

n	(p, q)	γ	ε_V	deviation	B	$\ B\ _E^2$	S/V/E	covolume
1	(3, 2)	$-0.50000 + 0.86603i$	$4 \leftrightarrow 14$	2.20×10^{-14}	(0.05, 0.41, 0.05)	0.17	22/23/44	0.676398849581584
		$-0.50000 - 0.86603i$	$4 \leftrightarrow 13$	2.55×10^{-14}	(0.16, 0.38, 0.22)	0.21	22/23/44	0.676760804700557
		$-2.50000 + 0.86603i$	$3 \leftrightarrow 13$	3.55×10^{-15}	(0.36, 0.37, 0.19)	0.30	14/10/24	0.676627737605910
		$-2.50000 - 0.86603i$	$4 \leftrightarrow 14$	4.88×10^{-15}	(0.45, 0.18, 0.33)	0.35	8/7/15	0.676627737607669
	(2, 3)	$-0.50000 + 0.86603i$	$3 \leftrightarrow 13$	3.24×10^{-14}	(0.01, 0.30, 0.20)	0.13	22/23/44	0.676563238051973
		$-0.50000 - 0.86603i$	$3 \leftrightarrow 13$	1.57×10^{-14}	(0.01, 0.33, 0.14)	0.13	22/23/44	0.676563238050312
		$-2.50000 + 0.86603i$	$3 \leftrightarrow 14$	3.55×10^{-15}	(0.35, 0.28, -0.24)	0.25	14/10/24	0.676627737605571
		$-2.50000 - 0.86603i$	$3 \leftrightarrow 13$	5.66×10^{-15}	(0.35, 0.28, 0.23)	0.26	14/10/24	0.676627737605229
2	(3, 2)	$0.36778 + 0.23154i$	$4 \leftrightarrow 12$	1.55×10^{-12}	(0.26, 0.13, 0.39)	0.24	28/26/52	0.192584612983471
		$0.36778 - 0.23154i$	$5 \leftrightarrow 12$	4.22×10^{-12}	(0.26, 0.27, 0.32)	0.24	28/26/52	0.192406713793864
		$-3.36778 + 0.23154i$	$4 \leftrightarrow 14$ 4	1.55×10^{-14}	(-0.23, 0.13, 0.37)	0.21	20/20/38	0.385365362960497
			5		failure.			0.385365362960489
	(2, 3)	$-3.36778 - 0.23154i$	$3 \leftrightarrow 14$	3.06×10^{-14}	(-0.23, 0.24, 0.31)	0.21	20/20/38	0.385610022684702
		$0.36778 + 0.23154i$	$4 \leftrightarrow 12$	4.76×10^{-12}	(0.02, 0.26, 0.21)	0.11	28/26/52	0.192773545478196
			$3 \leftrightarrow 12$	2.48×10^{-12}				0.192220119252556
		$0.36778 - 0.23154i$	3	2.44×10^{-12}	(0.02, 0.23, 0.13)	0.07	28/26/52	0.192220119251988
			12	2.27×10^{-12}				0.192220119242490
		$-3.36778 + 0.23154i$	$4 \leftrightarrow 12$	7.44×10^{-15}	(0.18, 0.12, 0.32)	0.15	20/20/38	0.385610022684362
		$-3.36778 - 0.23154i$	$4 \leftrightarrow 14$	1.29×10^{-14}	(0.31, 0.25, 0.26)	0.23	20/20/38	0.385120703236589
3	(3, 2)	$-0.25460 + 0.74953i$	$3 \leftrightarrow 13$ 3	4.17×10^{-14}	(0.06, 0.43, 0.02)	0.19	22/26/46	0.526530016209690
			4		failure.			0.526530016209692
		$-0.25460 - 0.74953i$	$5 \leftrightarrow 13$	1.78×10^{-14}	(0.06, 0.42, -0.03)	0.18	22/26/46	0.526530016209333
		$-2.74540 + 0.74953i$	$4 \leftrightarrow 11$	1.28×10^{-12}	(0.44, 0.13, 0.26)	0.28	28/30/56	0.263454475747302
	(2, 3)	$-2.74540 - 0.74953i$	$5 \leftrightarrow 12$	5.70×10^{-13}	(0.45, 0.15, 0.25)	0.28	28/30/56	0.263536300108507
		$-0.25460 + 0.74953i$	$3 \leftrightarrow 13$	6.03×10^{-14}	(-0.02, 0.33, 0.10)	0.12	24/28/50	0.526545516107715
		$-0.25460 - 0.74953i$	$4 \leftrightarrow 13$	4.56×10^{-14}	(0.01, 0.34, 0.15)	0.14	22/26/46	0.526530016209657
		$-2.74540 + 0.74953i$	$5 \leftrightarrow 11$	3.95×10^{-12}	(0.12, -0.05, 0.33)	0.12	28/28/54	0.263272758034494
			$3 \leftrightarrow 12$	8.45×10^{-13}				0.263259271398095
		$-2.74540 - 0.74953i$	3	8.64×10^{-13}	(0.22, 0.11, 0.36)	0.19	28/30/56	0.263259271398280
4	(3, 2)	$-1.50000 + 0.99849i$	$3 \leftrightarrow 13$	1.19×10^{-14}	(0.21, 0.21, 0.20)	0.13	10/7/16	Free?
		$-1.50000 - 0.99849i$	$4 \leftrightarrow 12$	4.20×10^{-14}	(0.02, 0.24, 0.07)	0.06	10/7/16	Free?
	(2, 3)	$-1.50000 + 0.99849i$	$4 \leftrightarrow 13$	9.88×10^{-15}	(0.14, 0.10, 0.21)	0.08	10/7/16	Free?
		$-1.50000 - 0.99849i$	$5 \leftrightarrow 13$	3.95×10^{-14}	(0.10, 0.15, 0.21)	0.08	10/7/16	Free?
5	(3, 2)	$-1.50000 + 1.07899i$	$3 \leftrightarrow 12$	9.10×10^{-15}	(0.09, 0.38, 0.12)	0.17	16/13/28	Free?
		$-1.50000 - 1.07899i$	$4 \leftrightarrow 13$	4.77×10^{-15}	(0.26, 0.41, 0.14)	0.26	12/8/19	Free?
	(2, 3)	$-1.50000 + 1.07899i$	$3 \leftrightarrow 14$	1.24×10^{-14}	(0.11, 0.32, 0.12)	0.13	16/13/28	Free?
		$-1.50000 - 1.07899i$	$3 \leftrightarrow 14$	1.20×10^{-14}	(0.11, 0.34, 0.08)	0.13	16/13/28	Free?
6	(3, 2)	$-1.50000 + 1.16963i$	$3 \leftrightarrow 14$	1.69×10^{-14}	(0.14, 0.41, 0.12)	0.20	16/13/28	Free?
		$-1.50000 - 1.16963i$	$4 \leftrightarrow 14$	4.44×10^{-15}	(0.32, 0.44, 0.16)	0.33	12/8/19	Free?
	(2, 3)	$-1.50000 + 1.16963i$	$3 \leftrightarrow 13$	5.55×10^{-15}	(0.17, 0.35, 0.12)	0.17	16/13/28	Free?
		$-1.50000 - 1.16963i$	$3 \leftrightarrow 12$	1.98×10^{-14}	(0.17, 0.36, 0.09)	0.17	16/13/28	Free?
7	(3, 2)	$-1.50000 + 1.21740i$	$4 \leftrightarrow 14$	5.88×10^{-15}	(0.16, 0.43, 0.12)	0.23	16/13/28	Free?
		$-1.50000 - 1.21740i$	$6 \leftrightarrow 10$	5.77×10^{-15}	(0.36, 0.46, 0.17)	0.37	12/8/19	Free?
	(2, 3)	$-1.50000 + 1.21740i$	$3 \leftrightarrow 13$	3.66×10^{-15}	(0.04, 0.20, 0.39)	0.20	12/8/19	Free?
		$-1.50000 - 1.21740i$	$3 \leftrightarrow 13$	1.38×10^{-14}	(0.20, 0.38, 0.10)	0.19	16/13/28	Free?

Table 1: Table Q5.5

n	(p, q)	γ	ε_V	deviation	B	$ B _E^2$	S/V/E	covolume	
8	(3, 2)	$0.47582 + 0.16460i$	$5 \leftrightarrow 11$	1.11×10^{-11}	(0.32, 0.17, 0.42)	0.31	30/28/56	0.220140673239553	
		$0.47582 - 0.16460i$	$4 \leftrightarrow 11$	2.99×10^{-12}	(0.33, 0.27, 0.36)	0.31	30/28/56	0.220140544640750	
		$-3.47582 + 0.16460i$	$3 \leftrightarrow 11$	4.74×10^{-13}	(-0.26, 0.25, 0.19)	0.17	30/28/56	0.220007282470588	
		$-3.47582 - 0.16460i$	$3 \leftrightarrow 11$	1.79×10^{-13}	(-0.28, 0.22, 0.23)	0.18	30/28/56	0.220219588908876	
	(2, 3)	$0.47582 + 0.16460i$	$3 \leftrightarrow 12$	1.07×10^{-11}	(0.08, 0.27, 0.21)	0.12	30/28/56	0.219957247078344	
		$0.47582 - 0.16460i$	$4 \leftrightarrow 12$ 3	1.72×10^{-11} 8.78×10^{-12}	(0.08, 0.25, 0.16)	0.09	30/28/56	0.220219589056842 0.220219588953623	
		$-3.47582 + 0.16460i$	$5 \leftrightarrow 12$ 3	1.12×10^{-12} 1.13×10^{-12}	(0.13, 0.20, 0.36)	0.19	30/28/56	0.220140673225395 0.220140673225399	
		$-3.47582 - 0.16460i$	$3 \leftrightarrow 4$ $5 \leftrightarrow 11$	1.03×10^{-12} 1.04×10^{-12}	(0.15, 0.16, 0.33)	0.15	30/28/56	0.220007282472575 0.220007282472604	
	9	(3, 2)	$0.23676 + 0.31257i$	$5 \leftrightarrow 12$	8.68×10^{-13}	(0.16, 0.42, 0.05)	0.21	26/24/48	0.154287388430275
			$0.23676 - 0.31257i$	$4 \leftrightarrow 12$	3.78×10^{-12}	(0.20, 0.28, 0.28)	0.19	26/24/48	0.154364842410065
$-3.23676 + 0.31257i$			$3 \leftrightarrow 11$ 3	2.62×10^{-14} 7.31×10^{-14}	(-0.39, 0.23, 0.12)	0.22	26/24/48	0.154047973303354 0.154047973303744	
$-3.23676 - 0.31257i$			$5 \leftrightarrow 11$	2.40×10^{-14}	(-0.39, 0.15, 0.22)	0.22	26/24/48	0.154318773285096	
(2, 3)		$0.23676 + 0.31257i$	$4 \leftrightarrow 12$	7.57×10^{-13}	(-0.06, 0.24, 0.21)	0.11	26/24/48	0.153776007581217	
		$0.23676 - 0.31257i$	$3 \leftrightarrow 12$ 3	1.17×10^{-12} 1.10×10^{-12}	(-0.04, 0.22, 0.10)	0.06	26/24/48	0.154375705696126 0.154375705689934	
		$-3.23676 + 0.31257i$	$4 \leftrightarrow 12$	2.72×10^{-13}	(0.03, 0.20, 0.45)	0.25	26/24/48	0.154287388416193	
		$-3.23676 - 0.31257i$	$3 \leftrightarrow 12$	7.77×10^{-14}	(0.09, 0.09, 0.41)	0.19	26/24/48	0.153513110895098	
10		(3, 2)	$-0.07087 + 0.66435i$	$4 \leftrightarrow 13$	7.84×10^{-14}	(0.07, 0.42, -0.07)	0.19	24/32/54	0.595189968898689
			$-0.07087 - 0.66435i$	$4 \leftrightarrow 12$	3.46×10^{-14}	(0.07, 0.42, 0.06)	0.19	24/32/54	0.595189968897844
	$-2.92913 + 0.66435i$		$5 \leftrightarrow 12$	1.00×10^{-12}	(0.47, 0.14, 0.26)	0.30	22/20/40	0.297303264846344	
	$-2.92913 - 0.66435i$		$5 \leftrightarrow 13$	5.37×10^{-14}	(0.39, 0.03, 0.41)	0.32	22/24/44	0.594206188118980	
	(2, 3)	$-0.07087 + 0.66435i$	$4 \leftrightarrow 13$	1.01×10^{-13}	(-0.13, 0.22, 0.30)	0.15	24/32/54	0.595419291729511	
		$-0.07087 - 0.66435i$	$4 \leftrightarrow 13$	8.83×10^{-14}	(-0.03, 0.39, 0.24)	0.21	24/32/54	0.595419291729334	
		$-2.92913 + 0.66435i$	$5 \leftrightarrow 13$	2.32×10^{-14}	(-0.02, 0.09, 0.46)	0.22	22/24/44	0.594663573037919	
		$-2.92913 - 0.66435i$	$4 \leftrightarrow 13$	8.88×10^{-15}	(0.36, 0.24, 0.27)	0.26	22/24/44	0.594566134203106	
	11	(3, 2)	$-1.08698 + 0.98787i$	$7 \leftrightarrow 12$	1.20×10^{-12}	(0.05, 0.26, 0.15)	0.09	28/30/56	0.264160360839894
				3	1.31×10^{-12}			24/23/45	0.264135365269606
4				1.20×10^{-12}	24/23/45			0.264043393927288	
5, 6				failure.					
(2, 3)		$-1.08698 - 0.98787i$	$4 \leftrightarrow 12$	1.21×10^{-12}	(0.16, 0.22, 0.21)	0.12	28/30/56	0.264618617416783	
		$-1.91302 + 0.98787i$	$5 \leftrightarrow 13$	4.11×10^{-14}	(0.11, 0.36, 0.13)	0.16	22/24/44	0.529237234824297	
		$-1.91302 - 0.98787i$	$4 \leftrightarrow 12$	1.50×10^{-14}	(0.47, 0.21, 0.34)	0.38	22/26/46	0.529237234824279	
		$-1.08698 + 0.98787i$	$7 \leftrightarrow 11$	1.27×10^{-11}	(-0.02, 0.21, -0.14)	0.07	28/30/56	0.264308750169820	
			4	24/23/45			0.264283754601990		
			5, 6	failure.					
	$-1.08698 - 0.98787i$	$3 \leftrightarrow 13$	1.03×10^{-12}	(-0.02, 0.21, 0.14)	0.07	28/30/56	0.264308750156561		
		3	24/23/45			0.264283754576702			
		4, 5, 6	failure.						
		13	9.25×10^{-13}	(-0.02, 0.21, 0.14)	0.07	28/30/56	0.264308750156759		
$-1.91302 + 0.98787i$	$4 \leftrightarrow 13$	7.44×10^{-15}	(0.12, 0.10, 0.34)	0.14	20/20/38	0.529035831989798			
$-1.91302 - 0.98787i$	$4 \leftrightarrow 14$	3.42×10^{-14}	(0.14, 0.32, 0.06)	0.13	22/24/44	0.529237234824353			

Table 2: Table Q5.5