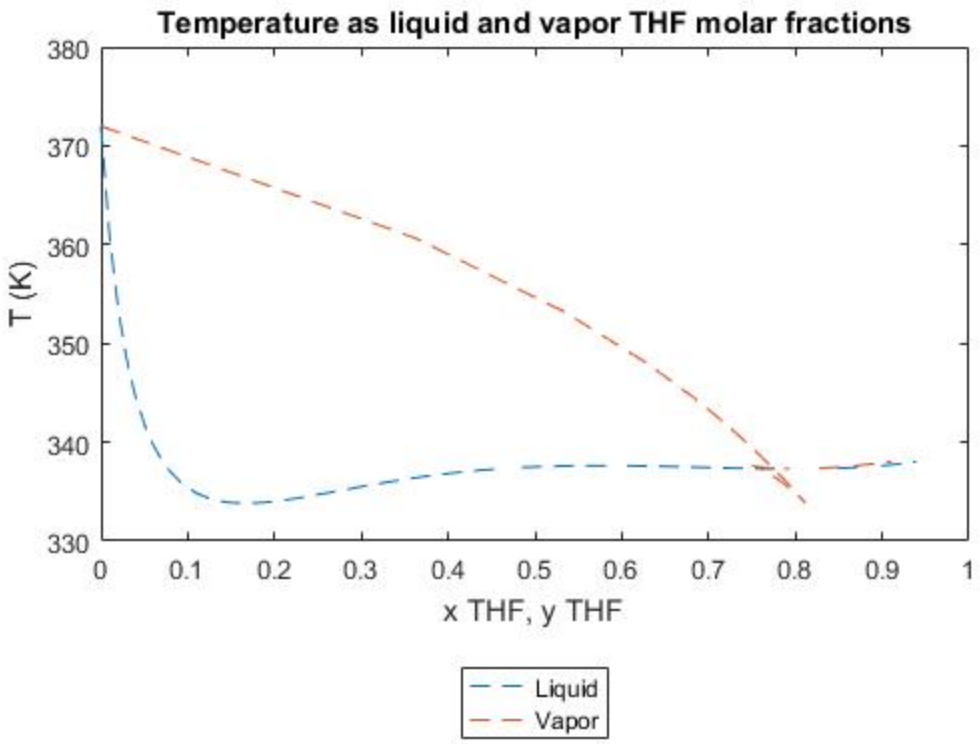

Pressure as liquid and vapor THF molar fractions
P (kPa)
x THF, y THF
Liquid
Vapor

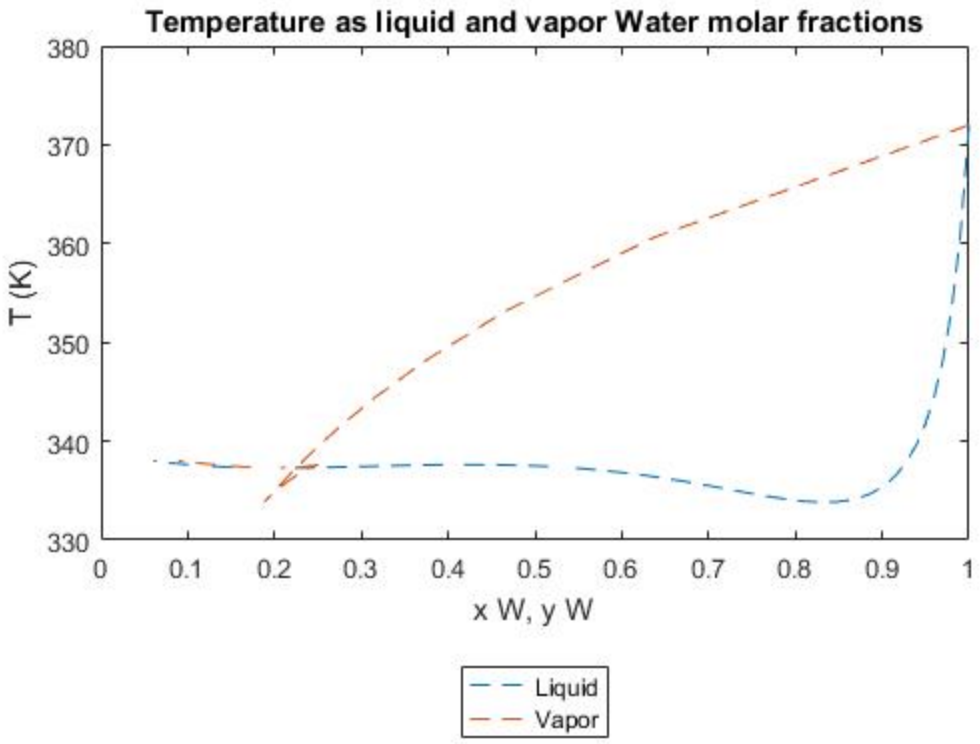

Pressure as liquid and vapor Water molar fractions
P (kPa)
x W, y W
Liquid
Vapor

T-xy Diagram

```
% From the NIST website, we find the Antoine's coeffiecients for both
 THF and water. We also set the total pressure to the room pressure,
 in bars.

% <http://webbook.nist.gov/cgi/cbook.cgi?
ID=C109999&Mask=4&Type=ANTOINE&Plot=on#ANTOINE>
% <http://webbook.nist.gov/cgi/cbook.cgi?
ID=C7732185&Mask=4&Type=ANTOINE&Plot=on>

    At = 4.12118;
    Bt = 1202.942;
    Ct = -46.818;
    Aw = 6.20963;
    Bw = 2354.731;
    Cw = 7.559;

    P2 = 1.01325; % bar

% We define a MATLAB system for T (we let T be a symbolic variable).
 We then use Antoine's equation to find the vapor pressures of THF and
 water.

    syms T
    Pt = 10.^(At-Bt./(T+Ct));
    Pw = 10.^(Aw-Bw./(T+Cw));

% We create two empty vectors to keep track of all of the temperatures
 and vapor molar fractions.

    allT = [];
    yTHF2 = [];

% In this section we solve for the temperature as a function of the
 liquid molar fraction of THF, and we find the vapor molar fraction of
 both components. We then plot all of the data.

% We create a loop that will iterate through the liquid molar fraction
 of THF, in 100 steps. For each molar fraction value, we find the
 corresponding activity (by Van Laars equation), and use the 'solve'
 function to find the temperature. We also calculate the corresponding
 vapor molar fraction at that temperature.

    warning('off','all') % to avoid 'solve' warning messages
    for xTHF2 = linspace(0,1,100)
    xW = 1 - xTHF2;
    gammaTHF = exp(alpha./(1+alpha.*xTHF2./beta./xW).^2);
    gammaW = exp(beta./(1+beta.*xW./alpha./xTHF2).^2);
    allT = [allT eval(solve(xTHF2 ==(-Pw.*gammaW+P2)./(Pt.*gammaTHF-
Pw.*gammaW),T))];
    yTHF2 = [yTHF2 (10.^(At-Bt./(allT(end)+Ct)).*gammaTHF.*xTHF2./
P2)];
```

```
    end
    warning('on','all')

    xTHF2 = linspace(0,1,100);
    xW2 = 1 - xTHF2;

    figure
    plot(xTHF2,allT,'--',yTHF2,allT,'--') % with '--' to hide plot
gaps
    title('Temperature as liquid and vapor THF molar fractions')
    xlim([0 1])
    xlabel('x_ THF, y_ THF')
    ylabel('T (K)')
    legend('Liquid','Vapor','Location', 'southoutside')
    figure
    plot(xW2, allT,'--', 1-yTHF2, allT,'--')
    title('Temperature as liquid and vapor Water molar fractions')
    xlim([0 1])
    xlabel('x_ W, y_ W')
    ylabel('T (K)')
    legend('Liquid','Vapor','Location', 'southoutside')
```





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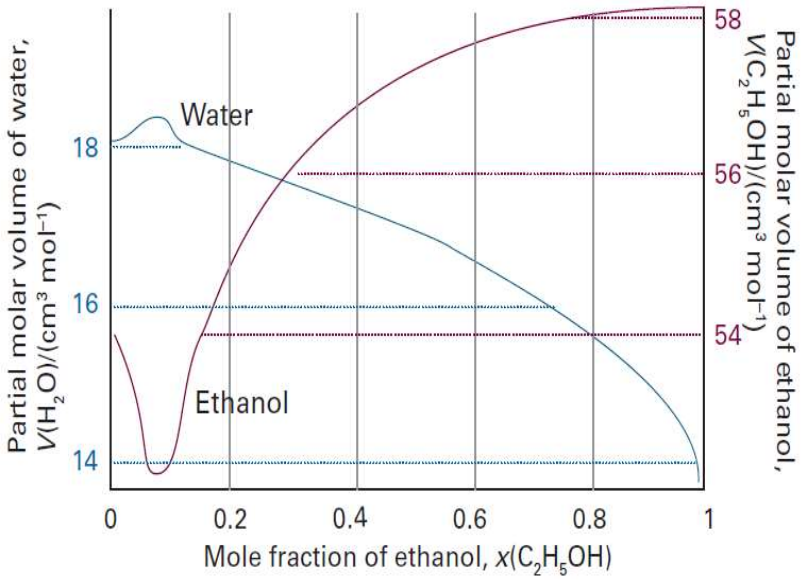
Estimate the final volume of a mixture when 34 mL of water is added to 66 mL of ethanol.

```
> restart;
> ρ_W , ρ_EtOH := 1, 0.7893 : # densities in g/
> M_W , M_EtOH := 18.01, 46.07 : # molecular weights in g/mol
  # Values taken from <https://en.wikipedia.org/wiki/Ethanol_
  (data_page)>
> V_W , V_EtOH := 34, 66 : # volumes in mL
> n_W := V_W·ρ_W / M_W : # moles of water
> n_EtOH := V_EtOH·ρ_EtOH / M_EtOH : # moles of EtOH
> x_EtOH := n_EtOH / (n_EtOH + n_W); # molar fraction of EtOH
```

0.3746 **(1.1)**

Partial molar volumes of water and ethanol at 25 °C, Atkins p.181

```
>
```




```
> V_-W , V_-EtOH := 17.5, 57 : # partial volumes in mL/mol,
  approximated from the graph
> V := n_W·V_-W + n_EtOH·V_-EtOH ; # total volume of mixture in mL
```

97.4901 **(1.2)**

For a chemical reaction, 3A(g) = 4B (g), calculate the change in the fraction of A molecules dissociated if the reaction pressure is tripled

```
> restart;
> n_A := n·(1 − 3 ·alpha) : # number of moles of A at equilibrium,
  assuming there are "n" moles of A to begin with
> n_B := 4·alpha·n : # number of moles of B at equilibrium, assuming
  there are 0 moles of B at the beginning
> x_A := simplify( n_A / (n_A + n_B) ); # mol fraction of A
```

$$x_A := \frac{1 - 3\,\alpha}{1 + \alpha} \tag{2.1}$$

```
> x_B := simplify( n_B / (n_A + n_B) ); # mol fraction of B
```

$$x_B := \frac{4\,\alpha}{1 + \alpha} \tag{2.2}$$

```
> eq := Kp = (x_B·P)^4 / (x_A·P)^3; # equilibrium constant for the reaction
```

$$eq := Kp = \frac{256\,\alpha^4\,P}{(1 + \alpha)\,(1 - 3\,\alpha)^3} \tag{2.3}$$

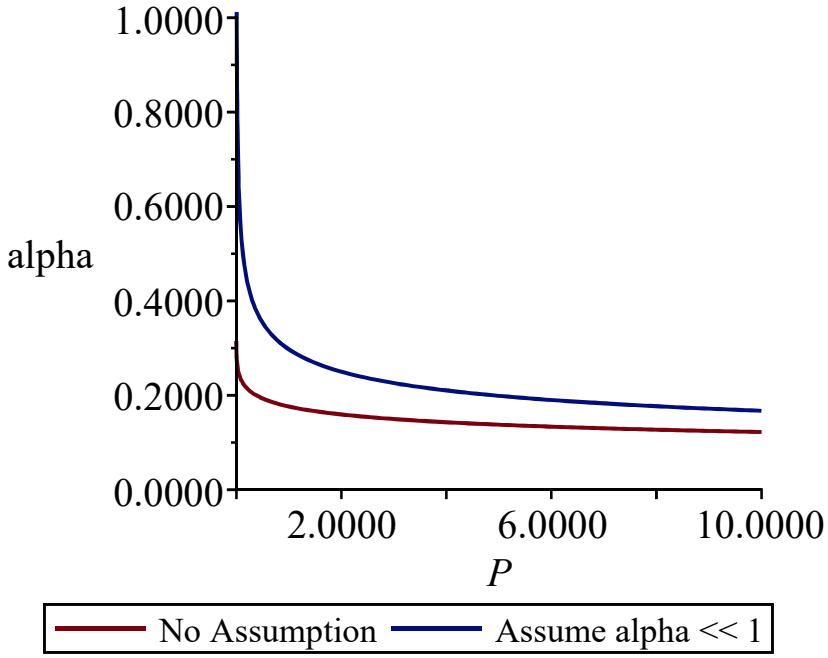
```
> eqS := lhs(eq) = rhs(eq)·(1 + alpha)·(1 − 3·alpha)^3; # by assuming
  alpha << 1
```

$$eqS := Kp = 256\,\alpha^4\,P \tag{2.4}$$

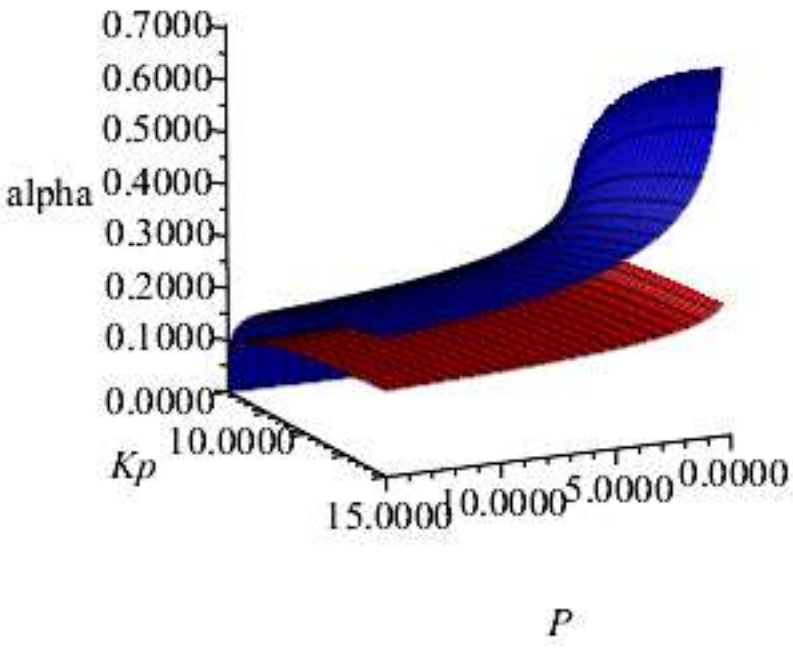
```
> alphaF := solve(eq, alpha, explicit )[3]: # solve for the real,
  positive solution for alphaF and alphaS
  alphaS := solve(eqS, alpha, explicit )[1]
```

$$alphaS := \frac{\left(\frac{Kp}{P}\right)^{1/4}}{4} \tag{2.5}$$

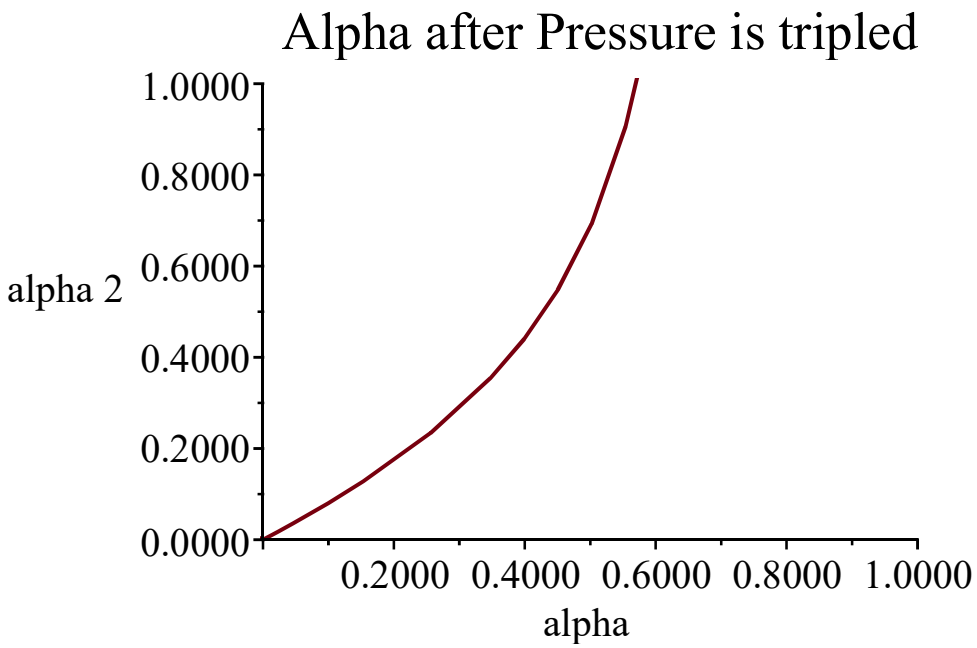
```
> plots[animate](plot, [[alphaF, alphaS], P], Kp = 0 ..2)
    # letting Kp vary, we plot both alphas
  # we can observe that alpha decreses as P increases, as per Le
    Chatelier's law.
```




```
> # for a more general idea, we can also make a 3 D plot; note
    that it is a mirror image of the plot above for easier
    visualization
  plot3d([alphaF(P, Kp), alphaS(P, Kp)], P = 0 ..15, Kp = 0 ..20, color
     = ["Red", "Blue"])
```



```
> α[2] := subs(P = 3·P, alphaF) : # solve for alpha when the pressure
  is tripled
> plots[animate](plot, [subs(Kp = rhs(eq), α[2]), alpha], P = 0 ..2)
    # letting P vary, we plot the alphas against each other
    (note that the relationship is not a fuction of P, P just
    has to be > 0)
```



xTHF	xW	gammaTHF	gammaW	P	yTHF	yW
0.0000	1.0000	20.5241	1.0000	3.1800	0.0000	1.0000
0.0010	0.9990	20.3322	1.0000	3.6175	0.1218	0.8782
0.0020	0.9980	20.1427	1.0000	4.0467	0.2157	0.7843
0.0030	0.9970	19.9554	1.0000	4.4680	0.2904	0.7096
0.0040	0.9960	19.7703	1.0001	4.8813	0.3511	0.6489
0.0050	0.9950	19.5875	1.0001	5.2869	0.4015	0.5985
0.0060	0.9940	19.4068	1.0002	5.6849	0.4439	0.5561
0.0070	0.9930	19.2282	1.0002	6.0754	0.4801	0.5199
0.0080	0.9920	19.0518	1.0003	6.4586	0.5114	0.4886
0.0090	0.9910	18.8774	1.0004	6.8345	0.5387	0.4613
0.0100	0.9900	18.7051	1.0005	7.2034	0.5628	0.4372
0.0110	0.9890	18.5349	1.0006	7.5653	0.5841	0.4159
0.0120	0.9880	18.3666	1.0007	7.9203	0.6031	0.3969
0.0130	0.9870	18.2003	1.0008	8.2687	0.6201	0.3799
0.0140	0.9860	18.0359	1.0009	8.6104	0.6355	0.3645
0.0150	0.9850	17.8735	1.0010	8.9457	0.6495	0.3505
0.0160	0.9840	17.7129	1.0012	9.2747	0.6622	0.3378
0.0170	0.9830	17.5542	1.0013	9.5974	0.6739	0.3261
0.0180	0.9820	17.3974	1.0015	9.9139	0.6845	0.3155
0.0190	0.9810	17.2423	1.0017	10.2245	0.6944	0.3056
0.0200	0.9800	17.0891	1.0018	10.5291	0.7035	0.2965
0.0210	0.9790	16.9376	1.0020	10.8279	0.7119	0.2881
0.0220	0.9780	16.7879	1.0022	11.1210	0.7197	0.2803
0.0230	0.9770	16.6398	1.0024	11.4084	0.7270	0.2730
0.0240	0.9760	16.4935	1.0026	11.6904	0.7338	0.2662
0.0250	0.9750	16.3488	1.0029	11.9670	0.7402	0.2598
0.0260	0.9740	16.2058	1.0031	12.2382	0.7461	0.2539
0.0270	0.9730	16.0645	1.0033	12.5043	0.7517	0.2483
0.0280	0.9720	15.9247	1.0036	12.7652	0.7570	0.2430
0.0290	0.9710	15.7865	1.0038	13.0210	0.7620	0.2380
0.0300	0.9700	15.6499	1.0041	13.2719	0.7666	0.2334
0.0310	0.9690	15.5148	1.0044	13.5180	0.7711	0.2289
0.0320	0.9680	15.3812	1.0047	13.7593	0.7752	0.2248
0.0330	0.9670	15.2491	1.0050	13.9958	0.7792	0.2208
0.0340	0.9660	15.1186	1.0053	14.2278	0.7830	0.2170
0.0350	0.9650	14.9894	1.0056	14.4553	0.7865	0.2135
0.0360	0.9640	14.8618	1.0059	14.6783	0.7899	0.2101
0.0370	0.9630	14.7355	1.0062	14.8969	0.7932	0.2068
0.0380	0.9620	14.6106	1.0065	15.1113	0.7962	0.2038
0.0390	0.9610	14.4872	1.0069	15.3214	0.7992	0.2008
0.0400	0.9600	14.3651	1.0072	15.5274	0.8020	0.1980
0.0410	0.9590	14.2443	1.0076	15.7293	0.8047	0.1953
0.0420	0.9580	14.1249	1.0080	15.9272	0.8072	0.1928
0.0430	0.9570	14.0068	1.0083	16.1212	0.8097	0.1903
0.0440	0.9560	13.8900	1.0087	16.3114	0.8120	0.1880

xTHF	xW	gammaTHF	gammaW	P	yTHF	yW
0.0450	0.9550	13.7745	1.0091	16.4977	0.8143	0.1857
0.0460	0.9540	13.6603	1.0095	16.6803	0.8164	0.1836
0.0470	0.9530	13.5473	1.0099	16.8593	0.8185	0.1815
0.0480	0.9520	13.4355	1.0103	17.0347	0.8205	0.1795
0.0490	0.9510	13.3250	1.0108	17.2065	0.8224	0.1776
0.0501	0.9499	13.2156	1.0112	17.3749	0.8242	0.1758
0.0511	0.9489	13.1075	1.0116	17.5399	0.8260	0.1740
0.0521	0.9479	13.0005	1.0121	17.7015	0.8276	0.1724
0.0531	0.9469	12.8946	1.0126	17.8598	0.8293	0.1707
0.0541	0.9459	12.7899	1.0130	18.0149	0.8308	0.1692
0.0551	0.9449	12.6864	1.0135	18.1669	0.8324	0.1676
0.0561	0.9439	12.5839	1.0140	18.3157	0.8338	0.1662
0.0571	0.9429	12.4825	1.0145	18.4615	0.8352	0.1648
0.0581	0.9419	12.3823	1.0150	18.6042	0.8366	0.1634
0.0591	0.9409	12.2831	1.0155	18.7440	0.8379	0.1621
0.0601	0.9399	12.1849	1.0160	18.8809	0.8392	0.1608
0.0611	0.9389	12.0878	1.0165	19.0149	0.8404	0.1596
0.0621	0.9379	11.9917	1.0171	19.1461	0.8416	0.1584
0.0631	0.9369	11.8967	1.0176	19.2746	0.8427	0.1573
0.0641	0.9359	11.8026	1.0181	19.4003	0.8438	0.1562
0.0651	0.9349	11.7096	1.0187	19.5235	0.8449	0.1551
0.0661	0.9339	11.6175	1.0193	19.6439	0.8459	0.1541
0.0671	0.9329	11.5264	1.0198	19.7619	0.8469	0.1531
0.0681	0.9319	11.4362	1.0204	19.8773	0.8479	0.1521
0.0691	0.9309	11.3470	1.0210	19.9902	0.8488	0.1512
0.0701	0.9299	11.2587	1.0216	20.1007	0.8497	0.1503
0.0711	0.9289	11.1713	1.0222	20.2088	0.8506	0.1494
0.0721	0.9279	11.0849	1.0228	20.3146	0.8514	0.1486
0.0731	0.9269	10.9993	1.0234	20.4180	0.8523	0.1477
0.0741	0.9259	10.9147	1.0241	20.5192	0.8530	0.1470
0.0751	0.9249	10.8309	1.0247	20.6182	0.8538	0.1462
0.0761	0.9239	10.7480	1.0253	20.7149	0.8546	0.1454
0.0771	0.9229	10.6659	1.0260	20.8095	0.8553	0.1447
0.0781	0.9219	10.5846	1.0267	20.9021	0.8560	0.1440
0.0791	0.9209	10.5043	1.0273	20.9925	0.8567	0.1433
0.0801	0.9199	10.4247	1.0280	21.0809	0.8573	0.1427
0.0811	0.9189	10.3459	1.0287	21.1673	0.8580	0.1420
0.0821	0.9179	10.2680	1.0294	21.2517	0.8586	0.1414
0.0831	0.9169	10.1908	1.0301	21.3342	0.8592	0.1408
0.0841	0.9159	10.1144	1.0308	21.4148	0.8598	0.1402
0.0851	0.9149	10.0388	1.0315	21.4935	0.8604	0.1396
0.0861	0.9139	9.9640	1.0322	21.5704	0.8609	0.1391
0.0871	0.9129	9.8899	1.0330	21.6455	0.8615	0.1385
0.0881	0.9119	9.8166	1.0337	21.7188	0.8620	0.1380
0.0891	0.9109	9.7440	1.0344	21.7904	0.8625	0.1375

xTHF	xW	gammaTHF	gammaW	P	yTHF	yW
0.0901	0.9099	9.6721	1.0352	21.8603	0.8630	0.1370
0.0911	0.9089	9.6010	1.0360	21.9285	0.8635	0.1365
0.0921	0.9079	9.5305	1.0367	21.9951	0.8639	0.1361
0.0931	0.9069	9.4608	1.0375	22.0601	0.8644	0.1356
0.0941	0.9059	9.3918	1.0383	22.1234	0.8648	0.1352
0.0951	0.9049	9.3234	1.0391	22.1852	0.8652	0.1348
0.0961	0.9039	9.2558	1.0399	22.2455	0.8656	0.1344
0.0971	0.9029	9.1888	1.0407	22.3042	0.8660	0.1340
0.0981	0.9019	9.1224	1.0415	22.3615	0.8664	0.1336
0.0991	0.9009	9.0568	1.0423	22.4174	0.8668	0.1332
0.1001	0.8999	8.9917	1.0432	22.4718	0.8672	0.1328
0.1011	0.8989	8.9273	1.0440	22.5248	0.8675	0.1325
0.1021	0.8979	8.8636	1.0448	22.5764	0.8679	0.1321
0.1031	0.8969	8.8004	1.0457	22.6267	0.8682	0.1318
0.1041	0.8959	8.7379	1.0466	22.6756	0.8685	0.1315
0.1051	0.8949	8.6760	1.0474	22.7232	0.8688	0.1312
0.1061	0.8939	8.6147	1.0483	22.7696	0.8691	0.1309
0.1071	0.8929	8.5540	1.0492	22.8147	0.8694	0.1306
0.1081	0.8919	8.4939	1.0501	22.8586	0.8697	0.1303
0.1091	0.8909	8.4344	1.0510	22.9012	0.8700	0.1300
0.1101	0.8899	8.3754	1.0519	22.9427	0.8703	0.1297
0.1111	0.8889	8.3170	1.0528	22.9830	0.8705	0.1295
0.1121	0.8879	8.2592	1.0537	23.0221	0.8708	0.1292
0.1131	0.8869	8.2019	1.0547	23.0601	0.8710	0.1290
0.1141	0.8859	8.1452	1.0556	23.0970	0.8713	0.1287
0.1151	0.8849	8.0890	1.0565	23.1328	0.8715	0.1285
0.1161	0.8839	8.0334	1.0575	23.1676	0.8717	0.1283
0.1171	0.8829	7.9783	1.0585	23.2013	0.8719	0.1281
0.1181	0.8819	7.9237	1.0594	23.2339	0.8721	0.1279
0.1191	0.8809	7.8696	1.0604	23.2656	0.8723	0.1277
0.1201	0.8799	7.8161	1.0614	23.2962	0.8725	0.1275
0.1211	0.8789	7.7630	1.0624	23.3259	0.8727	0.1273
0.1221	0.8779	7.7105	1.0634	23.3547	0.8729	0.1271
0.1231	0.8769	7.6584	1.0644	23.3824	0.8731	0.1269
0.1241	0.8759	7.6069	1.0654	23.4093	0.8732	0.1268
0.1251	0.8749	7.5558	1.0664	23.4352	0.8734	0.1266
0.1261	0.8739	7.5052	1.0675	23.4603	0.8736	0.1264
0.1271	0.8729	7.4551	1.0685	23.4845	0.8737	0.1263
0.1281	0.8719	7.4054	1.0695	23.5078	0.8739	0.1261
0.1291	0.8709	7.3562	1.0706	23.5303	0.8740	0.1260
0.1301	0.8699	7.3075	1.0716	23.5520	0.8741	0.1259
0.1311	0.8689	7.2592	1.0727	23.5728	0.8743	0.1257
0.1321	0.8679	7.2114	1.0738	23.5929	0.8744	0.1256
0.1331	0.8669	7.1640	1.0749	23.6122	0.8745	0.1255
0.1341	0.8659	7.1171	1.0760	23.6307	0.8746	0.1254

xTHF	xW	gammaTHF	gammaW	P	yTHF	yW
0.1351	0.8649	7.0706	1.0771	23.6484	0.8747	0.1253
0.1361	0.8639	7.0245	1.0782	23.6654	0.8748	0.1252
0.1371	0.8629	6.9788	1.0793	23.6817	0.8749	0.1251
0.1381	0.8619	6.9336	1.0804	23.6973	0.8750	0.1250
0.1391	0.8609	6.8888	1.0815	23.7122	0.8751	0.1249
0.1401	0.8599	6.8443	1.0827	23.7263	0.8752	0.1248
0.1411	0.8589	6.8003	1.0838	23.7399	0.8753	0.1247
0.1421	0.8579	6.7567	1.0850	23.7527	0.8754	0.1246
0.1431	0.8569	6.7135	1.0861	23.7649	0.8755	0.1245
0.1441	0.8559	6.6707	1.0873	23.7765	0.8755	0.1245
0.1451	0.8549	6.6282	1.0885	23.7874	0.8756	0.1244
0.1461	0.8539	6.5862	1.0896	23.7978	0.8757	0.1243
0.1471	0.8529	6.5445	1.0908	23.8075	0.8757	0.1243
0.1481	0.8519	6.5032	1.0920	23.8167	0.8758	0.1242
0.1491	0.8509	6.4623	1.0932	23.8252	0.8758	0.1242
0.1502	0.8498	6.4217	1.0944	23.8332	0.8759	0.1241
0.1512	0.8488	6.3815	1.0957	23.8407	0.8759	0.1241
0.1522	0.8478	6.3417	1.0969	23.8476	0.8760	0.1240
0.1532	0.8468	6.3022	1.0981	23.8540	0.8760	0.1240
0.1542	0.8458	6.2631	1.0994	23.8598	0.8761	0.1239
0.1552	0.8448	6.2243	1.1006	23.8651	0.8761	0.1239
0.1562	0.8438	6.1859	1.1019	23.8700	0.8761	0.1239
0.1572	0.8428	6.1478	1.1031	23.8743	0.8762	0.1238
0.1582	0.8418	6.1101	1.1044	23.8782	0.8762	0.1238
0.1592	0.8408	6.0726	1.1057	23.8815	0.8762	0.1238
0.1602	0.8398	6.0355	1.1070	23.8844	0.8762	0.1238
0.1612	0.8388	5.9988	1.1083	23.8869	0.8762	0.1238
0.1622	0.8378	5.9623	1.1096	23.8889	0.8762	0.1238
0.1632	0.8368	5.9262	1.1109	23.8904	0.8763	0.1237
0.1642	0.8358	5.8904	1.1122	23.8916	0.8763	0.1237
0.1652	0.8348	5.8549	1.1135	23.8923	0.8763	0.1237
0.1662	0.8338	5.8197	1.1149	23.8926	0.8763	0.1237
0.1672	0.8328	5.7848	1.1162	23.8925	0.8763	0.1237
0.1682	0.8318	5.7503	1.1176	23.8920	0.8763	0.1237
0.1692	0.8308	5.7160	1.1189	23.8911	0.8763	0.1237
0.1702	0.8298	5.6820	1.1203	23.8898	0.8763	0.1237
0.1712	0.8288	5.6483	1.1217	23.8882	0.8762	0.1238
0.1722	0.8278	5.6149	1.1230	23.8862	0.8762	0.1238
0.1732	0.8268	5.5818	1.1244	23.8838	0.8762	0.1238
0.1742	0.8258	5.5490	1.1258	23.8811	0.8762	0.1238
0.1752	0.8248	5.5165	1.1272	23.8780	0.8762	0.1238
0.1762	0.8238	5.4842	1.1286	23.8747	0.8762	0.1238
0.1772	0.8228	5.4522	1.1300	23.8709	0.8761	0.1239
0.1782	0.8218	5.4205	1.1315	23.8669	0.8761	0.1239
0.1792	0.8208	5.3891	1.1329	23.8625	0.8761	0.1239

xTHF	xW	gammaTHF	gammaW	P	yTHF	yW
0.1802	0.8198	5.3579	1.1343	23.8579	0.8760	0.1240
0.1812	0.8188	5.3270	1.1358	23.8529	0.8760	0.1240
0.1822	0.8178	5.2963	1.1372	23.8476	0.8760	0.1240
0.1832	0.8168	5.2659	1.1387	23.8421	0.8759	0.1241
0.1842	0.8158	5.2358	1.1402	23.8362	0.8759	0.1241
0.1852	0.8148	5.2059	1.1417	23.8301	0.8759	0.1241
0.1862	0.8138	5.1763	1.1431	23.8237	0.8758	0.1242
0.1872	0.8128	5.1469	1.1446	23.8171	0.8758	0.1242
0.1882	0.8118	5.1178	1.1461	23.8102	0.8757	0.1243
0.1892	0.8108	5.0889	1.1477	23.8030	0.8757	0.1243
0.1902	0.8098	5.0603	1.1492	23.7956	0.8756	0.1244
0.1912	0.8088	5.0319	1.1507	23.7879	0.8756	0.1244
0.1922	0.8078	5.0037	1.1522	23.7801	0.8755	0.1245
0.1932	0.8068	4.9758	1.1538	23.7719	0.8755	0.1245
0.1942	0.8058	4.9481	1.1553	23.7636	0.8754	0.1246
0.1952	0.8048	4.9206	1.1569	23.7550	0.8754	0.1246
0.1962	0.8038	4.8933	1.1584	23.7462	0.8753	0.1247
0.1972	0.8028	4.8663	1.1600	23.7373	0.8752	0.1248
0.1982	0.8018	4.8395	1.1616	23.7281	0.8752	0.1248
0.1992	0.8008	4.8129	1.1632	23.7187	0.8751	0.1249
0.2002	0.7998	4.7866	1.1648	23.7091	0.8751	0.1249
0.2012	0.7988	4.7604	1.1664	23.6993	0.8750	0.1250
0.2022	0.7978	4.7345	1.1680	23.6893	0.8749	0.1251
0.2032	0.7968	4.7088	1.1696	23.6792	0.8748	0.1252
0.2042	0.7958	4.6833	1.1712	23.6688	0.8748	0.1252
0.2052	0.7948	4.6580	1.1729	23.6583	0.8747	0.1253
0.2062	0.7938	4.6329	1.1745	23.6477	0.8746	0.1254
0.2072	0.7928	4.6080	1.1762	23.6368	0.8746	0.1254
0.2082	0.7918	4.5833	1.1778	23.6258	0.8745	0.1255
0.2092	0.7908	4.5588	1.1795	23.6147	0.8744	0.1256
0.2102	0.7898	4.5345	1.1812	23.6034	0.8743	0.1257
0.2112	0.7888	4.5104	1.1828	23.5919	0.8742	0.1258
0.2122	0.7878	4.4865	1.1845	23.5803	0.8742	0.1258
0.2132	0.7868	4.4628	1.1862	23.5686	0.8741	0.1259
0.2142	0.7858	4.4393	1.1879	23.5567	0.8740	0.1260
0.2152	0.7848	4.4160	1.1896	23.5447	0.8739	0.1261
0.2162	0.7838	4.3928	1.1914	23.5325	0.8738	0.1262
0.2172	0.7828	4.3699	1.1931	23.5203	0.8737	0.1263
0.2182	0.7818	4.3471	1.1948	23.5079	0.8736	0.1264
0.2192	0.7808	4.3245	1.1966	23.4954	0.8736	0.1264
0.2202	0.7798	4.3021	1.1983	23.4828	0.8735	0.1265
0.2212	0.7788	4.2798	1.2001	23.4700	0.8734	0.1266
0.2222	0.7778	4.2578	1.2018	23.4572	0.8733	0.1267
0.2232	0.7768	4.2359	1.2036	23.4442	0.8732	0.1268
0.2242	0.7758	4.2142	1.2054	23.4312	0.8731	0.1269

xTHF	xW	gammaTHF	gammaW	P	yTHF	yW
0.2252	0.7748	4.1926	1.2072	23.4181	0.8730	0.1270
0.2262	0.7738	4.1712	1.2090	23.4048	0.8729	0.1271
0.2272	0.7728	4.1500	1.2108	23.3915	0.8728	0.1272
0.2282	0.7718	4.1290	1.2126	23.3780	0.8727	0.1273
0.2292	0.7708	4.1081	1.2144	23.3645	0.8726	0.1274
0.2302	0.7698	4.0874	1.2163	23.3509	0.8725	0.1275
0.2312	0.7688	4.0669	1.2181	23.3372	0.8724	0.1276
0.2322	0.7678	4.0465	1.2200	23.3235	0.8723	0.1277
0.2332	0.7668	4.0262	1.2218	23.3096	0.8722	0.1278
0.2342	0.7658	4.0062	1.2237	23.2957	0.8721	0.1279
0.2352	0.7648	3.9862	1.2256	23.2818	0.8720	0.1280
0.2362	0.7638	3.9665	1.2274	23.2677	0.8719	0.1281
0.2372	0.7628	3.9468	1.2293	23.2536	0.8718	0.1282
0.2382	0.7618	3.9274	1.2312	23.2394	0.8717	0.1283
0.2392	0.7608	3.9081	1.2331	23.2252	0.8716	0.1284
0.2402	0.7598	3.8889	1.2350	23.2109	0.8714	0.1286
0.2412	0.7588	3.8699	1.2370	23.1965	0.8713	0.1287
0.2422	0.7578	3.8510	1.2389	23.1821	0.8712	0.1288
0.2432	0.7568	3.8323	1.2408	23.1677	0.8711	0.1289
0.2442	0.7558	3.8137	1.2428	23.1532	0.8710	0.1290
0.2452	0.7548	3.7952	1.2447	23.1386	0.8709	0.1291
0.2462	0.7538	3.7769	1.2467	23.1240	0.8708	0.1292
0.2472	0.7528	3.7588	1.2487	23.1094	0.8707	0.1293
0.2482	0.7518	3.7408	1.2506	23.0947	0.8705	0.1295
0.2492	0.7508	3.7229	1.2526	23.0800	0.8704	0.1296
0.2503	0.7497	3.7051	1.2546	23.0652	0.8703	0.1297
0.2513	0.7487	3.6875	1.2566	23.0505	0.8702	0.1298
0.2523	0.7477	3.6700	1.2586	23.0356	0.8701	0.1299
0.2533	0.7467	3.6526	1.2607	23.0208	0.8700	0.1300
0.2543	0.7457	3.6354	1.2627	23.0059	0.8698	0.1302
0.2553	0.7447	3.6183	1.2647	22.9910	0.8697	0.1303
0.2563	0.7437	3.6013	1.2668	22.9761	0.8696	0.1304
0.2573	0.7427	3.5845	1.2688	22.9611	0.8695	0.1305
0.2583	0.7417	3.5678	1.2709	22.9462	0.8694	0.1306
0.2593	0.7407	3.5512	1.2730	22.9312	0.8692	0.1308
0.2603	0.7397	3.5347	1.2750	22.9162	0.8691	0.1309
0.2613	0.7387	3.5184	1.2771	22.9011	0.8690	0.1310
0.2623	0.7377	3.5021	1.2792	22.8861	0.8689	0.1311
0.2633	0.7367	3.4860	1.2813	22.8710	0.8687	0.1313
0.2643	0.7357	3.4700	1.2834	22.8560	0.8686	0.1314
0.2653	0.7347	3.4542	1.2856	22.8409	0.8685	0.1315
0.2663	0.7337	3.4384	1.2877	22.8258	0.8684	0.1316
0.2673	0.7327	3.4228	1.2898	22.8107	0.8682	0.1318
0.2683	0.7317	3.4073	1.2920	22.7957	0.8681	0.1319
0.2693	0.7307	3.3918	1.2941	22.7806	0.8680	0.1320

xTHF	xW	gammaTHF	gammaW	P	yTHF	yW
0.2703	0.7297	3.3766	1.2963	22.7655	0.8679	0.1321
0.2713	0.7287	3.3614	1.2985	22.7504	0.8677	0.1323
0.2723	0.7277	3.3463	1.3006	22.7353	0.8676	0.1324
0.2733	0.7267	3.3313	1.3028	22.7202	0.8675	0.1325
0.2743	0.7257	3.3165	1.3050	22.7051	0.8674	0.1326
0.2753	0.7247	3.3017	1.3072	22.6900	0.8672	0.1328
0.2763	0.7237	3.2871	1.3094	22.6749	0.8671	0.1329
0.2773	0.7227	3.2726	1.3117	22.6598	0.8670	0.1330
0.2783	0.7217	3.2581	1.3139	22.6448	0.8668	0.1332
0.2793	0.7207	3.2438	1.3161	22.6297	0.8667	0.1333
0.2803	0.7197	3.2296	1.3184	22.6147	0.8666	0.1334
0.2813	0.7187	3.2155	1.3206	22.5997	0.8664	0.1336
0.2823	0.7177	3.2014	1.3229	22.5846	0.8663	0.1337
0.2833	0.7167	3.1875	1.3252	22.5696	0.8662	0.1338
0.2843	0.7157	3.1737	1.3275	22.5546	0.8660	0.1340
0.2853	0.7147	3.1600	1.3298	22.5397	0.8659	0.1341
0.2863	0.7137	3.1464	1.3321	22.5247	0.8658	0.1342
0.2873	0.7127	3.1328	1.3344	22.5098	0.8656	0.1344
0.2883	0.7117	3.1194	1.3367	22.4949	0.8655	0.1345
0.2893	0.7107	3.1061	1.3390	22.4800	0.8654	0.1346
0.2903	0.7097	3.0928	1.3413	22.4651	0.8652	0.1348
0.2913	0.7087	3.0797	1.3437	22.4503	0.8651	0.1349
0.2923	0.7077	3.0666	1.3460	22.4354	0.8650	0.1350
0.2933	0.7067	3.0537	1.3484	22.4206	0.8648	0.1352
0.2943	0.7057	3.0408	1.3508	22.4058	0.8647	0.1353
0.2953	0.7047	3.0280	1.3532	22.3911	0.8646	0.1354
0.2963	0.7037	3.0154	1.3555	22.3764	0.8644	0.1356
0.2973	0.7027	3.0028	1.3579	22.3617	0.8643	0.1357
0.2983	0.7017	2.9903	1.3603	22.3470	0.8642	0.1358
0.2993	0.7007	2.9778	1.3628	22.3324	0.8640	0.1360
0.3003	0.6997	2.9655	1.3652	22.3178	0.8639	0.1361
0.3013	0.6987	2.9532	1.3676	22.3032	0.8638	0.1362
0.3023	0.6977	2.9411	1.3701	22.2886	0.8636	0.1364
0.3033	0.6967	2.9290	1.3725	22.2741	0.8635	0.1365
0.3043	0.6957	2.9170	1.3750	22.2597	0.8633	0.1367
0.3053	0.6947	2.9051	1.3774	22.2452	0.8632	0.1368
0.3063	0.6937	2.8933	1.3799	22.2308	0.8631	0.1369
0.3073	0.6927	2.8815	1.3824	22.2164	0.8629	0.1371
0.3083	0.6917	2.8699	1.3849	22.2021	0.8628	0.1372
0.3093	0.6907	2.8583	1.3874	22.1878	0.8627	0.1373
0.3103	0.6897	2.8468	1.3899	22.1736	0.8625	0.1375
0.3113	0.6887	2.8353	1.3924	22.1593	0.8624	0.1376
0.3123	0.6877	2.8240	1.3950	22.1452	0.8622	0.1378
0.3133	0.6867	2.8127	1.3975	22.1310	0.8621	0.1379
0.3143	0.6857	2.8015	1.4001	22.1169	0.8620	0.1380

xTHF	xW	gammaTHF	gammaW	P	yTHF	yW
0.3153	0.6847	2.7904	1.4026	22.1028	0.8618	0.1382
0.3163	0.6837	2.7794	1.4052	22.0888	0.8617	0.1383
0.3173	0.6827	2.7684	1.4078	22.0749	0.8616	0.1384
0.3183	0.6817	2.7575	1.4104	22.0609	0.8614	0.1386
0.3193	0.6807	2.7467	1.4130	22.0470	0.8613	0.1387
0.3203	0.6797	2.7359	1.4156	22.0332	0.8611	0.1389
0.3213	0.6787	2.7253	1.4182	22.0194	0.8610	0.1390
0.3223	0.6777	2.7147	1.4208	22.0056	0.8609	0.1391
0.3233	0.6767	2.7041	1.4234	21.9919	0.8607	0.1393
0.3243	0.6757	2.6937	1.4261	21.9782	0.8606	0.1394
0.3253	0.6747	2.6833	1.4287	21.9646	0.8604	0.1396
0.3263	0.6737	2.6730	1.4314	21.9510	0.8603	0.1397
0.3273	0.6727	2.6627	1.4341	21.9375	0.8602	0.1398
0.3283	0.6717	2.6526	1.4368	21.9240	0.8600	0.1400
0.3293	0.6707	2.6425	1.4394	21.9106	0.8599	0.1401
0.3303	0.6697	2.6324	1.4421	21.8972	0.8597	0.1403
0.3313	0.6687	2.6224	1.4449	21.8839	0.8596	0.1404
0.3323	0.6677	2.6125	1.4476	21.8706	0.8595	0.1405
0.3333	0.6667	2.6027	1.4503	21.8574	0.8593	0.1407
0.3343	0.6657	2.5929	1.4530	21.8442	0.8592	0.1408
0.3353	0.6647	2.5832	1.4558	21.8311	0.8591	0.1409
0.3363	0.6637	2.5736	1.4585	21.8180	0.8589	0.1411
0.3373	0.6627	2.5640	1.4613	21.8049	0.8588	0.1412
0.3383	0.6617	2.5545	1.4641	21.7920	0.8586	0.1414
0.3393	0.6607	2.5450	1.4669	21.7790	0.8585	0.1415
0.3403	0.6597	2.5356	1.4697	21.7662	0.8584	0.1416
0.3413	0.6587	2.5263	1.4725	21.7533	0.8582	0.1418
0.3423	0.6577	2.5170	1.4753	21.7406	0.8581	0.1419
0.3433	0.6567	2.5078	1.4781	21.7279	0.8579	0.1421
0.3443	0.6557	2.4986	1.4809	21.7152	0.8578	0.1422
0.3453	0.6547	2.4895	1.4838	21.7026	0.8577	0.1423
0.3463	0.6537	2.4805	1.4866	21.6900	0.8575	0.1425
0.3473	0.6527	2.4715	1.4895	21.6775	0.8574	0.1426
0.3483	0.6517	2.4626	1.4924	21.6651	0.8573	0.1427
0.3493	0.6507	2.4538	1.4953	21.6527	0.8571	0.1429
0.3504	0.6496	2.4450	1.4982	21.6404	0.8570	0.1430
0.3514	0.6486	2.4362	1.5011	21.6281	0.8568	0.1432
0.3524	0.6476	2.4276	1.5040	21.6159	0.8567	0.1433
0.3534	0.6466	2.4189	1.5069	21.6037	0.8566	0.1434
0.3544	0.6456	2.4104	1.5098	21.5916	0.8564	0.1436
0.3554	0.6446	2.4018	1.5128	21.5795	0.8563	0.1437
0.3564	0.6436	2.3934	1.5157	21.5675	0.8562	0.1438
0.3574	0.6426	2.3850	1.5187	21.5556	0.8560	0.1440
0.3584	0.6416	2.3766	1.5216	21.5437	0.8559	0.1441
0.3594	0.6406	2.3683	1.5246	21.5319	0.8557	0.1443

xTHF	xW	gammaTHF	gammaW	P	yTHF	yW
0.3604	0.6396	2.3601	1.5276	21.5201	0.8556	0.1444
0.3614	0.6386	2.3519	1.5306	21.5084	0.8555	0.1445
0.3624	0.6376	2.3437	1.5336	21.4968	0.8553	0.1447
0.3634	0.6366	2.3357	1.5367	21.4852	0.8552	0.1448
0.3644	0.6356	2.3276	1.5397	21.4736	0.8551	0.1449
0.3654	0.6346	2.3196	1.5427	21.4622	0.8549	0.1451
0.3664	0.6336	2.3117	1.5458	21.4507	0.8548	0.1452
0.3674	0.6326	2.3038	1.5488	21.4394	0.8547	0.1453
0.3684	0.6316	2.2960	1.5519	21.4281	0.8545	0.1455
0.3694	0.6306	2.2882	1.5550	21.4168	0.8544	0.1456
0.3704	0.6296	2.2805	1.5581	21.4057	0.8543	0.1457
0.3714	0.6286	2.2728	1.5612	21.3945	0.8541	0.1459
0.3724	0.6276	2.2652	1.5643	21.3835	0.8540	0.1460
0.3734	0.6266	2.2576	1.5674	21.3725	0.8539	0.1461
0.3744	0.6256	2.2500	1.5706	21.3615	0.8537	0.1463
0.3754	0.6246	2.2425	1.5737	21.3506	0.8536	0.1464
0.3764	0.6236	2.2351	1.5769	21.3398	0.8535	0.1465
0.3774	0.6226	2.2277	1.5800	21.3291	0.8533	0.1467
0.3784	0.6216	2.2203	1.5832	21.3184	0.8532	0.1468
0.3794	0.6206	2.2130	1.5864	21.3077	0.8531	0.1469
0.3804	0.6196	2.2058	1.5896	21.2971	0.8529	0.1471
0.3814	0.6186	2.1985	1.5928	21.2866	0.8528	0.1472
0.3824	0.6176	2.1914	1.5960	21.2761	0.8527	0.1473
0.3834	0.6166	2.1843	1.5993	21.2657	0.8525	0.1475
0.3844	0.6156	2.1772	1.6025	21.2554	0.8524	0.1476
0.3854	0.6146	2.1701	1.6057	21.2451	0.8523	0.1477
0.3864	0.6136	2.1631	1.6090	21.2349	0.8521	0.1479
0.3874	0.6126	2.1562	1.6123	21.2247	0.8520	0.1480
0.3884	0.6116	2.1493	1.6156	21.2146	0.8519	0.1481
0.3894	0.6106	2.1424	1.6188	21.2046	0.8518	0.1482
0.3904	0.6096	2.1356	1.6221	21.1946	0.8516	0.1484
0.3914	0.6086	2.1288	1.6255	21.1847	0.8515	0.1485
0.3924	0.6076	2.1221	1.6288	21.1749	0.8514	0.1486
0.3934	0.6066	2.1154	1.6321	21.1651	0.8512	0.1488
0.3944	0.6056	2.1087	1.6355	21.1553	0.8511	0.1489
0.3954	0.6046	2.1021	1.6388	21.1457	0.8510	0.1490
0.3964	0.6036	2.0955	1.6422	21.1360	0.8509	0.1491
0.3974	0.6026	2.0890	1.6456	21.1265	0.8507	0.1493
0.3984	0.6016	2.0825	1.6490	21.1170	0.8506	0.1494
0.3994	0.6006	2.0761	1.6524	21.1076	0.8505	0.1495
0.4004	0.5996	2.0697	1.6558	21.0982	0.8504	0.1496
0.4014	0.5986	2.0633	1.6592	21.0889	0.8502	0.1498
0.4024	0.5976	2.0569	1.6626	21.0797	0.8501	0.1499
0.4034	0.5966	2.0506	1.6661	21.0705	0.8500	0.1500
0.4044	0.5956	2.0444	1.6695	21.0614	0.8499	0.1501

xTHF	xW	gammaTHF	gammaW	P	yTHF	yW
0.4054	0.5946	2.0382	1.6730	21.0523	0.8497	0.1503
0.4064	0.5936	2.0320	1.6765	21.0433	0.8496	0.1504
0.4074	0.5926	2.0258	1.6799	21.0344	0.8495	0.1505
0.4084	0.5916	2.0197	1.6834	21.0255	0.8494	0.1506
0.4094	0.5906	2.0137	1.6870	21.0167	0.8493	0.1507
0.4104	0.5896	2.0076	1.6905	21.0079	0.8491	0.1509
0.4114	0.5886	2.0016	1.6940	20.9992	0.8490	0.1510
0.4124	0.5876	1.9957	1.6976	20.9906	0.8489	0.1511
0.4134	0.5866	1.9897	1.7011	20.9820	0.8488	0.1512
0.4144	0.5856	1.9838	1.7047	20.9735	0.8486	0.1514
0.4154	0.5846	1.9780	1.7083	20.9651	0.8485	0.1515
0.4164	0.5836	1.9722	1.7118	20.9567	0.8484	0.1516
0.4174	0.5826	1.9664	1.7154	20.9484	0.8483	0.1517
0.4184	0.5816	1.9606	1.7191	20.9401	0.8482	0.1518
0.4194	0.5806	1.9549	1.7227	20.9319	0.8481	0.1519
0.4204	0.5796	1.9492	1.7263	20.9238	0.8479	0.1521
0.4214	0.5786	1.9436	1.7300	20.9157	0.8478	0.1522
0.4224	0.5776	1.9380	1.7336	20.9077	0.8477	0.1523
0.4234	0.5766	1.9324	1.7373	20.8997	0.8476	0.1524
0.4244	0.5756	1.9268	1.7410	20.8918	0.8475	0.1525
0.4254	0.5746	1.9213	1.7446	20.8840	0.8474	0.1526
0.4264	0.5736	1.9158	1.7484	20.8762	0.8472	0.1528
0.4274	0.5726	1.9104	1.7521	20.8685	0.8471	0.1529
0.4284	0.5716	1.9050	1.7558	20.8608	0.8470	0.1530
0.4294	0.5706	1.8996	1.7595	20.8532	0.8469	0.1531
0.4304	0.5696	1.8942	1.7633	20.8457	0.8468	0.1532
0.4314	0.5686	1.8889	1.7670	20.8382	0.8467	0.1533
0.4324	0.5676	1.8836	1.7708	20.8308	0.8466	0.1534
0.4334	0.5666	1.8784	1.7746	20.8235	0.8465	0.1535
0.4344	0.5656	1.8731	1.7784	20.8162	0.8463	0.1537
0.4354	0.5646	1.8679	1.7822	20.8089	0.8462	0.1538
0.4364	0.5636	1.8628	1.7860	20.8018	0.8461	0.1539
0.4374	0.5626	1.8576	1.7899	20.7947	0.8460	0.1540
0.4384	0.5616	1.8525	1.7937	20.7876	0.8459	0.1541
0.4394	0.5606	1.8474	1.7975	20.7806	0.8458	0.1542
0.4404	0.5596	1.8424	1.8014	20.7737	0.8457	0.1543
0.4414	0.5586	1.8374	1.8053	20.7668	0.8456	0.1544
0.4424	0.5576	1.8324	1.8092	20.7600	0.8455	0.1545
0.4434	0.5566	1.8274	1.8131	20.7532	0.8454	0.1546
0.4444	0.5556	1.8225	1.8170	20.7465	0.8453	0.1547
0.4454	0.5546	1.8176	1.8209	20.7399	0.8452	0.1548
0.4464	0.5536	1.8127	1.8249	20.7333	0.8451	0.1549
0.4474	0.5526	1.8079	1.8288	20.7268	0.8450	0.1550
0.4484	0.5516	1.8031	1.8328	20.7203	0.8449	0.1551
0.4494	0.5506	1.7983	1.8368	20.7139	0.8448	0.1552

xTHF	xW	gammaTHF	gammaW	P	yTHF	yW
0.4505	0.5495	1.7935	1.8408	20.7076	0.8447	0.1553
0.4515	0.5485	1.7888	1.8448	20.7013	0.8446	0.1554
0.4525	0.5475	1.7841	1.8488	20.6951	0.8445	0.1555
0.4535	0.5465	1.7794	1.8528	20.6889	0.8444	0.1556
0.4545	0.5455	1.7747	1.8568	20.6828	0.8443	0.1557
0.4555	0.5445	1.7701	1.8609	20.6768	0.8442	0.1558
0.4565	0.5435	1.7655	1.8649	20.6708	0.8441	0.1559
0.4575	0.5425	1.7609	1.8690	20.6649	0.8440	0.1560
0.4585	0.5415	1.7564	1.8731	20.6590	0.8439	0.1561
0.4595	0.5405	1.7519	1.8772	20.6532	0.8438	0.1562
0.4605	0.5395	1.7474	1.8813	20.6474	0.8437	0.1563
0.4615	0.5385	1.7429	1.8854	20.6417	0.8436	0.1564
0.4625	0.5375	1.7385	1.8896	20.6361	0.8435	0.1565
0.4635	0.5365	1.7341	1.8937	20.6305	0.8434	0.1566
0.4645	0.5355	1.7297	1.8979	20.6250	0.8433	0.1567
0.4655	0.5345	1.7253	1.9021	20.6195	0.8432	0.1568
0.4665	0.5335	1.7210	1.9062	20.6141	0.8431	0.1569
0.4675	0.5325	1.7166	1.9104	20.6087	0.8430	0.1570
0.4685	0.5315	1.7123	1.9147	20.6034	0.8429	0.1571
0.4695	0.5305	1.7081	1.9189	20.5982	0.8428	0.1572
0.4705	0.5295	1.7038	1.9231	20.5930	0.8427	0.1573
0.4715	0.5285	1.6996	1.9274	20.5879	0.8427	0.1573
0.4725	0.5275	1.6954	1.9316	20.5828	0.8426	0.1574
0.4735	0.5265	1.6912	1.9359	20.5778	0.8425	0.1575
0.4745	0.5255	1.6871	1.9402	20.5728	0.8424	0.1576
0.4755	0.5245	1.6830	1.9445	20.5679	0.8423	0.1577
0.4765	0.5235	1.6789	1.9488	20.5631	0.8422	0.1578
0.4775	0.5225	1.6748	1.9531	20.5583	0.8421	0.1579
0.4785	0.5215	1.6707	1.9575	20.5535	0.8421	0.1579
0.4795	0.5205	1.6667	1.9618	20.5488	0.8420	0.1580
0.4805	0.5195	1.6627	1.9662	20.5442	0.8419	0.1581
0.4815	0.5185	1.6587	1.9706	20.5396	0.8418	0.1582
0.4825	0.5175	1.6547	1.9750	20.5351	0.8417	0.1583
0.4835	0.5165	1.6508	1.9794	20.5307	0.8416	0.1584
0.4845	0.5155	1.6469	1.9838	20.5263	0.8416	0.1584
0.4855	0.5145	1.6430	1.9882	20.5219	0.8415	0.1585
0.4865	0.5135	1.6391	1.9927	20.5176	0.8414	0.1586
0.4875	0.5125	1.6352	1.9971	20.5134	0.8413	0.1587
0.4885	0.5115	1.6314	2.0016	20.5092	0.8413	0.1587
0.4895	0.5105	1.6276	2.0061	20.5051	0.8412	0.1588
0.4905	0.5095	1.6238	2.0106	20.5010	0.8411	0.1589
0.4915	0.5085	1.6200	2.0151	20.4970	0.8410	0.1590
0.4925	0.5075	1.6163	2.0196	20.4930	0.8409	0.1591
0.4935	0.5065	1.6126	2.0242	20.4891	0.8409	0.1591
0.4945	0.5055	1.6088	2.0287	20.4852	0.8408	0.1592

xTHF	xW	gammaTHF	gammaW	P	yTHF	yW
0.4955	0.5045	1.6052	2.0333	20.4814	0.8407	0.1593
0.4965	0.5035	1.6015	2.0379	20.4777	0.8407	0.1593
0.4975	0.5025	1.5979	2.0425	20.4739	0.8406	0.1594
0.4985	0.5015	1.5942	2.0471	20.4703	0.8405	0.1595
0.4995	0.5005	1.5906	2.0517	20.4667	0.8405	0.1595
0.5005	0.4995	1.5870	2.0563	20.4632	0.8404	0.1596
0.5015	0.4985	1.5835	2.0610	20.4597	0.8403	0.1597
0.5025	0.4975	1.5799	2.0656	20.4562	0.8402	0.1598
0.5035	0.4965	1.5764	2.0703	20.4528	0.8402	0.1598
0.5045	0.4955	1.5729	2.0750	20.4495	0.8401	0.1599
0.5055	0.4945	1.5694	2.0797	20.4462	0.8401	0.1599
0.5065	0.4935	1.5659	2.0844	20.4430	0.8400	0.1600
0.5075	0.4925	1.5625	2.0892	20.4398	0.8399	0.1601
0.5085	0.4915	1.5591	2.0939	20.4367	0.8399	0.1601
0.5095	0.4905	1.5557	2.0987	20.4336	0.8398	0.1602
0.5105	0.4895	1.5523	2.1034	20.4306	0.8397	0.1603
0.5115	0.4885	1.5489	2.1082	20.4276	0.8397	0.1603
0.5125	0.4875	1.5455	2.1130	20.4247	0.8396	0.1604
0.5135	0.4865	1.5422	2.1178	20.4218	0.8396	0.1604
0.5145	0.4855	1.5389	2.1227	20.4190	0.8395	0.1605
0.5155	0.4845	1.5356	2.1275	20.4162	0.8395	0.1605
0.5165	0.4835	1.5323	2.1324	20.4135	0.8394	0.1606
0.5175	0.4825	1.5290	2.1372	20.4109	0.8393	0.1607
0.5185	0.4815	1.5258	2.1421	20.4082	0.8393	0.1607
0.5195	0.4805	1.5226	2.1470	20.4057	0.8392	0.1608
0.5205	0.4795	1.5194	2.1519	20.4032	0.8392	0.1608
0.5215	0.4785	1.5162	2.1569	20.4007	0.8391	0.1609
0.5225	0.4775	1.5130	2.1618	20.3983	0.8391	0.1609
0.5235	0.4765	1.5098	2.1668	20.3959	0.8390	0.1610
0.5245	0.4755	1.5067	2.1717	20.3936	0.8390	0.1610
0.5255	0.4745	1.5036	2.1767	20.3913	0.8389	0.1611
0.5265	0.4735	1.5005	2.1817	20.3891	0.8389	0.1611
0.5275	0.4725	1.4974	2.1867	20.3869	0.8388	0.1612
0.5285	0.4715	1.4943	2.1918	20.3848	0.8388	0.1612
0.5295	0.4705	1.4912	2.1968	20.3827	0.8388	0.1612
0.5305	0.4695	1.4882	2.2019	20.3807	0.8387	0.1613
0.5315	0.4685	1.4852	2.2070	20.3787	0.8387	0.1613
0.5325	0.4675	1.4822	2.2120	20.3768	0.8386	0.1614
0.5335	0.4665	1.4792	2.2171	20.3749	0.8386	0.1614
0.5345	0.4655	1.4762	2.2223	20.3731	0.8385	0.1615
0.5355	0.4645	1.4733	2.2274	20.3713	0.8385	0.1615
0.5365	0.4635	1.4703	2.2326	20.3695	0.8385	0.1615
0.5375	0.4625	1.4674	2.2377	20.3678	0.8384	0.1616
0.5385	0.4615	1.4645	2.2429	20.3662	0.8384	0.1616
0.5395	0.4605	1.4616	2.2481	20.3646	0.8384	0.1616

xTHF	xW	gammaTHF	gammaW	P	yTHF	yW
0.5405	0.4595	1.4587	2.2533	20.3631	0.8383	0.1617
0.5415	0.4585	1.4558	2.2585	20.3615	0.8383	0.1617
0.5425	0.4575	1.4530	2.2638	20.3601	0.8383	0.1617
0.5435	0.4565	1.4502	2.2690	20.3587	0.8382	0.1618
0.5445	0.4555	1.4473	2.2743	20.3573	0.8382	0.1618
0.5455	0.4545	1.4445	2.2796	20.3560	0.8382	0.1618
0.5465	0.4535	1.4418	2.2849	20.3547	0.8381	0.1619
0.5475	0.4525	1.4390	2.2902	20.3535	0.8381	0.1619
0.5485	0.4515	1.4362	2.2955	20.3523	0.8381	0.1619
0.5495	0.4505	1.4335	2.3009	20.3512	0.8381	0.1619
0.5506	0.4494	1.4308	2.3062	20.3501	0.8380	0.1620
0.5516	0.4484	1.4281	2.3116	20.3490	0.8380	0.1620
0.5526	0.4474	1.4254	2.3170	20.3480	0.8380	0.1620
0.5536	0.4464	1.4227	2.3224	20.3471	0.8380	0.1620
0.5546	0.4454	1.4200	2.3278	20.3462	0.8379	0.1621
0.5556	0.4444	1.4174	2.3332	20.3453	0.8379	0.1621
0.5566	0.4434	1.4147	2.3387	20.3445	0.8379	0.1621
0.5576	0.4424	1.4121	2.3442	20.3437	0.8379	0.1621
0.5586	0.4414	1.4095	2.3497	20.3430	0.8379	0.1621
0.5596	0.4404	1.4069	2.3552	20.3423	0.8378	0.1622
0.5606	0.4394	1.4043	2.3607	20.3416	0.8378	0.1622
0.5616	0.4384	1.4017	2.3662	20.3410	0.8378	0.1622
0.5626	0.4374	1.3992	2.3718	20.3405	0.8378	0.1622
0.5636	0.4364	1.3966	2.3773	20.3399	0.8378	0.1622
0.5646	0.4354	1.3941	2.3829	20.3395	0.8378	0.1622
0.5656	0.4344	1.3916	2.3885	20.3390	0.8378	0.1622
0.5666	0.4334	1.3891	2.3941	20.3386	0.8378	0.1622
0.5676	0.4324	1.3866	2.3997	20.3383	0.8377	0.1623
0.5686	0.4314	1.3841	2.4054	20.3380	0.8377	0.1623
0.5696	0.4304	1.3817	2.4110	20.3377	0.8377	0.1623
0.5706	0.4294	1.3792	2.4167	20.3375	0.8377	0.1623
0.5716	0.4284	1.3768	2.4224	20.3373	0.8377	0.1623
0.5726	0.4274	1.3744	2.4281	20.3372	0.8377	0.1623
0.5736	0.4264	1.3720	2.4338	20.3371	0.8377	0.1623
0.5746	0.4254	1.3696	2.4396	20.3370	0.8377	0.1623
0.5756	0.4244	1.3672	2.4453	20.3370	0.8377	0.1623
0.5766	0.4234	1.3648	2.4511	20.3371	0.8377	0.1623
0.5776	0.4224	1.3624	2.4569	20.3371	0.8377	0.1623
0.5786	0.4214	1.3601	2.4627	20.3372	0.8377	0.1623
0.5796	0.4204	1.3578	2.4685	20.3374	0.8377	0.1623
0.5806	0.4194	1.3554	2.4744	20.3376	0.8377	0.1623
0.5816	0.4184	1.3531	2.4802	20.3378	0.8377	0.1623
0.5826	0.4174	1.3508	2.4861	20.3381	0.8377	0.1623
0.5836	0.4164	1.3486	2.4920	20.3384	0.8378	0.1622
0.5846	0.4154	1.3463	2.4979	20.3388	0.8378	0.1622

xTHF	xW	gammaTHF	gammaW	P	yTHF	yW
0.5856	0.4144	1.3440	2.5038	20.3391	0.8378	0.1622
0.5866	0.4134	1.3418	2.5097	20.3396	0.8378	0.1622
0.5876	0.4124	1.3395	2.5157	20.3400	0.8378	0.1622
0.5886	0.4114	1.3373	2.5217	20.3406	0.8378	0.1622
0.5896	0.4104	1.3351	2.5277	20.3411	0.8378	0.1622
0.5906	0.4094	1.3329	2.5337	20.3417	0.8378	0.1622
0.5916	0.4084	1.3307	2.5397	20.3423	0.8379	0.1621
0.5926	0.4074	1.3286	2.5457	20.3430	0.8379	0.1621
0.5936	0.4064	1.3264	2.5518	20.3437	0.8379	0.1621
0.5946	0.4054	1.3242	2.5579	20.3444	0.8379	0.1621
0.5956	0.4044	1.3221	2.5640	20.3452	0.8379	0.1621
0.5966	0.4034	1.3200	2.5701	20.3460	0.8380	0.1620
0.5976	0.4024	1.3178	2.5762	20.3469	0.8380	0.1620
0.5986	0.4014	1.3157	2.5823	20.3478	0.8380	0.1620
0.5996	0.4004	1.3136	2.5885	20.3487	0.8380	0.1620
0.6006	0.3994	1.3116	2.5947	20.3497	0.8381	0.1619
0.6016	0.3984	1.3095	2.6009	20.3507	0.8381	0.1619
0.6026	0.3974	1.3074	2.6071	20.3517	0.8381	0.1619
0.6036	0.3964	1.3054	2.6133	20.3528	0.8381	0.1619
0.6046	0.3954	1.3033	2.6195	20.3539	0.8382	0.1618
0.6056	0.3944	1.3013	2.6258	20.3550	0.8382	0.1618
0.6066	0.3934	1.2993	2.6321	20.3562	0.8382	0.1618
0.6076	0.3924	1.2973	2.6384	20.3574	0.8383	0.1617
0.6086	0.3914	1.2953	2.6447	20.3587	0.8383	0.1617
0.6096	0.3904	1.2933	2.6510	20.3600	0.8384	0.1616
0.6106	0.3894	1.2913	2.6574	20.3613	0.8384	0.1616
0.6116	0.3884	1.2893	2.6638	20.3627	0.8384	0.1616
0.6126	0.3874	1.2874	2.6702	20.3641	0.8385	0.1615
0.6136	0.3864	1.2854	2.6766	20.3655	0.8385	0.1615
0.6146	0.3854	1.2835	2.6830	20.3670	0.8386	0.1614
0.6156	0.3844	1.2816	2.6894	20.3685	0.8386	0.1614
0.6166	0.3834	1.2797	2.6959	20.3700	0.8386	0.1614
0.6176	0.3824	1.2778	2.7024	20.3716	0.8387	0.1613
0.6186	0.3814	1.2759	2.7089	20.3732	0.8387	0.1613
0.6196	0.3804	1.2740	2.7154	20.3748	0.8388	0.1612
0.6206	0.3794	1.2721	2.7219	20.3765	0.8388	0.1612
0.6216	0.3784	1.2703	2.7285	20.3782	0.8389	0.1611
0.6226	0.3774	1.2684	2.7350	20.3799	0.8389	0.1611
0.6236	0.3764	1.2666	2.7416	20.3817	0.8390	0.1610
0.6246	0.3754	1.2647	2.7482	20.3835	0.8391	0.1609
0.6256	0.3744	1.2629	2.7548	20.3853	0.8391	0.1609
0.6266	0.3734	1.2611	2.7615	20.3872	0.8392	0.1608
0.6276	0.3724	1.2593	2.7681	20.3891	0.8392	0.1608
0.6286	0.3714	1.2575	2.7748	20.3910	0.8393	0.1607
0.6296	0.3704	1.2557	2.7815	20.3930	0.8394	0.1606

xTHF	xW	gammaTHF	gammaW	P	yTHF	yW
0.6306	0.3694	1.2539	2.7882	20.3950	0.8394	0.1606
0.6316	0.3684	1.2522	2.7950	20.3970	0.8395	0.1605
0.6326	0.3674	1.2504	2.8017	20.3991	0.8395	0.1605
0.6336	0.3664	1.2486	2.8085	20.4012	0.8396	0.1604
0.6346	0.3654	1.2469	2.8153	20.4033	0.8397	0.1603
0.6356	0.3644	1.2452	2.8221	20.4055	0.8398	0.1602
0.6366	0.3634	1.2435	2.8289	20.4077	0.8398	0.1602
0.6376	0.3624	1.2418	2.8358	20.4099	0.8399	0.1601
0.6386	0.3614	1.2401	2.8426	20.4121	0.8400	0.1600
0.6396	0.3604	1.2384	2.8495	20.4144	0.8400	0.1600
0.6406	0.3594	1.2367	2.8564	20.4167	0.8401	0.1599
0.6416	0.3584	1.2350	2.8633	20.4190	0.8402	0.1598
0.6426	0.3574	1.2333	2.8703	20.4214	0.8403	0.1597
0.6436	0.3564	1.2317	2.8772	20.4238	0.8404	0.1596
0.6446	0.3554	1.2300	2.8842	20.4262	0.8404	0.1596
0.6456	0.3544	1.2284	2.8912	20.4287	0.8405	0.1595
0.6466	0.3534	1.2268	2.8982	20.4312	0.8406	0.1594
0.6476	0.3524	1.2251	2.9053	20.4337	0.8407	0.1593
0.6486	0.3514	1.2235	2.9123	20.4362	0.8408	0.1592
0.6496	0.3504	1.2219	2.9194	20.4388	0.8409	0.1591
0.6507	0.3493	1.2203	2.9265	20.4414	0.8410	0.1590
0.6517	0.3483	1.2187	2.9336	20.4440	0.8410	0.1590
0.6527	0.3473	1.2172	2.9407	20.4467	0.8411	0.1589
0.6537	0.3463	1.2156	2.9479	20.4494	0.8412	0.1588
0.6547	0.3453	1.2140	2.9551	20.4521	0.8413	0.1587
0.6557	0.3443	1.2125	2.9623	20.4548	0.8414	0.1586
0.6567	0.3433	1.2109	2.9695	20.4576	0.8415	0.1585
0.6577	0.3423	1.2094	2.9767	20.4604	0.8416	0.1584
0.6587	0.3413	1.2079	2.9840	20.4632	0.8417	0.1583
0.6597	0.3403	1.2064	2.9912	20.4661	0.8418	0.1582
0.6607	0.3393	1.2048	2.9985	20.4690	0.8419	0.1581
0.6617	0.3383	1.2033	3.0058	20.4719	0.8420	0.1580
0.6627	0.3373	1.2018	3.0132	20.4748	0.8421	0.1579
0.6637	0.3363	1.2004	3.0205	20.4777	0.8422	0.1578
0.6647	0.3353	1.1989	3.0279	20.4807	0.8423	0.1577
0.6657	0.3343	1.1974	3.0353	20.4837	0.8425	0.1575
0.6667	0.3333	1.1959	3.0427	20.4868	0.8426	0.1574
0.6677	0.3323	1.1945	3.0501	20.4898	0.8427	0.1573
0.6687	0.3313	1.1930	3.0576	20.4929	0.8428	0.1572
0.6697	0.3303	1.1916	3.0651	20.4960	0.8429	0.1571
0.6707	0.3293	1.1902	3.0725	20.4992	0.8430	0.1570
0.6717	0.3283	1.1888	3.0801	20.5023	0.8431	0.1569
0.6727	0.3273	1.1873	3.0876	20.5055	0.8433	0.1567
0.6737	0.3263	1.1859	3.0952	20.5087	0.8434	0.1566
0.6747	0.3253	1.1845	3.1027	20.5119	0.8435	0.1565

xTHF	xW	gammaTHF	gammaW	P	yTHF	yW
0.6757	0.3243	1.1831	3.1103	20.5152	0.8436	0.1564
0.6767	0.3233	1.1818	3.1179	20.5185	0.8438	0.1562
0.6777	0.3223	1.1804	3.1256	20.5218	0.8439	0.1561
0.6787	0.3213	1.1790	3.1332	20.5251	0.8440	0.1560
0.6797	0.3203	1.1776	3.1409	20.5285	0.8441	0.1559
0.6807	0.3193	1.1763	3.1486	20.5318	0.8443	0.1557
0.6817	0.3183	1.1749	3.1563	20.5352	0.8444	0.1556
0.6827	0.3173	1.1736	3.1641	20.5386	0.8445	0.1555
0.6837	0.3163	1.1723	3.1718	20.5421	0.8447	0.1553
0.6847	0.3153	1.1709	3.1796	20.5455	0.8448	0.1552
0.6857	0.3143	1.1696	3.1874	20.5490	0.8450	0.1550
0.6867	0.3133	1.1683	3.1953	20.5525	0.8451	0.1549
0.6877	0.3123	1.1670	3.2031	20.5561	0.8452	0.1548
0.6887	0.3113	1.1657	3.2110	20.5596	0.8454	0.1546
0.6897	0.3103	1.1644	3.2189	20.5632	0.8455	0.1545
0.6907	0.3093	1.1631	3.2268	20.5668	0.8457	0.1543
0.6917	0.3083	1.1619	3.2347	20.5704	0.8458	0.1542
0.6927	0.3073	1.1606	3.2427	20.5740	0.8460	0.1540
0.6937	0.3063	1.1593	3.2506	20.5777	0.8461	0.1539
0.6947	0.3053	1.1581	3.2586	20.5814	0.8463	0.1537
0.6957	0.3043	1.1568	3.2667	20.5851	0.8464	0.1536
0.6967	0.3033	1.1556	3.2747	20.5888	0.8466	0.1534
0.6977	0.3023	1.1544	3.2828	20.5925	0.8468	0.1532
0.6987	0.3013	1.1531	3.2908	20.5963	0.8469	0.1531
0.6997	0.3003	1.1519	3.2989	20.6001	0.8471	0.1529
0.7007	0.2993	1.1507	3.3071	20.6039	0.8472	0.1528
0.7017	0.2983	1.1495	3.3152	20.6077	0.8474	0.1526
0.7027	0.2973	1.1483	3.3234	20.6115	0.8476	0.1524
0.7037	0.2963	1.1471	3.3316	20.6154	0.8477	0.1523
0.7047	0.2953	1.1459	3.3398	20.6192	0.8479	0.1521
0.7057	0.2943	1.1447	3.3480	20.6231	0.8481	0.1519
0.7067	0.2933	1.1436	3.3563	20.6271	0.8482	0.1518
0.7077	0.2923	1.1424	3.3646	20.6310	0.8484	0.1516
0.7087	0.2913	1.1412	3.3729	20.6349	0.8486	0.1514
0.7097	0.2903	1.1401	3.3812	20.6389	0.8488	0.1512
0.7107	0.2893	1.1389	3.3896	20.6429	0.8489	0.1511
0.7117	0.2883	1.1378	3.3979	20.6469	0.8491	0.1509
0.7127	0.2873	1.1367	3.4063	20.6509	0.8493	0.1507
0.7137	0.2863	1.1355	3.4147	20.6549	0.8495	0.1505
0.7147	0.2853	1.1344	3.4232	20.6590	0.8497	0.1503
0.7157	0.2843	1.1333	3.4316	20.6630	0.8499	0.1501
0.7167	0.2833	1.1322	3.4401	20.6671	0.8501	0.1499
0.7177	0.2823	1.1311	3.4486	20.6712	0.8502	0.1498
0.7187	0.2813	1.1300	3.4572	20.6753	0.8504	0.1496
0.7197	0.2803	1.1289	3.4657	20.6795	0.8506	0.1494

xTHF	xW	gammaTHF	gammaW	P	yTHF	yW
0.7207	0.2793	1.1278	3.4743	20.6836	0.8508	0.1492
0.7217	0.2783	1.1267	3.4829	20.6878	0.8510	0.1490
0.7227	0.2773	1.1257	3.4915	20.6920	0.8512	0.1488
0.7237	0.2763	1.1246	3.5002	20.6961	0.8514	0.1486
0.7247	0.2753	1.1235	3.5088	20.7004	0.8516	0.1484
0.7257	0.2743	1.1225	3.5175	20.7046	0.8518	0.1482
0.7267	0.2733	1.1215	3.5262	20.7088	0.8520	0.1480
0.7277	0.2723	1.1204	3.5350	20.7131	0.8522	0.1478
0.7287	0.2713	1.1194	3.5437	20.7173	0.8524	0.1476
0.7297	0.2703	1.1183	3.5525	20.7216	0.8527	0.1473
0.7307	0.2693	1.1173	3.5613	20.7259	0.8529	0.1471
0.7317	0.2683	1.1163	3.5701	20.7302	0.8531	0.1469
0.7327	0.2673	1.1153	3.5790	20.7345	0.8533	0.1467
0.7337	0.2663	1.1143	3.5879	20.7389	0.8535	0.1465
0.7347	0.2653	1.1133	3.5968	20.7432	0.8537	0.1463
0.7357	0.2643	1.1123	3.6057	20.7476	0.8540	0.1460
0.7367	0.2633	1.1113	3.6146	20.7519	0.8542	0.1458
0.7377	0.2623	1.1103	3.6236	20.7563	0.8544	0.1456
0.7387	0.2613	1.1094	3.6326	20.7607	0.8546	0.1454
0.7397	0.2603	1.1084	3.6416	20.7651	0.8549	0.1451
0.7407	0.2593	1.1074	3.6507	20.7695	0.8551	0.1449
0.7417	0.2583	1.1065	3.6597	20.7740	0.8553	0.1447
0.7427	0.2573	1.1055	3.6688	20.7784	0.8556	0.1444
0.7437	0.2563	1.1046	3.6780	20.7829	0.8558	0.1442
0.7447	0.2553	1.1036	3.6871	20.7873	0.8560	0.1440
0.7457	0.2543	1.1027	3.6963	20.7918	0.8563	0.1437
0.7467	0.2533	1.1018	3.7055	20.7963	0.8565	0.1435
0.7477	0.2523	1.1008	3.7147	20.8008	0.8567	0.1433
0.7487	0.2513	1.0999	3.7239	20.8053	0.8570	0.1430
0.7497	0.2503	1.0990	3.7332	20.8098	0.8572	0.1428
0.7508	0.2492	1.0981	3.7425	20.8143	0.8575	0.1425
0.7518	0.2482	1.0972	3.7518	20.8189	0.8577	0.1423
0.7528	0.2472	1.0963	3.7611	20.8234	0.8580	0.1420
0.7538	0.2462	1.0954	3.7705	20.8280	0.8582	0.1418
0.7548	0.2452	1.0945	3.7798	20.8326	0.8585	0.1415
0.7558	0.2442	1.0936	3.7893	20.8371	0.8588	0.1412
0.7568	0.2432	1.0927	3.7987	20.8417	0.8590	0.1410
0.7578	0.2422	1.0919	3.8081	20.8463	0.8593	0.1407
0.7588	0.2412	1.0910	3.8176	20.8509	0.8595	0.1405
0.7598	0.2402	1.0902	3.8271	20.8555	0.8598	0.1402
0.7608	0.2392	1.0893	3.8367	20.8601	0.8601	0.1399
0.7618	0.2382	1.0884	3.8462	20.8647	0.8603	0.1397
0.7628	0.2372	1.0876	3.8558	20.8694	0.8606	0.1394
0.7638	0.2362	1.0868	3.8654	20.8740	0.8609	0.1391
0.7648	0.2352	1.0859	3.8751	20.8786	0.8612	0.1388

xTHF	xW	gammaTHF	gammaW	P	yTHF	yW
0.7658	0.2342	1.0851	3.8847	20.8833	0.8614	0.1386
0.7668	0.2332	1.0843	3.8944	20.8879	0.8617	0.1383
0.7678	0.2322	1.0835	3.9041	20.8926	0.8620	0.1380
0.7688	0.2312	1.0826	3.9139	20.8973	0.8623	0.1377
0.7698	0.2302	1.0818	3.9236	20.9020	0.8626	0.1374
0.7708	0.2292	1.0810	3.9334	20.9066	0.8629	0.1371
0.7718	0.2282	1.0802	3.9432	20.9113	0.8631	0.1369
0.7728	0.2272	1.0794	3.9531	20.9160	0.8634	0.1366
0.7738	0.2262	1.0787	3.9629	20.9207	0.8637	0.1363
0.7748	0.2252	1.0779	3.9728	20.9254	0.8640	0.1360
0.7758	0.2242	1.0771	3.9827	20.9301	0.8643	0.1357
0.7768	0.2232	1.0763	3.9927	20.9348	0.8646	0.1354
0.7778	0.2222	1.0755	4.0027	20.9395	0.8649	0.1351
0.7788	0.2212	1.0748	4.0127	20.9443	0.8652	0.1348
0.7798	0.2202	1.0740	4.0227	20.9490	0.8655	0.1345
0.7808	0.2192	1.0733	4.0327	20.9537	0.8658	0.1342
0.7818	0.2182	1.0725	4.0428	20.9584	0.8661	0.1339
0.7828	0.2172	1.0718	4.0529	20.9632	0.8665	0.1335
0.7838	0.2162	1.0710	4.0630	20.9679	0.8668	0.1332
0.7848	0.2152	1.0703	4.0732	20.9726	0.8671	0.1329
0.7858	0.2142	1.0696	4.0834	20.9774	0.8674	0.1326
0.7868	0.2132	1.0688	4.0936	20.9821	0.8677	0.1323
0.7878	0.2122	1.0681	4.1038	20.9869	0.8680	0.1320
0.7888	0.2112	1.0674	4.1141	20.9916	0.8684	0.1316
0.7898	0.2102	1.0667	4.1244	20.9964	0.8687	0.1313
0.7908	0.2092	1.0660	4.1347	21.0011	0.8690	0.1310
0.7918	0.2082	1.0653	4.1450	21.0059	0.8693	0.1307
0.7928	0.2072	1.0646	4.1554	21.0106	0.8697	0.1303
0.7938	0.2062	1.0639	4.1658	21.0154	0.8700	0.1300
0.7948	0.2052	1.0632	4.1762	21.0201	0.8704	0.1296
0.7958	0.2042	1.0625	4.1866	21.0249	0.8707	0.1293
0.7968	0.2032	1.0618	4.1971	21.0296	0.8710	0.1290
0.7978	0.2022	1.0612	4.2076	21.0344	0.8714	0.1286
0.7988	0.2012	1.0605	4.2182	21.0391	0.8717	0.1283
0.7998	0.2002	1.0598	4.2287	21.0439	0.8721	0.1279
0.8008	0.1992	1.0592	4.2393	21.0486	0.8724	0.1276
0.8018	0.1982	1.0585	4.2499	21.0534	0.8728	0.1272
0.8028	0.1972	1.0579	4.2606	21.0582	0.8731	0.1269
0.8038	0.1962	1.0572	4.2712	21.0629	0.8735	0.1265
0.8048	0.1952	1.0566	4.2819	21.0677	0.8738	0.1262
0.8058	0.1942	1.0559	4.2927	21.0724	0.8742	0.1258
0.8068	0.1932	1.0553	4.3034	21.0771	0.8746	0.1254
0.8078	0.1922	1.0547	4.3142	21.0819	0.8749	0.1251
0.8088	0.1912	1.0540	4.3250	21.0866	0.8753	0.1247
0.8098	0.1902	1.0534	4.3358	21.0914	0.8757	0.1243

xTHF	xW	gammaTHF	gammaW	P	yTHF	yW
0.8108	0.1892	1.0528	4.3467	21.0961	0.8760	0.1240
0.8118	0.1882	1.0522	4.3576	21.1008	0.8764	0.1236
0.8128	0.1872	1.0516	4.3685	21.1056	0.8768	0.1232
0.8138	0.1862	1.0510	4.3795	21.1103	0.8772	0.1228
0.8148	0.1852	1.0504	4.3904	21.1150	0.8776	0.1224
0.8158	0.1842	1.0498	4.4014	21.1197	0.8779	0.1221
0.8168	0.1832	1.0492	4.4125	21.1244	0.8783	0.1217
0.8178	0.1822	1.0486	4.4235	21.1291	0.8787	0.1213
0.8188	0.1812	1.0480	4.4346	21.1338	0.8791	0.1209
0.8198	0.1802	1.0474	4.4457	21.1385	0.8795	0.1205
0.8208	0.1792	1.0469	4.4569	21.1432	0.8799	0.1201
0.8218	0.1782	1.0463	4.4681	21.1479	0.8803	0.1197
0.8228	0.1772	1.0457	4.4793	21.1526	0.8807	0.1193
0.8238	0.1762	1.0452	4.4905	21.1573	0.8811	0.1189
0.8248	0.1752	1.0446	4.5018	21.1619	0.8815	0.1185
0.8258	0.1742	1.0441	4.5131	21.1666	0.8819	0.1181
0.8268	0.1732	1.0435	4.5244	21.1712	0.8823	0.1177
0.8278	0.1722	1.0430	4.5357	21.1759	0.8827	0.1173
0.8288	0.1712	1.0424	4.5471	21.1805	0.8831	0.1169
0.8298	0.1702	1.0419	4.5585	21.1852	0.8836	0.1164
0.8308	0.1692	1.0414	4.5700	21.1898	0.8840	0.1160
0.8318	0.1682	1.0408	4.5814	21.1944	0.8844	0.1156
0.8328	0.1672	1.0403	4.5929	21.1990	0.8848	0.1152
0.8338	0.1662	1.0398	4.6045	21.2036	0.8853	0.1147
0.8348	0.1652	1.0393	4.6160	21.2082	0.8857	0.1143
0.8358	0.1642	1.0387	4.6276	21.2128	0.8861	0.1139
0.8368	0.1632	1.0382	4.6392	21.2174	0.8866	0.1134
0.8378	0.1622	1.0377	4.6509	21.2220	0.8870	0.1130
0.8388	0.1612	1.0372	4.6626	21.2265	0.8874	0.1126
0.8398	0.1602	1.0367	4.6743	21.2311	0.8879	0.1121
0.8408	0.1592	1.0362	4.6860	21.2356	0.8883	0.1117
0.8418	0.1582	1.0357	4.6978	21.2401	0.8888	0.1112
0.8428	0.1572	1.0353	4.7096	21.2447	0.8892	0.1108
0.8438	0.1562	1.0348	4.7214	21.2492	0.8897	0.1103
0.8448	0.1552	1.0343	4.7333	21.2537	0.8901	0.1099
0.8458	0.1542	1.0338	4.7451	21.2581	0.8906	0.1094
0.8468	0.1532	1.0334	4.7571	21.2626	0.8910	0.1090
0.8478	0.1522	1.0329	4.7690	21.2671	0.8915	0.1085
0.8488	0.1512	1.0324	4.7810	21.2715	0.8920	0.1080
0.8498	0.1502	1.0320	4.7930	21.2760	0.8924	0.1076
0.8509	0.1491	1.0315	4.8050	21.2804	0.8929	0.1071
0.8519	0.1481	1.0311	4.8171	21.2848	0.8934	0.1066
0.8529	0.1471	1.0306	4.8292	21.2892	0.8939	0.1061
0.8539	0.1461	1.0302	4.8414	21.2936	0.8943	0.1057
0.8549	0.1451	1.0297	4.8535	21.2980	0.8948	0.1052

xTHF	xW	gammaTHF	gammaW	P	yTHF	yW
0.8559	0.1441	1.0293	4.8657	21.3023	0.8953	0.1047
0.8569	0.1431	1.0289	4.8779	21.3067	0.8958	0.1042
0.8579	0.1421	1.0284	4.8902	21.3110	0.8963	0.1037
0.8589	0.1411	1.0280	4.9025	21.3153	0.8968	0.1032
0.8599	0.1401	1.0276	4.9148	21.3196	0.8973	0.1027
0.8609	0.1391	1.0272	4.9272	21.3239	0.8978	0.1022
0.8619	0.1381	1.0267	4.9396	21.3282	0.8983	0.1017
0.8629	0.1371	1.0263	4.9520	21.3325	0.8988	0.1012
0.8639	0.1361	1.0259	4.9644	21.3367	0.8993	0.1007
0.8649	0.1351	1.0255	4.9769	21.3409	0.8998	0.1002
0.8659	0.1341	1.0251	4.9894	21.3451	0.9003	0.0997
0.8669	0.1331	1.0247	5.0019	21.3493	0.9008	0.0992
0.8679	0.1321	1.0243	5.0145	21.3535	0.9013	0.0987
0.8689	0.1311	1.0239	5.0271	21.3577	0.9018	0.0982
0.8699	0.1301	1.0236	5.0398	21.3618	0.9024	0.0976
0.8709	0.1291	1.0232	5.0524	21.3659	0.9029	0.0971
0.8719	0.1281	1.0228	5.0651	21.3701	0.9034	0.0966
0.8729	0.1271	1.0224	5.0779	21.3741	0.9040	0.0960
0.8739	0.1261	1.0220	5.0906	21.3782	0.9045	0.0955
0.8749	0.1251	1.0217	5.1034	21.3823	0.9050	0.0950
0.8759	0.1241	1.0213	5.1163	21.3863	0.9056	0.0944
0.8769	0.1231	1.0209	5.1291	21.3903	0.9061	0.0939
0.8779	0.1221	1.0206	5.1420	21.3943	0.9067	0.0933
0.8789	0.1211	1.0202	5.1550	21.3983	0.9072	0.0928
0.8799	0.1201	1.0199	5.1679	21.4023	0.9078	0.0922
0.8809	0.1191	1.0195	5.1809	21.4062	0.9083	0.0917
0.8819	0.1181	1.0192	5.1940	21.4101	0.9089	0.0911
0.8829	0.1171	1.0189	5.2070	21.4140	0.9094	0.0906
0.8839	0.1161	1.0185	5.2201	21.4179	0.9100	0.0900
0.8849	0.1151	1.0182	5.2332	21.4217	0.9106	0.0894
0.8859	0.1141	1.0178	5.2464	21.4256	0.9111	0.0889
0.8869	0.1131	1.0175	5.2596	21.4294	0.9117	0.0883
0.8879	0.1121	1.0172	5.2728	21.4332	0.9123	0.0877
0.8889	0.1111	1.0169	5.2861	21.4370	0.9129	0.0871
0.8899	0.1101	1.0166	5.2994	21.4407	0.9135	0.0865
0.8909	0.1091	1.0162	5.3127	21.4444	0.9140	0.0860
0.8919	0.1081	1.0159	5.3261	21.4481	0.9146	0.0854
0.8929	0.1071	1.0156	5.3395	21.4518	0.9152	0.0848
0.8939	0.1061	1.0153	5.3529	21.4555	0.9158	0.0842
0.8949	0.1051	1.0150	5.3663	21.4591	0.9164	0.0836
0.8959	0.1041	1.0147	5.3798	21.4627	0.9170	0.0830
0.8969	0.1031	1.0144	5.3934	21.4663	0.9176	0.0824
0.8979	0.1021	1.0141	5.4069	21.4698	0.9182	0.0818
0.8989	0.1011	1.0138	5.4205	21.4734	0.9188	0.0812
0.8999	0.1001	1.0136	5.4342	21.4769	0.9195	0.0805

xTHF	xW	gammaTHF	gammaW	P	yTHF	yW
0.9009	0.0991	1.0133	5.4478	21.4804	0.9201	0.0799
0.9019	0.0981	1.0130	5.4615	21.4838	0.9207	0.0793
0.9029	0.0971	1.0127	5.4753	21.4872	0.9213	0.0787
0.9039	0.0961	1.0125	5.4891	21.4907	0.9219	0.0781
0.9049	0.0951	1.0122	5.5029	21.4940	0.9226	0.0774
0.9059	0.0941	1.0119	5.5167	21.4974	0.9232	0.0768
0.9069	0.0931	1.0117	5.5306	21.5007	0.9239	0.0761
0.9079	0.0921	1.0114	5.5445	21.5040	0.9245	0.0755
0.9089	0.0911	1.0111	5.5584	21.5073	0.9251	0.0749
0.9099	0.0901	1.0109	5.5724	21.5105	0.9258	0.0742
0.9109	0.0891	1.0106	5.5864	21.5137	0.9264	0.0736
0.9119	0.0881	1.0104	5.6005	21.5169	0.9271	0.0729
0.9129	0.0871	1.0102	5.6146	21.5201	0.9277	0.0723
0.9139	0.0861	1.0099	5.6287	21.5232	0.9284	0.0716
0.9149	0.0851	1.0097	5.6428	21.5263	0.9291	0.0709
0.9159	0.0841	1.0094	5.6570	21.5294	0.9297	0.0703
0.9169	0.0831	1.0092	5.6713	21.5324	0.9304	0.0696
0.9179	0.0821	1.0090	5.6855	21.5354	0.9311	0.0689
0.9189	0.0811	1.0088	5.6998	21.5384	0.9318	0.0682
0.9199	0.0801	1.0085	5.7141	21.5413	0.9324	0.0676
0.9209	0.0791	1.0083	5.7285	21.5442	0.9331	0.0669
0.9219	0.0781	1.0081	5.7429	21.5471	0.9338	0.0662
0.9229	0.0771	1.0079	5.7574	21.5500	0.9345	0.0655
0.9239	0.0761	1.0077	5.7718	21.5528	0.9352	0.0648
0.9249	0.0751	1.0075	5.7864	21.5556	0.9359	0.0641
0.9259	0.0741	1.0073	5.8009	21.5583	0.9366	0.0634
0.9269	0.0731	1.0071	5.8155	21.5611	0.9373	0.0627
0.9279	0.0721	1.0069	5.8301	21.5637	0.9380	0.0620
0.9289	0.0711	1.0067	5.8448	21.5664	0.9387	0.0613
0.9299	0.0701	1.0065	5.8595	21.5690	0.9395	0.0605
0.9309	0.0691	1.0063	5.8742	21.5716	0.9402	0.0598
0.9319	0.0681	1.0061	5.8890	21.5742	0.9409	0.0591
0.9329	0.0671	1.0059	5.9038	21.5767	0.9416	0.0584
0.9339	0.0661	1.0057	5.9186	21.5792	0.9424	0.0576
0.9349	0.0651	1.0056	5.9335	21.5816	0.9431	0.0569
0.9359	0.0641	1.0054	5.9484	21.5840	0.9439	0.0561
0.9369	0.0631	1.0052	5.9634	21.5864	0.9446	0.0554
0.9379	0.0621	1.0050	5.9784	21.5887	0.9453	0.0547
0.9389	0.0611	1.0049	5.9934	21.5911	0.9461	0.0539
0.9399	0.0601	1.0047	6.0085	21.5933	0.9469	0.0531
0.9409	0.0591	1.0046	6.0236	21.5956	0.9476	0.0524
0.9419	0.0581	1.0044	6.0387	21.5977	0.9484	0.0516
0.9429	0.0571	1.0042	6.0539	21.5999	0.9491	0.0509
0.9439	0.0561	1.0041	6.0691	21.6020	0.9499	0.0501
0.9449	0.0551	1.0040	6.0843	21.6041	0.9507	0.0493

xTHF	xW	gammaTHF	gammaW	P	yTHF	yW
0.9459	0.0541	1.0038	6.0996	21.6061	0.9515	0.0485
0.9469	0.0531	1.0037	6.1150	21.6081	0.9523	0.0477
0.9479	0.0521	1.0035	6.1303	21.6101	0.9530	0.0470
0.9489	0.0511	1.0034	6.1457	21.6120	0.9538	0.0462
0.9499	0.0501	1.0033	6.1612	21.6139	0.9546	0.0454
0.9510	0.0490	1.0031	6.1767	21.6157	0.9554	0.0446
0.9520	0.0480	1.0030	6.1922	21.6176	0.9562	0.0438
0.9530	0.0470	1.0029	6.2077	21.6193	0.9570	0.0430
0.9540	0.0460	1.0027	6.2233	21.6210	0.9579	0.0421
0.9550	0.0450	1.0026	6.2390	21.6227	0.9587	0.0413
0.9560	0.0440	1.0025	6.2546	21.6243	0.9595	0.0405
0.9570	0.0430	1.0024	6.2704	21.6259	0.9603	0.0397
0.9580	0.0420	1.0023	6.2861	21.6275	0.9611	0.0389
0.9590	0.0410	1.0022	6.3019	21.6290	0.9620	0.0380
0.9600	0.0400	1.0021	6.3177	21.6305	0.9628	0.0372
0.9610	0.0390	1.0020	6.3336	21.6319	0.9637	0.0363
0.9620	0.0380	1.0019	6.3495	21.6333	0.9645	0.0355
0.9630	0.0370	1.0018	6.3655	21.6346	0.9653	0.0347
0.9640	0.0360	1.0017	6.3814	21.6359	0.9662	0.0338
0.9650	0.0350	1.0016	6.3975	21.6371	0.9671	0.0329
0.9660	0.0340	1.0015	6.4135	21.6383	0.9679	0.0321
0.9670	0.0330	1.0014	6.4296	21.6395	0.9688	0.0312
0.9680	0.0320	1.0013	6.4458	21.6406	0.9697	0.0303
0.9690	0.0310	1.0012	6.4620	21.6417	0.9705	0.0295
0.9700	0.0300	1.0012	6.4782	21.6427	0.9714	0.0286
0.9710	0.0290	1.0011	6.4945	21.6437	0.9723	0.0277
0.9720	0.0280	1.0010	6.5108	21.6446	0.9732	0.0268
0.9730	0.0270	1.0009	6.5271	21.6455	0.9741	0.0259
0.9740	0.0260	1.0009	6.5435	21.6463	0.9750	0.0250
0.9750	0.0250	1.0008	6.5599	21.6471	0.9759	0.0241
0.9760	0.0240	1.0007	6.5764	21.6478	0.9768	0.0232
0.9770	0.0230	1.0007	6.5929	21.6485	0.9777	0.0223
0.9780	0.0220	1.0006	6.6094	21.6491	0.9786	0.0214
0.9790	0.0210	1.0006	6.6260	21.6497	0.9795	0.0205
0.9800	0.0200	1.0005	6.6426	21.6502	0.9805	0.0195
0.9810	0.0190	1.0005	6.6593	21.6507	0.9814	0.0186
0.9820	0.0180	1.0004	6.6760	21.6512	0.9823	0.0177
0.9830	0.0170	1.0004	6.6928	21.6516	0.9833	0.0167
0.9840	0.0160	1.0003	6.7096	21.6519	0.9842	0.0158
0.9850	0.0150	1.0003	6.7264	21.6522	0.9852	0.0148
0.9860	0.0140	1.0002	6.7433	21.6524	0.9861	0.0139
0.9870	0.0130	1.0002	6.7602	21.6526	0.9871	0.0129
0.9880	0.0120	1.0002	6.7771	21.6527	0.9880	0.0120
0.9890	0.0110	1.0002	6.7941	21.6528	0.9890	0.0110
0.9900	0.0100	1.0001	6.8112	21.6528	0.9900	0.0100

xTHF	xW	gammaTHF	gammaW	P	yTHF	yW
0.9910	0.0090	1.0001	6.8282	21.6528	0.9910	0.0090
0.9920	0.0080	1.0001	6.8454	21.6527	0.9919	0.0081
0.9930	0.0070	1.0001	6.8625	21.6525	0.9929	0.0071
0.9940	0.0060	1.0000	6.8797	21.6523	0.9939	0.0061
0.9950	0.0050	1.0000	6.8970	21.6521	0.9949	0.0051
0.9960	0.0040	1.0000	6.9143	21.6518	0.9959	0.0041
0.9970	0.0030	1.0000	6.9316	21.6514	0.9969	0.0031
0.9980	0.0020	1.0000	6.9490	21.6510	0.9980	0.0020
0.9990	0.0010	1.0000	6.9664	21.6505	0.9990	0.0010
1.0000	0.0000	1.0000	6.9838	21.6500	1.0000	0.0000

xTHF	xW	gammaTHF	gammaW	T	yTHF	yW
0.0000	0.0000	20.5241	1.0000	371.9968	0.0000	1.0000
0.0101	0.0101	18.6896	1.0005	360.6667	0.3619	0.6381
0.0202	0.0202	17.0614	1.0019	353.2234	0.5332	0.4668
0.0303	0.0303	15.6129	1.0042	348.0852	0.6273	0.3727
0.0404	0.0404	14.3210	1.0074	344.3989	0.6846	0.3154
0.0505	0.0505	13.1663	1.0114	341.6810	0.7221	0.2779
0.0606	0.0606	12.1318	1.0163	339.6398	0.7478	0.2522
0.0707	0.0707	11.2030	1.0220	338.0895	0.7661	0.2339
0.0808	0.0808	10.3673	1.0285	336.9055	0.7794	0.2206
0.0909	0.0909	9.6139	1.0358	336.0015	0.7892	0.2108
0.1010	0.1010	8.9332	1.0439	335.3151	0.7964	0.2036
0.1111	0.1111	8.3170	1.0528	334.8005	0.8018	0.1982
0.1212	0.1212	7.7582	1.0625	334.4228	0.8057	0.1943
0.1313	0.1313	7.2505	1.0729	334.1552	0.8084	0.1916
0.1414	0.1414	6.7884	1.0841	333.9768	0.8102	0.1898
0.1515	0.1515	6.3670	1.0961	333.8707	0.8113	0.1887
0.1616	0.1616	5.9822	1.1089	333.8236	0.8118	0.1882
0.1717	0.1717	5.6301	1.1224	333.8243	0.8118	0.1882
0.1818	0.1818	5.3074	1.1367	333.8639	0.8114	0.1886
0.1919	0.1919	5.0114	1.1518	333.9350	0.8106	0.1894
0.2020	0.2020	4.7392	1.1677	334.0312	0.8095	0.1905
0.2121	0.2121	4.4887	1.1844	334.1475	0.8082	0.1918
0.2222	0.2222	4.2578	1.2018	334.2793	0.8067	0.1933
0.2323	0.2323	4.0446	1.2201	334.4229	0.8050	0.1950
0.2424	0.2424	3.8476	1.2393	334.5753	0.8032	0.1968
0.2525	0.2525	3.6652	1.2592	334.7337	0.8012	0.1988
0.2626	0.2626	3.4963	1.2800	334.8959	0.7992	0.2008
0.2727	0.2727	3.3395	1.3016	335.0599	0.7971	0.2029
0.2828	0.2828	3.1938	1.3241	335.2241	0.7949	0.2051
0.2929	0.2929	3.0584	1.3475	335.3870	0.7926	0.2074
0.3030	0.3030	2.9323	1.3718	335.5476	0.7904	0.2096
0.3131	0.3131	2.8148	1.3971	335.7048	0.7881	0.2119
0.3232	0.3232	2.7051	1.4232	335.8577	0.7858	0.2142
0.3333	0.3333	2.6027	1.4503	336.0058	0.7835	0.2165
0.3434	0.3434	2.5069	1.4784	336.1483	0.7812	0.2188
0.3535	0.3535	2.4174	1.5074	336.2850	0.7790	0.2210
0.3636	0.3636	2.3335	1.5375	336.4153	0.7768	0.2232
0.3737	0.3737	2.2548	1.5686	336.5390	0.7746	0.2254
0.3838	0.3838	2.1810	1.6007	336.6559	0.7725	0.2275
0.3939	0.3939	2.1118	1.6339	336.7659	0.7704	0.2296
0.4040	0.4040	2.0467	1.6683	336.8688	0.7684	0.2316
0.4141	0.4141	1.9854	1.7037	336.9647	0.7665	0.2335
0.4242	0.4242	1.9278	1.7403	337.0535	0.7646	0.2354
0.4343	0.4343	1.8736	1.7780	337.1352	0.7628	0.2372
0.4444	0.4444	1.8225	1.8170	337.2100	0.7612	0.2388

xTHF	xW	gammaTHF	gammaW	T	yTHF	yW
0.4545	0.4545	1.7743	1.8572	337.2780	0.7596	0.2404
0.4646	0.4646	1.7289	1.8986	337.3393	0.7581	0.2419
0.4747	0.4747	1.6860	1.9414	Inf	10441.7653	-10440.7653
0.4848	0.4848	1.6454	1.9854	337.4424	0.7554	0.2446
0.4949	0.4949	1.6072	2.0308	337.4846	0.7543	0.2457
0.5051	0.5051	1.5710	2.0776	337.5208	0.7532	0.2468
0.5152	0.5152	1.5368	2.1257	337.5514	0.7523	0.2477
0.5253	0.5253	1.5044	2.1754	337.5765	0.7515	0.2485
0.5354	0.5354	1.4738	2.2265	337.5964	0.7509	0.2491
0.5455	0.5455	1.4448	2.2791	337.6113	0.7504	0.2496
0.5556	0.5556	1.4174	2.3332	337.6216	0.7500	0.2500
0.5657	0.5657	1.3914	2.3890	337.6275	0.7498	0.2502
0.5758	0.5758	1.3667	2.4464	337.6293	0.7497	0.2503
0.5859	0.5859	1.3434	2.5054	337.6273	0.7498	0.2502
0.5960	0.5960	1.3213	2.5662	Inf	10272.7759	-10271.7759
0.6061	0.6061	1.3004	2.6287	337.6131	0.7504	0.2496
0.6162	0.6162	1.2805	2.6929	337.6016	0.7510	0.2490
0.6263	0.6263	1.2617	2.7591	337.5876	0.7518	0.2482
0.6364	0.6364	1.2439	2.8270	337.5713	0.7527	0.2473
0.6465	0.6465	1.2271	2.8969	337.5531	0.7539	0.2461
0.6566	0.6566	1.2111	2.9688	337.5334	0.7552	0.2448
0.6667	0.6667	1.1959	3.0427	337.5125	0.7567	0.2433
0.6768	0.6768	1.1816	3.1186	337.4907	0.7584	0.2416
0.6869	0.6869	1.1681	3.1967	337.4685	0.7604	0.2396
0.6970	0.6970	1.1553	3.2769	337.4460	0.7625	0.2375
0.7071	0.7071	1.1431	3.3593	337.4238	0.7649	0.2351
0.7172	0.7172	1.1317	3.4440	337.4022	0.7675	0.2325
0.7273	0.7273	1.1209	3.5310	337.3816	0.7704	0.2296
0.7374	0.7374	1.1107	3.6204	337.3624	0.7735	0.2265
0.7475	0.7475	1.1011	3.7121	337.3449	0.7768	0.2232
0.7576	0.7576	1.0920	3.8064	337.3296	0.7805	0.2195
0.7677	0.7677	1.0835	3.9032	337.3169	0.7844	0.2156
0.7778	0.7778	1.0755	4.0027	337.3073	0.7886	0.2114
0.7879	0.7879	1.0681	4.1047	337.3012	0.7931	0.2069
0.7980	0.7980	1.0610	4.2095	Inf	11045.6240	-11044.6240
0.8081	0.8081	1.0545	4.3171	Inf	11116.4121	-11115.4121
0.8182	0.8182	1.0484	4.4276	Inf	11190.2156	-11189.2156
0.8283	0.8283	1.0427	4.5409	Inf	11267.0381	-11266.0381
0.8384	0.8384	1.0375	4.6573	Inf	11346.8846	-11345.8846
0.8485	0.8485	1.0326	4.7766	337.3661	0.8275	0.1725
0.8586	0.8586	1.0281	4.8991	337.3990	0.8347	0.1653
0.8687	0.8687	1.0240	5.0248	337.4399	0.8422	0.1578
0.8788	0.8788	1.0203	5.1538	337.4895	0.8503	0.1497
0.8889	0.8889	1.0169	5.2861	Inf	11791.7634	-11790.7634
0.8990	0.8990	1.0138	5.4218	337.6179	0.8680	0.1320

xTHF	xW	gammaTHF	gammaW	T	yTHF	yW
0.9091	0.9091	1.0111	5.5610	337.6984	0.8777	0.1223
0.9192	0.9192	1.0087	5.7037	337.7910	0.8880	0.1120
0.9293	0.9293	1.0066	5.8501	337.8967	0.8990	0.1010
0.9394	0.9394	1.0048	6.0002	338.0167	0.9107	0.0893
0.9495	0.9495	1.0033	6.1542	Inf	12427.7434	-12426.7434
0.9596	0.9596	1.0021	6.3120	338.3046	0.9366	0.0634
0.9697	0.9697	1.0012	6.4738	Inf	12665.1099	-12664.1099
0.9798	0.9798	1.0005	6.6396	Inf	12788.6513	-12787.6513
0.9899	0.9899	1.0001	6.8096	Inf	12915.4656	-12914.4656
1.0000	1.0000	1.0000	6.9838	339.1161	1.0000	0.0000