

n	(p, q)	γ	ε_V	deviation	B	$\ B\ _F^2$	S/V/E	covolume
1	(4, 2)	$-0.50000 + 0.86603i$	$4 \leftrightarrow 13$	1.29×10^{-14}	$(0.07, 0.42, -0.03)$	0.18	20/22/40	0.253735401602386
		$-0.50000 - 0.86603i$	$4 \leftrightarrow 13$	9.44×10^{-15}	$(0.08, 0.42, 0.05)$	0.18	20/22/40	0.253598511561355
		$-1.50000 + 0.86603i$	$3 \leftrightarrow 13$	4.55×10^{-15}	$(0.18, 0.41, 0.04)$	0.20	18/22/38	0.253041353515199
		$-1.50000 - 0.86603i$	$4 \leftrightarrow 13$	5.55×10^{-15}	$(0.38, 0.31, 0.25)$	0.31	18/22/38	0.252720823519394
		$-0.50000 + 0.86603i$	$5 \leftrightarrow 13$	7.66×10^{-15}	$(-0.08, 0.28, 0.07)$	0.09	20/22/40	0.253542824010740
	(2, 4)	$-0.50000 - 0.86603i$	$3 \leftrightarrow 13$	2.00×10^{-14}	$(-0.07, 0.30, 0.05)$	0.10	20/22/40	0.253338508765728
		$-1.50000 + 0.86603i$	$4 \leftrightarrow 14$	6.22×10^{-15}	$(0.08, 0.30, -0.00)$	0.10	18/22/38	0.253712610730981
			$3 \leftrightarrow 14$	3.33×10^{-15}				0.253384811296644
		$-1.50000 - 0.86603i$	3	4.66×10^{-15}	$(0.02, 0.29, 0.07)$	0.09	18/22/38	0.253384811296590
2	(4, 2)	$0.23279 + 0.79255i$	$4 \leftrightarrow 11$	5.50×10^{-14}	$(0.13, 0.31, 0.38)$	0.26	22/28/48	0.593639175240615
		$0.23279 - 0.79255i$	$5 \leftrightarrow 12$	1.88×10^{-14}	$(0.17, 0.50, 0.13)$	0.29	22/26/46	0.593261429781721
		$-2.23279 + 0.79255i$	$5 \leftrightarrow 13$	1.10×10^{-14}	$(-0.26, 0.28, 0.49)$	0.39	22/28/48	0.595004149184967
		$-2.23279 - 0.79255i$	$5 \leftrightarrow 14$	2.18×10^{-14}	$(-0.27, 0.47, 0.31)$	0.39	22/28/48	0.594063100273875
		$0.23279 + 0.79255i$	$3 \leftrightarrow 14$	4.24×10^{-14}	$(0.02, 0.34, 0.12)$	0.13	22/28/48	0.592869862079440
	(2, 4)	$0.23279 - 0.79255i$	$4 \leftrightarrow 13$	4.69×10^{-14}	$(0.03, 0.36, 0.11)$	0.14	22/26/46	0.593261429782327
		$-2.23279 + 0.79255i$	$4 \leftrightarrow 14$	1.75×10^{-14}	$(0.33, 0.34, -0.22)$	0.27	22/28/48	0.593689839020190
		$-2.23279 - 0.79255i$	$4 \leftrightarrow 14$	1.71×10^{-14}	$(0.33, 0.35, 0.21)$	0.28	22/28/48	0.593689839020260
3	(4, 2)	$-1.34116 + 1.16154i$	$3 \leftrightarrow 12$	4.41×10^{-14}	$(0.25, 0.51, 0.02)$	0.33	24/26/48	0.593035916591825
			3	7.31×10^{-14}				0.593035916591793
		$-1.34116 - 1.16154i$	$4 \leftrightarrow 13$	3.13×10^{-14}	$(0.25, 0.51, -0.03)$	0.33	24/26/48	0.593035916591978
		$-0.65884 + 1.16154i$	$4 \leftrightarrow 13$	6.66×10^{-15}	$(0.36, 0.56, -0.09)$	0.46	22/28/48	0.593932061794999
		$-0.65884 - 1.16154i$	$3 \leftrightarrow 14$	1.13×10^{-14}	$(0.42, 0.49, 0.24)$	0.47	22/28/48	0.594047553937928
	(2, 4)	$-1.34116 + 1.16154i$	$3 \leftrightarrow 14$	6.28×10^{-14}	$(0.19, 0.37, 0.04)$	0.18	24/26/48	0.593687497734524
			3	6.08×10^{-14}				0.593687497734493
		$-1.34116 - 1.16154i$	$4 \leftrightarrow 14$	5.42×10^{-14}	$(0.13, 0.37, 0.08)$	0.16	24/26/48	0.592911657244731
		$-0.65884 + 1.16154i$	$4 \leftrightarrow 14$	1.12×10^{-14}	$(0.19, 0.38, -0.17)$	0.21	22/28/48	0.593688668377331
		$-0.65884 - 1.16154i$	$3 \leftrightarrow 14$	1.44×10^{-14}	$(0.17, 0.38, 0.17)$	0.20	22/28/48	0.593687497734380
4	(4, 2)	$0.66236 + 0.56228i$	$5 \leftrightarrow 13$	1.10×10^{-13}	$(0.18, 0.40, 0.37)$	0.32	22/30/50	0.825295376298228
		$0.66236 - 0.56228i$	$4 \leftrightarrow 13$	3.89×10^{-14}	$(0.20, 0.52, 0.20)$	0.35	22/30/50	0.824578962449851
		$-2.66236 + 0.56228i$	$4 \leftrightarrow 12$	3.20×10^{-14}	$(-0.23, 0.47, 0.26)$	0.34	24/28/50	0.824071575741213
		$-2.66236 - 0.56228i$	$4 \leftrightarrow 14$	7.39×10^{-14}	$(-0.26, 0.59, 0.15)$	0.43	24/30/52	0.824403065414145
		$0.66236 + 0.56228i$	$4 \leftrightarrow 12$	1.07×10^{-13}	$(0.07, 0.37, 0.14)$	0.16	22/30/50	0.825510669974842
	(2, 4)	$0.66236 - 0.56228i$	$4 \leftrightarrow 13$	4.17×10^{-14}	$(0.07, 0.38, 0.13)$	0.17	22/30/50	0.82451209676969
		$-2.66236 + 0.56228i$	$4 \leftrightarrow 13$	8.84×10^{-14}	$(-0.20, 0.06, 0.43)$	0.23	24/30/52	0.823496863377182
		$-2.66236 - 0.56228i$	$4 \leftrightarrow 14$	8.55×10^{-14}	$(0.42, 0.58, 0.35)$	0.64	24/30/52	0.823979602632310
5	(4, 2)	$0.50000 + 0.86603i$	$4 \leftrightarrow 13$	5.80×10^{-13}	$(0.61, 0.47, 0.46)$	0.80	26/34/58	1.523565545131137
		$0.50000 - 0.86603i$	$4 \leftrightarrow 11$	2.78×10^{-13}	$(0.61, 0.39, 0.51)$	0.78	26/34/58	1.523980885312456
		$-2.50000 + 0.86603i$	$5 \leftrightarrow 11$	4.76×10^{-13}	$(-0.39, 0.21, 0.64)$	0.61	28/34/60	1.523293304604914
		$-2.50000 - 0.86603i$	$4 \leftrightarrow 12$	4.40×10^{-14}	$(-0.41, 0.63, 0.27)$	0.64	28/34/60	1.5245956595895754
		$0.50000 + 0.86603i$	$4 \leftrightarrow 13$	8.73×10^{-13}	$(0.18, 0.31, 0.42)$	0.31	26/34/58	1.522827749800601
	(2, 4)	$0.50000 - 0.86603i$	$4 \leftrightarrow 12$	1.13×10^{-12}	$(0.16, 0.39, 0.26)$	0.25	34/46/78	1.523846644121271
		$-2.50000 + 0.86603i$	$5 \leftrightarrow 13$	8.32×10^{-13}	$(-0.25, 0.06, 0.58)$	0.40	28/34/60	1.522412409614590
		$-2.50000 - 0.86603i$	$4 \leftrightarrow 13$	9.14×10^{-13}	$(0.55, 0.52, 0.41)$	0.75	28/34/60	1.524178139252510
6	(4, 2)	$-0.21508 + 1.30714i$	$6 \leftrightarrow 11$	9.94×10^{-13}	$(0.51, 0.61, -0.16)$	0.66	44/58/100	2.122090588879277
		$-0.21508 - 1.30714i$	$6 \leftrightarrow 10$	7.00×10^{-12}	$(0.52, 0.47, 0.37)$	0.64	38/48/84	2.119372694824350
		$-1.78492 + 1.30714i$	$6 \leftrightarrow 11$	1.52×10^{-12}	$(-0.36, 0.37, 0.51)$	0.53	42/62/102	2.125201114257589
		$-1.78492 - 1.30714i$	$5 \leftrightarrow 12$	6.96×10^{-12}	$(-0.35, 0.49, 0.42)$	0.54	42/62/102	2.124077667438180
		$-0.21508 + 1.30714i$	$5 \leftrightarrow 13$	1.10×10^{-11}	$(0.34, 0.43, 0.18)$	0.33	38/48/84	2.119305381101686
	(2, 4)	$-0.21508 - 1.30714i$	$5 \leftrightarrow 14$	6.60×10^{-12}	$(0.31, 0.43, 0.23)$	0.33	44/58/100	2.124295589694652
		$-1.78492 + 1.30714i$	$6 \leftrightarrow 12$	2.87×10^{-11}	$(0.40, 0.42, -0.17)$	0.37	42/62/102	2.120955568937968
		$-1.78492 - 1.30714i$	$5 \leftrightarrow 12$	8.96×10^{-12}	$(0.47, 0.18, 0.42)$	0.43	38/52/88	2.122102670376362
7	(4, 2)	$1.06115 + 0.38830i$	$4 \leftrightarrow 13$	1.74×10^{-13}	$(0.57, 0.52, 0.40)$	0.75	26/38/62	1.545465473698826
		$1.06115 - 0.38830i$	$5 \leftrightarrow 12$	1.64×10^{-13}	$(0.39, 0.56, 0.28)$	0.54	30/46/74	1.542632159257580
			12	4.87×10^{-12}				1.542632159259560
		$-3.06115 + 0.38830i$	$4 \leftrightarrow 10$	6.96×10^{-13}	$(-0.24, 0.62, 0.23)$	0.49	28/30/56	1.542891480916546
		$-3.06115 - 0.38830i$	$5 \leftrightarrow 11$	5.14×10^{-13}	$(-0.25, 0.69, 0.04)$	0.54	28/32/58	1.542645122925050
	(2, 4)	$1.06115 + 0.38830i$	$3 \leftrightarrow 13$	5.15×10^{-13}	$(0.18, 0.35, 0.39)$	0.31	26/38/62	1.542645122928808
		$1.06115 - 0.38830i$	$3 \leftrightarrow 13$	6.87×10^{-13}	$(0.06, 0.37, 0.30)$	0.23	30/46/74	1.542854953734646
		$-3.06115 + 0.38830i$	$5 \leftrightarrow 13$	9.10×10^{-13}	$(0.24, 0.30, 0.32)$	0.25	38/48/84	1.542004392351739
		$-3.06115 - 0.38830i$	$5 \leftrightarrow 12$	4.41×10^{-12}	$(0.36, 0.34, 0.27)$	0.32	38/48/84	1.542145896625610

Table 1: Table Q5.8

n	(p, q)	γ	ε_V	deviation	B	$\ B\ _E^2$	S/V/E	covolume
8	(4, 2)	$0.03640 + 1.21238i$	$5 \leftrightarrow 11$	1.85×10^{-13}	$(0.51, 0.60, -0.18)$	0.64	30/36/64	1.540788174525126
		$0.03640 - 1.21238i$	$5 \leftrightarrow 10$	3.63×10^{-13}	$(0.66, 0.48, 0.53)$	0.94	30/38/66	1.542645122913982
		$-2.03640 + 1.21238i$	$4 \leftrightarrow 12$	1.90×10^{-12}	$(0.61, 0.65, 0.03)$	0.80	26/38/62	1.542302706507817
		$-2.03640 - 1.21238i$	$5 \leftrightarrow 13$	4.91×10^{-13}	$(-0.42, 0.55, 0.42)$	0.65	26/38/62	1.545386182393748
	(2, 4)	$0.03640 + 1.21238i$	$4 \leftrightarrow 12$	5.57×10^{-13}	$(0.24, 0.35, 0.38)$	0.33	30/38/66	1.542645122929170
		$0.03640 - 1.21238i$	$4 \leftrightarrow 12$ 13	1.02×10^{-11} 7.33×10^{-13}	$(0.28, 0.42, 0.24)$	0.32	30/36/64	1.539457592499659
		$-2.03640 + 1.21238i$	$6 \leftrightarrow 13$	2.11×10^{-13}	$(-0.30, 0.12, 0.55)$	0.41	26/38/62	1.542645122925198
		$-2.03640 - 1.21238i$	$4 \leftrightarrow 13$	8.96×10^{-13}	$(0.52, 0.42, 0.25)$	0.51	26/38/62	1.545720979684452
9	(4, 2)	$0.65139 + 0.75874i$	$4 \leftrightarrow 12$ 4	8.65×10^{-14} 9.13×10^{-14}	$(0.64, 0.38, 0.53)$	0.83	30/40/68	1.624021910597929
			5, 6	failure.				1.624021910598127
		$0.65139 - 0.75874i$	$5 \leftrightarrow 11$ 5	4.40×10^{-13} 4.40×10^{-13}	$(0.60, 0.60, 0.25)$	0.78	30/40/68	1.623182497757532
			6, 7, 8	failure.				1.623182497757539
		$-2.65139 + 0.75874i$	$4 \leftrightarrow 13$	4.95×10^{-13}	$(-0.33, 0.15, 0.66)$	0.57	30/38/66	1.626212883740653
		$-2.65139 - 0.75874i$	$5 \leftrightarrow 12$	1.33×10^{-13}	$(-0.35, 0.66, 0.21)$	0.61	30/38/66	1.625477965973462
	(2, 4)	$0.65139 + 0.75874i$	$4 \leftrightarrow 13$	5.39×10^{-13}	$(0.15, 0.39, 0.53)$	0.46	30/40/68	1.622813060220924
		$0.65139 - 0.75874i$	$4 \leftrightarrow 12$	2.16×10^{-12}	$(0.31, 0.42, 0.32)$	0.37	30/40/68	1.623508874386314
		$-2.65139 + 0.75874i$	$5 \leftrightarrow 13$	9.57×10^{-13}	$(-0.22, 0.05, 0.54)$	0.34	30/38/66	1.625086429747067
		$-2.65139 - 0.75874i$	$4 \leftrightarrow 13$ 4	1.65×10^{-12} 1.07×10^{-12}	$(0.55, 0.59, 0.41)$	0.82	30/38/66	1.626631271664573
				failure.				1.626631271663298
10	(4, 2)	$1.36778 + 0.23154i$	$5 \leftrightarrow 8$	1.92×10^{-10}	$(0.59, 0.55, 0.39)$	0.80	44/72/114	2.896525584118602
		$1.36778 - 0.23154i$	$6 \leftrightarrow 9$	2.95×10^{-11}	$(0.69, 0.58, 0.36)$	0.94	38/60/96	2.892098842548785
		$-3.36778 + 0.23154i$	$6 \leftrightarrow 9$	3.34×10^{-10}	$(-0.24, 0.74, 0.16)$	0.63	46/60/104	2.892265006742646
		$-3.36778 - 0.23154i$	$5 \leftrightarrow 8$	3.76×10^{-10}	$(-0.21, 0.73, 0.15)$	0.60	44/58/100	2.895735473733071
	(2, 4)	$1.36778 + 0.23154i$	$5 \leftrightarrow 12$	1.99×10^{-11}	$(0.19, 0.37, 0.39)$	0.33	44/72/114	2.900382924576496
		$1.36778 - 0.23154i$	$3 \leftrightarrow 12$	4.40×10^{-11}	$(0.36, 0.42, 0.40)$	0.47	38/60/96	2.889967487870522
		$-3.36778 + 0.23154i$	$4 \leftrightarrow 12$ 4	1.72×10^{-10} 1.72×10^{-10}	$(0.36, 0.35, 0.30)$	0.34	54/82/134	2.896693414681468
			5	failure.				2.896693414681705
		$-3.36778 - 0.23154i$	$5 \leftrightarrow 12$	2.92×10^{-10}	$(0.41, 0.37, 0.27)$	0.38	54/82/134	2.895921415505758
11	(4, 2)	$-0.57943 + 1.45743i$	$6 \leftrightarrow 12$ 12	2.52×10^{-11} 3.19×10^{-11}	$(0.58, 0.64, -0.14)$	0.76	48/62/108	2.889771482503296
		$-0.57943 - 1.45743i$	$6 \leftrightarrow 12$	6.07×10^{-11}	$(0.71, 0.57, 0.33)$	0.94	46/58/102	2.889771482506005
		$-1.42057 + 1.45743i$	$5 \leftrightarrow 12$	5.87×10^{-10}	$(0.42, 0.61, -0.02)$	0.55	40/64/102	2.888631582046883
		$-1.42057 - 1.45743i$	$5 \leftrightarrow 9$	2.11×10^{-10}	$(0.42, 0.61, -0.00)$	0.55	40/64/102	2.888357706163286
	(2, 4)	$-0.57943 + 1.45743i$	$6 \leftrightarrow 11$	8.88×10^{-11}	$(0.09, 0.30, 0.56)$	0.41	46/58/102	2.891037328603279
		$-0.57943 - 1.45743i$	$5 \leftrightarrow 11$	4.67×10^{-10}	$(0.48, 0.46, 0.26)$	0.50	46/58/102	2.887948649383576
		$-1.42057 + 1.45743i$	$4 \leftrightarrow 12$	9.45×10^{-11}	$(0.34, 0.43, -0.14)$	0.32	40/64/102	2.891340099023110
		$-1.42057 - 1.45743i$	$5 \leftrightarrow 12$	2.91×10^{-11}	$(0.34, 0.44, 0.13)$	0.32	40/64/102	2.891141431027691

Table 2: Table Q5.8