

G_{3i} groups			
n	γ -polynomial	γ	covolume
1	$z + 1$	$-1.00000 + 0.00000i$	Fuch
2	$z^2 + 3z + 1$	$-0.38197 + 0.00000i$	Fuch
3	$z^4 + 6z^3 + 12z^2 + 9z + 1$	$-1.50000 + 0.60666i$	0.039015451336356
4	$z^4 + 5z^3 + 7z^2 + 3z + 1$	$-0.21190 + 0.40136i$	0.040890367870668
5	$z^3 + 4z^2 + 4z + 2$	$-0.58036 + 0.60629i$	0.132387219941707
6	$z^3 + 5z^2 + 8z + 5$	$-1.12256 + 0.74486i$	0.157117893796128
7	$z^3 + 3z^2 + 2z + 1$	$-0.33764 + 0.56228i$	0.156983968194460
8	$z^4 + 5z^3 + 8z^2 + 6z + 1$	$-0.92362 + 0.81470i$	0.127456265703298
9	$z^2 + 3z + 3$	$-1.50000 + 0.86603i$	0.338313868802930
10	$z^3 + 4z^2 + 5z + 3$	$-0.76721 + 0.79255i$	0.263008715157447
11	$z^4 + 5z^3 + 6z^2 + 1$	$0.06115 + 0.38830i$	0.102661071637195
12	$z^3 + 4z^2 + 3z - 1$	$0.24698 + 0.00000i$	Free?
13	$z^6 + 8z^5 + 24z^4 + 35z^3 + 28z^2 + 12z + 1$	$-0.52842 + 0.78122i$	0.362887228283480
14	$z^3 + 3z^2 + z + 2$	$-0.11535 + 0.58974i$	0.330717107428080
G_{4i} groups			
n	γ -polynomial	γ	covolume
1	$z + 1$	$-1.00000 + 0.00000i$	Fuch
2	$z^2 + z + 1$	$-1.50000 + 0.86603i$	0.253384811296644
3	$z^3 + 2z^2 + z + 1$	$-0.12256 + 0.74486i$	0.137344777947632
4	$z^2 + 2z + 2$	$-1.00000 + 1.00000i$	0.457982797088671
5	$z^3 + 3z^2 + 4z + 3$	$-0.65884 + 1.16154i$	0.593932061794999
6	$z^3 + z^2 + 1$	$0.23279 + 0.79255i$	0.595004149184967
7	$z^3 + 2z^2 + 2z + 2$	$-0.22816 + 1.11514i$	0.793839731308609
8	$z^3 + z^2 - z + 1$	$0.41964 + 0.60629i$	0.264774439883719
9	$z^2 + 1$	$0.00000 + 1.00000i$	0.915965594176532
10	$z^2 + z - 1$	$0.61803 + 0.00000i$	Fuch?
11	$z^4 + 4z^3 + 7z^2 + 6z + 1$	$-1.00000 + 1.27202i$	Free?
12	$z^4 + 3z^3 + 4z^2 + 4z + 1$	$-0.40630 + 1.19616i$	0.447434850606938
13	$z^4 + z^3 - 2z^2 + 1$	$0.78810 + 0.40136i$	0.347567297638236
G_{5i} groups			
n	γ -polynomial	γ	covolume
1	$z - \beta - 1$	$-0.38197 + 0.00000i$	Fuch?
2	$z^2 - \beta z + 1$	$-0.69098 + 0.72287i$	0.093325539506778
3	$z^2 - (\beta + 1)z - \beta - 1$	$0.11803 + 0.60666i$	0.039050285615487
4	$z^2 - (\beta + 1)z + 1$	$-1.19098 + 0.98159i$	0.468603427380289
5	$z - \beta - 2$	$0.61803 + 0.00000i$	Free?
6	$z(z - \beta - 1)^2 + 1$	$0.25278 + 0.85077i$	0.313085454214014
7	$z^2 - \beta z + 2$	$-0.69098 + 1.23391i$	Free?
8	$z^3 - (2\beta + 1)z^2 + (\beta^2 + \beta + 2)z - 2\beta - 1$	$-0.38197 + 1.27202i$	0.861236641862642
9	$z^3 - (2\beta + 2)z^2 + (\beta^2 + 2\beta + 2)z - \beta$	$0.11803 + 1.16963i$	1.119270315426469
10	$z^4 - (2\beta + 1)z^3 + (\beta^2 + \beta + 2)z^2 - 2\beta z + 1$	$-0.08180 + 1.28803i$	0.700364591063245
11	$z^3 - (2\beta + 3)z^2 + (\beta^2 + 3\beta + 2)z + 1$	$0.61803 + 0.78615i$	0.861241520146132
12	$z(z - \beta)(z - \beta - 2)^2 + 1$	$0.87764 + 0.58260i$	0.454271480250933
G_{6i} groups			
n	γ -polynomial	γ	covolume
1	$z^2 + z + 1$	$-0.50000 + 0.86603i$	0.253735401602561
2	$z^2 + 1$	$0.00000 + 1.00000i$	0.610643729451522
3	$z^2 - z + 1$	$0.50000 + 0.86603i$	0.507438590492248
4	$z^2 + z + 2$	$-0.50000 + 1.32288i$	Free?
5	$z^3 + z^2 + 2z + 1$	$-0.21508 + 1.30714i$	1.019497428415326
6	$z^3 + z + 1$	$0.34116 + 1.16154i$	1.320702203534967
7	$z - 1$	$1.00000 + 0.00000i$	Free?
8	$z^3 - z^2 + 1$	$0.87744 + 0.74486i$	1.022004856907895
G_{7i} groups			
n	γ -polynomial	γ	covolume
1	$z - \beta - 1$	$0.24698 + 0.00000i$	Fuch?
2	$z^2 - \beta z + 1$	$-0.37651 + 0.92641i$	Free?
3	$z - \beta - 2$	$1.24698 + 0.00000i$	Fuch?

Table 1: $G(n)i$ groups