

$n$	$(p, q)$	$\gamma$	$\varepsilon_V$	deviation	$B$	$\ B\ _E^2$	S/V/E	covolume
1	(3, 2)	$-0.76721 - 0.79255i$	$3 \leftrightarrow 13$	$1.64 \times 10^{-14}$	$(-0.02, 0.31, 0.12)$	0.11	20/20/38	0.263723173448867
		$-0.76721 + 0.79255i$	$4 \leftrightarrow 14$	$7.33 \times 10^{-15}$	$(-0.05, 0.33, 0.07)$	0.12	22/26/46	0.263487375455115
		$-2.23279 - 0.79255i$	$5 \leftrightarrow 13$	$1.53 \times 10^{-14}$	$(0.34, 0.22, 0.24)$	0.23	22/26/46	0.263518203239260
		$-2.23279 + 0.79255i$	$4 \leftrightarrow 14$ 4	$3.20 \times 10^{-14}$ $2.80 \times 10^{-14}$	$(0.16, 0.32, 0.13)$	0.14	24/34/56	0.263688965427039 0.263688965427042
	(2, 3)	$-0.76721 - 0.79255i$	$4 \leftrightarrow 13$	$1.08 \times 10^{-14}$	$(-0.04, 0.30, 0.01)$	0.09	22/26/46	0.263394331688615
		$-0.76721 + 0.79255i$	$4 \leftrightarrow 13$	$1.52 \times 10^{-14}$	$(-0.04, 0.29, -0.01)$	0.09	22/26/46	0.263394331688655
		$-2.23279 - 0.79255i$	$5 \leftrightarrow 14$	$9.10 \times 10^{-15}$	$(0.16, 0.28, 0.10)$	0.11	24/34/56	0.262917569081549
		$-2.23279 + 0.79255i$	$5 \leftrightarrow 14$	$6.00 \times 10^{-15}$	$(0.16, 0.28, -0.11)$	0.11	24/34/56	0.263008715157447
	(3, 2)	$-0.34861 + 0.75874i$	$4 \leftrightarrow 14$	$3.09 \times 10^{-14}$	$(0.02, 0.40, 0.04)$	0.16	26/34/58	0.432564598948254
		$-0.34861 - 0.75874i$	$4 \leftrightarrow 13$	$4.22 \times 10^{-14}$	$(0.07, 0.39, 0.09)$	0.17	26/34/58	0.432548106138239
		$-2.65139 + 0.75874i$	$4 \leftrightarrow 14$	$2.33 \times 10^{-14}$	$(0.37, 0.33, 0.21)$	0.28	26/34/58	0.432564598947727
		$-2.65139 - 0.75874i$	$4 \leftrightarrow 13$	$4.84 \times 10^{-14}$	$(0.36, -0.00, 0.39)$	0.28	26/34/58	0.432414119827482
		$-0.34861 + 0.75874i$	$4 \leftrightarrow 13$	$4.22 \times 10^{-14}$	$(-0.04, 0.31, -0.15)$	0.12	26/34/58	0.432564598948507
		$-0.34861 - 0.75874i$	$4 \leftrightarrow 13$	$6.64 \times 10^{-14}$	$(-0.04, 0.32, 0.15)$	0.13	26/34/58	0.432564598949059
		$-2.65139 + 0.75874i$	$5 \leftrightarrow 14$	$2.94 \times 10^{-14}$	$(0.33, 0.24, -0.25)$	0.22	26/34/58	0.432564598947876
		$-2.65139 - 0.75874i$	$4 \leftrightarrow 13$	$8.10 \times 10^{-15}$	$(0.33, 0.24, 0.24)$	0.22	26/34/58	0.432564598947726
3	(3, 2)	$-1.00000 + 1.00000i$	$3 \leftrightarrow 14$	$1.09 \times 10^{-13}$	$(0.15, 0.43, 0.07)$	0.21	26/30/54	0.610778931489704
		$-1.00000 - 1.00000i$	$4 \leftrightarrow 14$	$2.16 \times 10^{-13}$	$(0.21, 0.43, 0.06)$	0.23	26/30/54	0.611172970066301
		$-2.00000 + 1.00000i$	$5 \leftrightarrow 13$	$7.99 \times 10^{-14}$	$(0.13, 0.39, 0.13)$	0.18	30/42/70	0.610009854824228
		$-2.00000 - 1.00000i$	$5 \leftrightarrow 13$	$2.38 \times 10^{-14}$	$(0.42, 0.33, 0.25)$	0.35	24/30/52	0.610519526694357
	(2, 3)	$-1.00000 + 1.00000i$	$4 \leftrightarrow 14$ 14	$2.08 \times 10^{-13}$ $9.57 \times 10^{-14}$	$(0.14, 0.35, -0.15)$ $(0.14, 0.35, -0.15)$	0.16 0.16	26/30/54 26/30/54	0.610632545608902 0.610632545608938
		$-1.00000 - 1.00000i$	$3 \leftrightarrow 13$	$7.06 \times 10^{-14}$	$(0.14, 0.35, 0.14)$	0.16	26/30/54	0.610797931045570
		$-2.00000 + 1.00000i$	$3 \leftrightarrow 14$ 3 4	$8.50 \times 10^{-14}$	$(0.18, 0.09, 0.36)$	0.17	24/30/52	0.610519526695058 0.610519526695014
		$-2.00000 - 1.00000i$	$4 \leftrightarrow 14$	$2.48 \times 10^{-13}$	$(0.18, 0.33, 0.07)$	0.15	30/42/70	0.610416962118645
		$-0.60186 + 0.93867i$	$4 \leftrightarrow 13$	$1.83 \times 10^{-13}$	$(0.09, 0.42, 0.06)$	0.19	28/34/60	0.710901322036743
		$-0.60186 - 0.93867i$	$4 \leftrightarrow 14$	$1.05 \times 10^{-13}$	$(0.23, 0.40, 0.24)$	0.27	26/28/52	0.711606386948809
4	(3, 2)	$-2.39814 + 0.93867i$	$5 \leftrightarrow 13$	$6.84 \times 10^{-14}$	$(0.33, 0.39, 0.17)$	0.29	24/34/56	0.711338778934043
		$-2.39814 - 0.93867i$	$5 \leftrightarrow 13$	$5.84 \times 10^{-14}$	$(0.39, -0.04, 0.43)$	0.34	26/38/62	0.711117203273613
	(2, 3)	$-0.60186 + 0.93867i$	$4 \leftrightarrow 14$	$2.30 \times 10^{-13}$	$(0.11, 0.37, 0.07)$	0.15	28/34/60	0.712315086378573
		$-0.60186 - 0.93867i$	$4 \leftrightarrow 13$	$3.78 \times 10^{-13}$	$(0.05, 0.35, 0.14)$	0.14	28/34/60	0.711763881371836
		$-2.39814 + 0.93867i$	$5 \leftrightarrow 14$	$2.06 \times 10^{-13}$	$(0.34, 0.31, -0.21)$	0.25	24/34/56	0.711338778934606
		$-2.39814 - 0.93867i$	$5 \leftrightarrow 13$	$7.03 \times 10^{-14}$	$(0.38, 0.27, 0.26)$	0.28	26/38/62	0.710938595008224
	(3, 2)	$0.11005 + 0.57190i$	$5 \leftrightarrow 13$	$1.87 \times 10^{-13}$	$(-0.02, 0.42, -0.00)$	0.18	26/36/60	0.710510137161106
		$0.11005 - 0.57190i$	$4 \leftrightarrow 13$	$1.84 \times 10^{-13}$	$(0.07, 0.35, 0.28)$	0.20	26/38/62	0.710579473464925
		$-3.11005 + 0.57190i$	$5 \leftrightarrow 14$	$2.72 \times 10^{-13}$	$(0.39, 0.34, 0.25)$	0.33	28/40/66	0.712180070353679
		$-3.11005 - 0.57190i$	$5 \leftrightarrow 14$	$2.03 \times 10^{-13}$	$(-0.33, 0.28, 0.32)$	0.29	28/40/66	0.712180070353544
		$0.11005 + 0.57190i$	$4 \leftrightarrow 13$	$1.19 \times 10^{-13}$	$(-0.07, 0.28, 0.27)$	0.16	26/38/62	0.710579473464162
		$0.11005 - 0.57190i$	$4 \leftrightarrow 12$	$1.06 \times 10^{-13}$	$(0.00, 0.37, 0.01)$	0.14	26/36/60	0.710753951013632
		$-3.11005 + 0.57190i$	$4 \leftrightarrow 13$	$8.37 \times 10^{-14}$	$(0.06, 0.08, 0.42)$	0.18	28/40/66	0.712543560125077
		$-3.11005 - 0.57190i$	$5 \leftrightarrow 13$	$2.45 \times 10^{-13}$	$(0.37, 0.27, 0.25)$	0.28	28/40/66	0.711612113759270
6	(3, 2)	$-1.86240 + 1.07589i$	$5 \leftrightarrow 14$	$1.20 \times 10^{-12}$	$(0.13, 0.39, 0.13)$	0.18	32/48/78	0.866178421227291
		$-1.86240 - 1.07589i$	$4 \leftrightarrow 14$	$1.09 \times 10^{-12}$	$(0.13, 0.38, -0.13)$	0.18	32/48/78	0.866178421227852
		$-1.13760 + 1.07589i$	$4 \leftrightarrow 13$	$1.49 \times 10^{-13}$	$(0.21, 0.46, 0.08)$	0.26	28/36/62	0.865996064707863
		$-1.13760 - 1.07589i$	$5 \leftrightarrow 14$	$5.05 \times 10^{-13}$	$(0.28, 0.43, 0.17)$	0.29	28/36/62	0.864674947308066
	(2, 3)	$-1.86240 + 1.07589i$	$3 \leftrightarrow 13$	$2.82 \times 10^{-13}$	$(0.14, 0.13, 0.37)$	0.17	28/34/60	0.866237338993355
		$-1.86240 - 1.07589i$	$4 \leftrightarrow 14$ 14	$8.87 \times 10^{-13}$ $6.66 \times 10^{-13}$	$(0.18, 0.35, 0.07)$	0.16	32/48/78	0.865353485572168 0.865353485572135
		$-1.13760 + 1.07589i$	$5 \leftrightarrow 13$	$1.74 \times 10^{-13}$	$(-0.00, 0.21, 0.37)$	0.18	28/36/62	0.864774791781850
		$-1.13760 - 1.07589i$	$4 \leftrightarrow 13$	$3.30 \times 10^{-13}$	$(0.21, 0.38, 0.15)$	0.21	28/36/62	0.864164682655471

Table 1: Table Q51

$n$	$(p, q)$	$\gamma$	$\varepsilon_V$	deviation	$B$	$\ B\ _E^2$	S/V/E	covolume	
7	(3, 2)	$-0.23931 - 0.85787i$	$5 \leftrightarrow 13$	$3.71 \times 10^{-12}$	(0.20, 0.39, 0.26)	0.26	38/60/96	1.252307176564980	
		$-0.23931 + 0.85787i$	$4 \leftrightarrow 13$	$1.97 \times 10^{-12}$	(0.24, 0.51, 0.01)	0.32	32/44/74	1.252928202049658	
		$-2.76069 - 0.85787i$	$6 \leftrightarrow 12$	$1.43 \times 10^{-11}$	(0.48, -0.00, 0.47)	0.45	38/48/84	1.250321943401754	
		$-2.76069 + 0.85787i$	$5 \leftrightarrow 13$	$9.92 \times 10^{-12}$	(0.50, 0.38, 0.26)	0.46	38/48/84	1.250713782739033	
	(2, 3)	$-0.23931 - 0.85787i$	$5 \leftrightarrow 13$	$9.84 \times 10^{-13}$	(0.19, 0.39, 0.22)	0.24	32/44/74	1.255231836333305	
		$-0.23931 + 0.85787i$	$5 \leftrightarrow 13$	$8.22 \times 10^{-12}$	(0.17, 0.41, 0.03)	0.20	38/60/96	1.251442419208005	
		$-2.76069 - 0.85787i$	$5 \leftrightarrow 13$	$4.29 \times 10^{-12}$	(0.46, 0.26, 0.32)	0.37	38/48/84	1.251828263901439	
		$-2.76069 + 0.85787i$	$5 \leftrightarrow 13$	$4.56 \times 10^{-12}$	(-0.10, 0.12, 0.59)	0.37	38/48/84	1.252338870907436	
	8	(3, 2)	$-1.77184 + 1.11514i$	$5 \leftrightarrow 14$	$5.55 \times 10^{-13}$	(0.14, 0.39, 0.13)	0.19	32/44/74	1.067793082470478
			$-1.77184 - 1.11514i$	$4 \leftrightarrow 13$	$7.93 \times 10^{-13}$	(0.14, 0.39, -0.13)	0.19	32/44/74	1.067737300243070
$-1.22816 + 1.11514i$			$4 \leftrightarrow 14$	$7.33 \times 10^{-13}$	(0.29, 0.47, 0.09)	0.31	28/34/60	1.059048949359196	
$-1.22816 - 1.11514i$			$4 \leftrightarrow 11$	$3.44 \times 10^{-13}$	(0.29, 0.46, -0.10)	0.31	28/34/60	1.059048949359549	
(2, 3)		$-1.77184 + 1.11514i$	$4 \leftrightarrow 13$	$5.49 \times 10^{-13}$	(0.20, 0.36, 0.01)	0.17	32/44/74	1.067412724658020	
		$-1.77184 - 1.11514i$	$4 \leftrightarrow 14$	$1.42 \times 10^{-12}$	(0.18, 0.35, 0.08)	0.16	32/44/74	1.060315838908867	
		$-1.22816 + 1.11514i$	$5 \leftrightarrow 13$	$7.64 \times 10^{-13}$	(0.10, 0.19, 0.38)	0.19	28/34/60	1.059072575346030	
		$-1.22816 - 1.11514i$	$3 \leftrightarrow 14$	$6.60 \times 10^{-13}$	(0.28, 0.37, 0.19)	0.25	28/34/60	1.059072575345849	
9	(3, 2)	$-0.65219 - 1.02885i$	$5 \leftrightarrow 13$	$8.60 \times 10^{-12}$	(0.41, 0.38, 0.31)	0.41	34/46/78	1.483691461545163	
		$-0.65219 + 1.02885i$	$6 \leftrightarrow 14$	$8.50 \times 10^{-12}$	(0.18, 0.47, 0.05)	0.26	38/54/90	1.486637828881297	
		$-2.34781 - 1.02885i$	$5 \leftrightarrow 12$	$7.12 \times 10^{-12}$	(0.48, -0.01, 0.46)	0.44	38/50/86	1.496113936056134	
		$-2.34781 + 1.02885i$	$8 \leftrightarrow 13$	$2.18 \times 10^{-11}$	(0.32, 0.42, 0.16)	0.31	62/98/158	1.491181485968302	
	(2, 3)	$-0.65219 - 1.02885i$	$5 \leftrightarrow 13$	$9.50 \times 10^{-12}$	(0.16, 0.38, 0.17)	0.20	38/54/90	1.485461477905392	
		$-0.65219 + 1.02885i$	$5 \leftrightarrow 13$	$8.99 \times 10^{-12}$	(0.18, 0.22, 0.39)	0.23	34/46/78	1.486979860104871	
		$-2.34781 - 1.02885i$	$6 \leftrightarrow 12$	$3.66 \times 10^{-12}$	(0.44, 0.23, 0.32)	0.35	38/50/86	1.498880413762323	
		$-2.34781 + 1.02885i$	$5 \leftrightarrow 12$	$8.60 \times 10^{-12}$	(0.35, 0.34, -0.19)	0.28	62/98/158	1.494723230945138	
			5				62/92/152	1.493844293827972	
			6, 7				failure.		
10	(3, 2)	$0.17229 + 0.58559i$	$5 \leftrightarrow 12$	$1.14 \times 10^{-13}$	(0.12, 0.48, -0.02)	0.24	32/44/74	1.178776902865389	
		$0.17229 - 0.58559i$	$4 \leftrightarrow 12$	$5.12 \times 10^{-13}$	(0.25, 0.44, 0.24)	0.32	30/42/70	1.181360578216781	
		$-3.17229 + 0.58559i$	$5 \leftrightarrow 13$	$1.82 \times 10^{-12}$	(-0.34, 0.12, 0.44)	0.32	32/46/76	1.177589893407057	
		$-3.17229 - 0.58559i$	$5 \leftrightarrow 14$	$2.30 \times 10^{-12}$	(-0.35, 0.30, 0.34)	0.33	32/46/76	1.177440816718236	
	(2, 3)	$0.17229 + 0.58559i$	$4 \leftrightarrow 12$	$1.01 \times 10^{-12}$	(0.04, 0.29, 0.34)	0.20	30/42/70	1.181360578218381	
		$0.17229 - 0.58559i$	$4 \leftrightarrow 12$	$4.83 \times 10^{-12}$	(0.03, 0.36, 0.22)	0.18	32/44/74	1.179957019878848	
		$-3.17229 + 0.58559i$	$4 \leftrightarrow 13$	$2.73 \times 10^{-12}$	(0.09, 0.08, 0.45)	0.22	32/46/76	1.179576630255273	
		$-3.17229 - 0.58559i$	$6 \leftrightarrow 13$	$1.65 \times 10^{-12}$	(0.42, 0.28, 0.28)	0.33	32/46/76	1.179374721462420	
11	(3, 2)	$-0.13972 + 0.82586i$	$5 \leftrightarrow 13$	$2.89 \times 10^{-11}$	(0.21, 0.50, 0.01)	0.30	38/52/88	1.754207433479665	
		$-0.13972 - 0.82586i$	$5 \leftrightarrow 13$	$2.66 \times 10^{-11}$	(0.25, 0.40, 0.29)	0.31	38/54/90	1.748677559087148	
		$-2.86028 + 0.82586i$	$6 \leftrightarrow 13$	$2.61 \times 10^{-11}$	(0.60, 0.39, 0.26)	0.58	42/64/104	1.757144139163060	
		$-2.86028 - 0.82586i$	$7 \leftrightarrow 10$	$4.39 \times 10^{-11}$	(0.58, -0.02, 0.49)	0.57	42/64/104	1.757711925963126	
	(2, 3)	$-0.13972 + 0.82586i$	$5 \leftrightarrow 12$	$5.84 \times 10^{-11}$	(0.15, 0.38, 0.23)	0.22	38/54/90	1.753904062661501	
		$-0.13972 - 0.82586i$	$5 \leftrightarrow 13$	$5.59 \times 10^{-11}$	(0.15, 0.39, 0.22)	0.22	38/52/88	1.750828480010552	
			5	1.750828480015106					
			6	failure.					
		$-2.86028 + 0.82586i$	$6 \leftrightarrow 11$	$1.23 \times 10^{-11}$	(-0.10, 0.11, 0.67)	0.47	42/64/104	1.750517907450094	
		$-2.86028 - 0.82586i$	$5 \leftrightarrow 12$	$2.36 \times 10^{-11}$	(0.51, 0.27, 0.41)	0.50	42/64/104	1.758382402555404	

Table 2: Table Q51