

TABLE 4

**BIRCH–SWINNERTON-DYER DATA**

In Table 4 we give the numbers relating to the Birch–Swinnerton-Dyer conjecture, for each “strong Weil” curve  $E_f$ . Each curve is identified as before with a single letter X after the conductor, and is<sup>1</sup> the curve NX1 of Table 1.

For each curve we first give the rank  $r$ , and then list (to 10 decimal places): the real period  $\Omega(f)$ , the value of  $L^{(r)}(f, 1)/r!$ , the regulator  $R$  of  $E_f$ , and the ratio  $L^{(r)}(f, 1)/r!R\Omega$ . For curves of rank 0 we obviously have  $R = 1$  exactly; also the ratio  $L(f, 1)/\Omega(f)$  is known exactly in these cases, so we give it as an exact rational rather than as a decimal. Finally we give the value of

$$S = \frac{L^{(r)}(f, 1)}{r! \Omega(f)} \bigg/ \frac{(\prod c_p) R}{|T|^2},$$

which according to the Birch–Swinnerton-Dyer conjecture should equal the order of the Tate–Shafarevich group  $\text{III}(E_f/\mathbb{Q})$ . The value  $S$  is known exactly in case  $r = 0$  and approximately in case  $r > 0$ ; in each case it is a positive integer to within 10 decimal places, and is (to this precision) equal to 1 in all but 4 cases. The exceptions are

$$\begin{aligned} S = 4 & \quad \text{for 571A, 960D, and 960N;} \\ S = 9 & \quad \text{for 681B.} \end{aligned}$$

These are all curves of rank 0, so that the value of  $S$  is exact.

We have also computed the corresponding data for all the curves in each isogeny class, but this extra data is not included here for reasons of space. For a summary of the results obtained, see [16]. As well as  $S = 1, 4$  and  $9$ , the values  $S = 16, 25$  and  $49$  were also obtained, all for curves of rank 0.

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<sup>1</sup>As remarked earlier, for class 990H the “strong” curve is 990H3 and not 990H1, and so the data here is for the curve 990H3.

TABLE 4: BIRCH-SWINNERTON-DYER DATA 11A-66B

Curve	$r$	$\Omega$	$L^{(r)}(1)/r!$	$R$	$L^{(r)}(1)/r!\Omega R$	$S$
11 A (B)	0	1.2692093043	0.2538418609	1	1/5	1
14 A (C)	0	1.9813419561	0.3302236593	1	1/6	1
15 A (C)	0	2.8012060847	0.3501507606	1	1/8	1
17 A (C)	0	1.5470797536	0.3867699384	1	1/4	1
19 A (B)	0	1.3597597335	0.4532532445	1	1/3	1
20 A (B)	0	2.8243751420	0.4707291903	1	1/6	1
21 A (B)	0	3.6089232431	0.4511154054	1	1/8	1
24 A (B)	0	4.3130312950	0.5391289119	1	1/8	1
26 A (B)	0	1.5467299538	0.5155766513	1	1/3	1
26 B (D)	0	4.3467574468	0.6209653495	1	1/7	1
27 A (B)	0	1.7666387503	0.5888795834	1	1/3	1
30 A (A)	0	3.3519482592	0.5586580432	1	1/6	1
32 A (B)	0	2.6220575543	0.6555143886	1	1/4	1
33 A (B)	0	2.9893565910	0.7473391477	1	1/4	1
34 A (A)	0	4.4956633263	0.7492772211	1	1/6	1
35 A (B)	0	2.1087337174	0.7029112391	1	1/3	1
36 A (A)	0	4.2065463160	0.7010910527	1	1/6	1
37 A (A)	1	5.9869172925	0.3059997738	0.0511114082	1.0000000000	1.0
37 B (C)	0	2.1770431858	0.7256810619	1	1/3	1
38 A (D)	0	1.8906322299	0.6302107433	1	1/3	1
38 B (A)	0	4.0962281653	0.8192456331	1	1/5	1
39 A (B)	0	3.3067514027	0.8266878507	1	1/4	1
40 A (B)	0	2.9688249468	0.7422062367	1	1/4	1
42 A (A)	0	3.4754474575	0.8688618644	1	1/4	1
43 A (A)	1	5.4686895300	0.3435239746	0.0628165071	1.0000000000	1.0
44 A (A)	0	2.4139388627	0.8046462876	1	1/3	1
45 A (A)	0	1.8431817533	0.9215908766	1	1/2	1
46 A (A)	0	1.3218082226	0.6609041113	1	1/2	1
48 A (B)	0	3.3715007096	0.8428751774	1	1/4	1
49 A (A)	0	1.9333117056	0.9666558528	1	1/2	1
50 A (E)	0	2.1394949443	0.7131649814	1	1/3	1
50 B (A)	0	4.7840561329	0.9568112266	1	1/5	1
51 A (A)	0	2.5801770484	0.8600590161	1	1/3	1
52 A (B)	0	1.6909664173	0.8454832086	1	1/2	1
53 A (A)	1	4.6876410489	0.4358638242	0.0929814846	1.0000000000	1.0
54 A (E)	0	2.1047244760	0.7015748253	1	1/3	1
54 B (A)	0	3.0915655491	1.0305218497	1	1/3	1
55 A (B)	0	4.1146794247	1.0286698562	1	1/4	1
56 A (C)	0	3.4981932568	0.8745483142	1	1/4	1
56 B (A)	0	1.8960382312	0.9480191156	1	1/2	1
57 A (E)	1	5.5555045214	0.4174916397	0.0375745927	2.0000000000	1.0
57 B (B)	0	4.3412090891	1.0853022723	1	1/4	1
57 C (F)	0	1.4662739791	0.5865095917	1	2/5	1
58 A (A)	1	5.4655916989	0.4637041648	0.0424203078	2.0000000000	1.0
58 B (B)	0	2.5830187734	1.0332075094	1	2/5	1
61 A (A)	1	6.1331931484	0.4856736514	0.0791877314	1.0000000000	1.0
62 A (A)	0	4.4349626414	1.1087406604	1	1/4	1
63 A (A)	0	2.2066209287	1.1033104643	1	1/2	1
64 A (B)	0	3.7081493546	0.9270373387	1	1/4	1
65 A (A)	1	5.3828534706	0.5053343423	0.3755140987	0.2500000000	1.0
66 A (A)	0	4.7825487441	0.7970914573	1	1/6	1
66 B (E)	0	4.4087701205	1.1021925301	1	1/4	1

TABLE 4: BIRCH-SWINNERTON-DYER DATA 66C-108A

Curve	$r$	$\Omega$	$L^{(r)}(1)/r!$	$R$	$L^{(r)}(1)/r!\Omega R$	$S$
66 C (I)	0	2.3832296312	1.1916148156	1	1/2	1
67 A (A)	0	1.2737700365	1.2737700365	1	1	1
69 A (A)	0	2.4058638676	1.2029319338	1	1/2	1
70 A (A)	0	2.3606086931	1.1803043466	1	1/2	1
72 A (A)	0	1.9465368423	0.9732684211	1	1/2	1
73 A (B)	0	2.3653209345	1.1826604672	1	1/2	1
75 A (A)	0	1.4025399402	1.4025399402	1	1	1
75 B (E)	0	2.5054748897	1.2527374449	1	1/2	1
75 C (C)	0	3.1361746475	0.6272349295	1	1/5	1
76 A (A)	0	1.1104197465	1.1104197465	1	1	1
77 A (F)	1	3.1997813616	0.6273362019	0.0980279793	2.0000000000	1.0
77 B (D)	0	1.5489100656	1.0326067104	1	2/3	1
77 C (A)	0	2.6516148585	1.3258074292	1	1/2	1
78 A (A)	0	1.4504359262	0.7252179631	1	1/2	1
79 A (A)	1	5.9508003526	0.5811802159	0.0976642101	1.0000000000	1.0
80 A (F)	0	4.0378116400	1.0094529100	1	1/4	1
80 B (B)	0	2.2741651990	1.1370825995	1	1/2	1
82 A (A)	1	5.1889950404	0.5830015595	0.2247069249	0.5000000000	1.0
83 A (A)	1	3.3744689001	0.5982673327	0.1772922941	1.0000000000	1.0
84 A (C)	0	2.1903171092	1.0951585546	1	1/2	1
84 B (A)	0	1.9449239505	0.9724619753	1	1/2	1
85 A (A)	0	2.7953844365	1.3976922183	1	1/2	1
88 A (A)	1	4.2525295331	0.6849015939	0.0402643643	4.0000000000	1.0
89 A (C)	1	5.5526265646	0.6224765415	0.1121048812	1.0000000000	1.0
89 B (A)	0	2.8446096585	1.4223048292	1	1/2	1
90 A (M)	0	2.4599353712	0.8199784571	1	1/3	1
90 B (A)	0	3.9710942585	1.3236980862	1	1/3	1
90 C (E)	0	1.3375959946	1.3375959946	1	1	1
91 A (A)	1	3.8972609371	0.5549393665	0.1423921507	1.0000000000	1.0
91 B (B)	1	6.0394915365	0.7108113038	1.0592450864	0.1111111111	1.0
92 A (A)	0	3.4103924343	1.1367974781	1	1/3	1
92 B (C)	1	4.7070877612	0.7033574920	0.0498083973	3.0000000000	1.0
94 A (A)	0	2.7134690132	1.3567345066	1	1/2	1
96 A (E)	0	4.6856803366	1.1714200841	1	1/4	1
96 B (A)	0	4.0043095218	1.0010773805	1	1/4	1
98 A (B)	0	1.0019771958	1.0019771958	1	1	1
99 A (A)	1	4.4984528866	0.6805515591	0.3025713846	0.5000000000	1.0
99 B (H)	0	3.1692296155	0.7923074039	1	1/4	1
99 C (F)	0	2.7285845914	1.3642922957	1	1/2	1
99 D (C)	0	1.6844963330	1.6844963330	1	1	1
100 A (A)	0	2.5261979246	1.2630989623	1	1/2	1
101 A (A)	1	4.5902472119	0.7560295657	0.1647034529	1.0000000000	1.0
102 A (E)	1	4.7278638235	0.6772848980	0.1432538929	1.0000000000	1.0
102 B (G)	0	2.9593558556	1.4796779278	1	1/2	1
102 C (A)	0	2.7860649844	0.9286883281	1	1/3	1
104 A (A)	0	1.1836111473	1.1836111473	1	1	1
105 A (A)	0	5.8634534537	1.4658633634	1	1/4	1
106 A (B)	0	3.7857830586	1.2619276862	1	1/3	1
106 B (A)	1	5.0128820343	0.6909022751	0.0689126804	2.0000000000	1.0
106 C (E)	0	0.5717994122	1.5247984324	1	8/3	1
106 D (D)	0	1.0421614431	1.0421614431	1	1	1
108 A (A)	0	3.3387380236	1.1129126745	1	1/3	1

TABLE 4: BIRCH-SWINNERTON-DYER DATA 109A-138C

Curve	$r$	$\Omega$	$L^{(r)}(1)/r!$	$R$	$L^{(r)}(1)/r!\Omega R$	$S$
109 A (A)	0	1.4110259162	1.4110259162	1	1	1
110 A (C)	0	1.3595418147	1.3595418147	1	1	1
110 B (A)	0	4.6222420328	1.5407473443	1	1/3	1
110 C (E)	0	2.8261738995	0.9420579665	1	1/3	1
112 A (K)	1	3.3732121966	0.8093007286	0.2399198987	1.0000000000	1.0
112 B (A)	0	2.2962114575	1.1481057287	1	1/2	1
112 C (E)	0	1.3254912397	1.3254912397	1	1	1
113 A (B)	0	2.0183698932	1.0091849466	1	1/2	1
114 A (A)	0	3.1488707131	1.5744353566	1	1/2	1
114 B (E)	0	1.5271441130	0.7635720565	1	1/2	1
114 C (G)	0	1.1101789855	1.3877237318	1	5/4	1
115 A (A)	0	1.8080388810	1.8080388810	1	1	1
116 A (E)	0	0.2863256792	0.8589770377	1	3	1
116 B (A)	0	3.8294768331	1.2764922777	1	1/3	1
116 C (D)	0	2.6462381980	1.3231190990	1	1/2	1
117 A (A)	1	2.6403251263	0.7461133887	1.1303356262	0.2500000000	1.0
118 A (A)	1	4.1584572190	0.7311083080	0.0879061957	2.0000000000	1.0
118 B (B)	0	3.4884515797	1.3953806319	1	2/5	1
118 C (D)	0	1.6840974200	1.6840974200	1	1	1
118 D (E)	0	1.0990077472	1.0990077472	1	1	1
120 A (E)	0	5.0779771119	1.2694942780	1	1/4	1
120 B (A)	0	2.4898202911	1.2449101455	1	1/2	1
121 A (H)	0	1.0197948618	1.0197948618	1	1	1
121 B (D)	1	4.8024213220	0.8623722967	0.0897851562	2.0000000000	1.0
121 C (F)	0	1.6661569204	1.6661569204	1	1	1
121 D (A)	0	0.8796995193	1.7593990387	1	2	1
122 A (A)	1	2.9660992729	0.7168659467	0.1208432154	2.0000000000	1.0
123 A (A)	1	3.9950826936	0.6715905138	0.8405214175	0.2000000000	1.0
123 B (C)	1	2.9874191593	0.8720710560	0.2919145287	1.0000000000	1.0
124 A (B)	1	4.9333272334	0.8559827493	0.5205306939	0.3333333333	1.0
124 B (A)	0	1.1755295616	1.1755295616	1	1	1
126 A (A)	0	1.5305454481	1.5305454481	1	1	1
126 B (G)	0	0.9104737369	0.9104737369	1	1	1
128 A (C)	1	4.0364616539	0.8725440838	0.4323311646	0.5000000000	1.0
128 B (F)	0	1.9426724598	0.9713362299	1	1/2	1
128 C (A)	0	2.7473537399	1.3736768699	1	1/2	1
128 D (G)	0	2.8542094075	1.4271047037	1	1/2	1
129 A (E)	1	4.4728045672	0.8941955093	0.0999591527	2.0000000000	1.0
129 B (B)	0	2.1455286131	1.6091464598	1	3/4	1
130 A (E)	1	3.7842289994	0.7382173988	1.1704641536	0.1666666667	1.0
130 B (A)	0	3.1294275088	1.5647137544	1	1/2	1
130 C (J)	0	0.8865474519	1.7730949038	1	2	1
131 A (A)	1	4.1716092763	0.9014647353	0.2160951987	1.0000000000	1.0
132 A (A)	0	2.6563291575	1.3281645788	1	1/2	1
132 B (C)	0	2.1888884346	1.0944442173	1	1/2	1
135 A (A)	1	3.7814246602	0.6703486968	0.0295456852	6.0000000000	1.0
135 B (B)	0	0.9833356547	1.9666713094	1	2	1
136 A (A)	1	3.8871054798	0.8998959875	0.2315079928	1.0000000000	1.0
136 B (C)	0	2.8672616758	1.4336308379	1	1/2	1
138 A (E)	1	4.4583602683	0.7907712971	0.1773681913	1.0000000000	1.0
138 B (G)	0	3.0602034222	1.0200678074	1	1/3	1
138 C (A)	0	2.9754615368	1.4877307684	1	1/2	1

TABLE 4: BIRCH-SWINNERTON-DYER DATA 139A-166A

Curve	$r$	$\Omega$	$L^{(r)}(1)/r!$	$R$	$L^{(r)}(1)/r!\Omega R$	$S$
139 A (A)	0	1.7396869770	1.7396869770	1	1	1
140 A (A)	0	1.3443015422	1.3443015422	1	1	1
140 B (C)	0	1.5555116321	1.5555116321	1	1	1
141 A (E)	1	2.9765040248	0.7185501725	0.0344867750	7.0000000000	1.0
141 B (G)	0	1.3805576056	0.6902788028	1	1/2	1
141 C (A)	0	3.8499118765	0.9624779691	1	1/4	1
141 D (I)	1	4.7295280333	0.9387887853	0.1984952365	1.0000000000	1.0
141 E (H)	0	2.1075355786	2.1075355786	1	1	1
142 A (F)	1	3.4643325948	1.0535114537	0.0337891426	9.0000000000	1.0
142 B (E)	1	4.4304737755	0.8015334521	0.1809137110	1.0000000000	1.0
142 C (A)	0	1.8851444898	0.9425722449	1	1/2	1
142 D (C)	0	5.2000441497	1.7333480499	1	1/3	1
142 E (G)	0	1.3008551919	1.3008551919	1	1	1
143 A (A)	1	1.9699231646	0.9456964112	0.2400338318	2.0000000000	1.0
144 A (A)	0	2.4286506479	1.2143253239	1	1/2	1
144 B (E)	0	2.4901297792	1.2450648896	1	1/2	1
145 A (A)	1	5.6915790981	0.8316217075	0.5844576299	0.2500000000	1.0
147 A (C)	0	1.4445724908	0.7222862454	1	1/2	1
147 B (I)	0	2.1340337345	2.1340337345	1	1	1
147 C (A)	0	1.9200537453	1.9200537453	1	1	1
148 A (A)	1	3.3849941577	0.9773274900	0.0962411794	3.0000000000	1.0
150 A (A)	0	1.7692592483	1.7692592483	1	1	1
150 B (G)	0	0.7912367898	0.7912367898	1	1	1
150 C (I)	0	1.4990368329	1.4990368329	1	1	1
152 A (A)	1	3.6456468990	0.9539180658	0.0654148696	4.0000000000	1.0
152 B (B)	0	1.3670652145	1.3670652145	1	1	1
153 A (C)	1	5.0866355584	0.7068417367	0.0694802811	2.0000000000	1.0
153 B (A)	1	2.2547575497	1.0181559607	0.1128897385	4.0000000000	1.0
153 C (E)	0	3.1705064379	1.5852532190	1	1/2	1
153 D (D)	0	1.0383987258	2.0767974516	1	2	1
154 A (C)	1	3.5423530689	0.8716922254	0.2460771720	1.0000000000	1.0
154 B (E)	0	1.1263920237	1.6895880356	1	3/2	1
154 C (A)	0	1.2199842863	1.2199842863	1	1	1
155 A (D)	1	2.2165110787	0.6715528888	1.5148872822	0.2000000000	1.0
155 B (A)	0	2.1141393763	1.0570696881	1	1/2	1
155 C (C)	1	5.3453690009	0.9843172157	0.1841439226	1.0000000000	1.0
156 A (E)	1	4.5382403755	1.0035030550	0.1474144120	1.5000000000	1.0
156 B (A)	0	2.7522991873	1.3761495936	1	1/2	1
158 A (E)	1	3.5817087725	1.1172146322	0.0389902803	8.0000000000	1.0
158 B (D)	1	5.3375846274	0.8451399432	0.0791687629	2.0000000000	1.0
158 C (H)	0	1.9304530479	1.5443624383	1	4/5	1
158 D (B)	0	1.6852937385	1.1235291590	1	2/3	1
158 E (F)	0	3.8328305468	1.9164152734	1	1/2	1
160 A (D)	1	5.4517057364	0.9777440810	0.3586929040	0.5000000000	1.0
160 B (A)	0	3.0115524554	1.5057762277	1	1/2	1
161 A (B)	0	3.4513373072	0.8628343268	1	1/4	1
162 A (K)	1	4.3954427629	0.8964795141	0.3059348839	0.6666666667	1.0
162 B (G)	0	5.0519074124	1.6839691375	1	1/3	1
162 C (A)	0	2.8006777426	0.9335592475	1	1/3	1
162 D (E)	0	2.6051702504	1.7367801669	1	2/3	1
163 A (A)	1	5.5180730712	1.0479330218	0.1899092325	1.0000000000	1.0
166 A (A)	1	4.7801672708	0.8600170155	0.0899567909	2.0000000000	1.0

TABLE 4: BIRCH-SWINNERTON-DYER DATA 168A-192A

Curve	$r$	$\Omega$	$L^{(r)}(1)/r!$	$R$	$L^{(r)}(1)/r!\Omega R$	$S$
168 A (B)	0	2.9025247409	1.4512623705	1	1/2	1
168 B (E)	0	2.3215093041	1.1607546520	1	1/2	1
170 A (A)	1	4.0409291005	0.8289341482	0.2051345440	1.0000000000	1.0
170 B (H)	0	1.9117819746	0.6372606582	1	1/3	1
170 C (F)	0	0.7915291521	1.8469013550	1	7/3	1
170 D (D)	0	3.3291061788	1.1097020596	1	1/3	1
170 E (C)	0	1.3360256749	1.3360256749	1	1	1
171 A (D)	0	3.4734453619	0.8683613405	1	1/4	1
171 B (A)	1	2.3827779033	1.0768577238	0.2259668688	2.0000000000	1.0
171 C (I)	0	1.0700870190	2.1401740379	1	2	1
171 D (H)	0	1.1075480554	2.2150961108	1	2	1
172 A (A)	1	4.0096273260	1.0159589215	0.7601396630	0.3333333333	1.0
174 A (I)	0	0.4362942674	1.0180199573	1	7/3	1
174 B (G)	0	1.8598039585	1.8598039585	1	1	1
174 C (F)	0	1.5847007717	1.5847007717	1	1	1
174 D (A)	0	2.2764447598	1.1382223799	1	1/2	1
174 E (E)	0	0.8687758077	0.8687758077	1	1	1
175 A (B)	1	2.6245205399	0.6977340315	0.1329259994	2.0000000000	1.0
175 B (C)	1	2.8291631631	1.0476202635	0.0925733338	4.0000000000	1.0
175 C (F)	0	1.1737212671	2.3474425342	1	2	1
176 A (C)	0	1.6554236532	1.6554236532	1	1	1
176 B (D)	0	1.4588166169	1.4588166169	1	1	1
176 C (A)	1	3.0540697209	1.0693142864	0.1750638303	2.0000000000	1.0
178 A (A)	0	1.4760248421	1.9680331227	1	4/3	1
178 B (C)	0	2.5803848480	1.2901924240	1	1/2	1
179 A (A)	0	2.2601982547	2.2601982547	1	1	1
180 A (A)	0	2.6259797797	1.3129898898	1	1/2	1
182 A (E)	0	0.7188679094	1.7971697734	1	5/2	1
182 B (A)	0	1.9204065876	1.9204065876	1	1	1
182 C (J)	0	1.2089756349	1.2089756349	1	1	1
182 D (D)	0	2.1353664019	2.1353664019	1	1	1
182 E (I)	0	1.3931977005	1.3931977005	1	1	1
184 A (C)	1	4.4163757466	1.0875847398	0.1231309112	2.0000000000	1.0
184 B (B)	1	5.3243221525	1.0975263443	0.1030672368	2.0000000000	1.0
184 C (D)	0	2.5979495920	1.2989747960	1	1/2	1
184 D (A)	0	0.8765533735	1.7531067469	1	2	1
185 A (D)	1	3.5930803975	0.8196298176	0.1140567044	2.0000000000	1.0
185 B (A)	1	4.8983715401	1.0803747090	0.1102789672	2.0000000000	1.0
185 C (B)	1	3.4935106383	1.2447948639	1.4252652907	0.2500000000	1.0
186 A (D)	0	0.7823354594	0.7823354594	1	1	1
186 B (B)	0	1.9528976690	1.9528976690	1	1	1
186 C (A)	0	1.1823572975	1.1823572975	1	1	1
187 A (A)	0	2.1146369273	1.4097579516	1	2/3	1
187 B (C)	0	2.3270976414	2.3270976414	1	1	1
189 A (A)	1	4.0550955533	0.7689943976	0.0632121888	3.0000000000	1.0
189 B (C)	1	5.4604576374	1.1304624983	1.8632435522	0.1111111111	1.0
189 C (F)	0	3.7360320500	1.2453440167	1	1/3	1
189 D (B)	0	2.2649180731	2.2649180731	1	1	1
190 A (D)	1	2.7276120737	1.2342342404	0.0205680115	22.0000000000	1.0
190 B (C)	1	3.4751792755	0.9162065638	0.1318214819	2.0000000000	1.0
190 C (A)	0	0.9862313357	1.9724626715	1	2	1
192 A (Q)	1	3.3132763405	1.1195591687	1.3516037344	0.2500000000	1.0

TABLE 4: BIRCH-SWINNERTON-DYER DATA 192B-214D

Curve	$r$	$\Omega$	$L^{(r)}(1)/r!$	$R$	$L^{(r)}(1)/r!\Omega R$	$S$
192 B (A)	0	5.6629488337	1.4157372084	1	1/4	1
192 C (K)	0	3.0497736762	1.5248868381	1	1/2	1
192 D (E)	0	2.3840110146	1.1920055073	1	1/2	1
194 A (A)	0	3.7750977496	1.8875488748	1	1/2	1
195 A (A)	0	4.0228485413	1.0057121353	1	1/4	1
195 B (I)	0	2.4793554937	2.4793554937	1	1	1
195 C (K)	0	0.8075282392	2.4225847175	1	3	1
195 D (J)	0	2.1212032775	2.1212032775	1	1	1
196 A (A)	1	4.3609185288	1.1255807768	0.0860354510	3.0000000000	1.0
196 B (C)	0	1.5672749721	1.5672749721	1	1	1
197 A (A)	1	5.6695604223	0.7873204700	0.1388679918	1.0000000000	1.0
198 A (I)	1	2.5334819295	0.9882757884	0.1950429914	2.0000000000	1.0
198 B (E)	0	1.8053975906	1.8053975906	1	1	1
198 C (M)	0	2.7073977438	1.8049318292	1	2/3	1
198 D (A)	0	2.9230911893	0.9743637298	1	1/3	1
198 E (Q)	0	1.0857413665	1.0857413665	1	1	1
200 A (B)	0	0.8086102703	0.8086102703	1	1	1
200 B (C)	1	3.7121152732	1.0884331301	0.2932110266	1.0000000000	1.0
200 C (G)	0	2.6553977578	1.3276988789	1	1/2	1
200 D (E)	0	1.6601084182	1.6601084182	1	1	1
200 E (A)	0	1.8081075317	1.8081075317	1	1	1
201 A	1	3.4396827280	0.7311199568	0.1062772376	2.0000000000	1.0
201 B	1	3.9730794904	1.0237848640	0.0858934794	3.0000000000	1.0
201 C	1	3.1413000178	1.3514120376	0.4302078853	1.0000000000	1.0
202 A	0	1.0396665953	1.0396665953	1	1	1
203 A	0	1.7527085873	0.3505417175	1	1/5	1
203 B	1	2.1960815500	0.9130968311	0.2078922869	2.0000000000	1.0
203 C	0	4.1972127996	2.0986063998	1	1/2	1
204 A	0	0.3761481280	1.1284443840	1	3	1
204 B	0	1.5198335215	1.5198335215	1	1	1
205 A	1	4.8982345731	0.9812396964	1.6026013973	0.1250000000	1.0
205 B	0	2.2297855138	1.1148927569	1	1/2	1
205 C	0	4.1540692640	2.0770346320	1	1/2	1
206 A	0	2.8621154666	1.4310577333	1	1/2	1
207 A	1	2.7562368184	0.9785571203	0.3550337597	1.0000000000	1.0
208 A	1	1.7396717417	1.1571474716	0.1662881916	4.0000000000	1.0
208 B	1	3.7085476616	1.1687186183	0.0787854657	4.0000000000	1.0
208 C	0	2.8023148363	1.4011574181	1	1/2	1
208 D	0	0.9020285967	1.8040571934	1	2	1
209 A	1	2.8242928435	1.2523241408	0.6651173640	0.6666666667	1.0
210 A	0	1.9904248604	1.9904248604	1	1	1
210 B	0	2.3533261493	1.1766630746	1	1/2	1
210 C	0	1.6773824351	1.6773824351	1	1	1
210 D	1	3.5846020263	0.9546630067	0.5326465810	0.5000000000	1.0
210 E	0	1.0259330100	2.0518660200	1	2	1
212 A	1	3.5702124333	1.1728370526	0.1095020791	3.0000000000	1.0
212 B	0	1.1700042516	1.7550063774	1	3/2	1
213 A	0	3.8962324367	1.9481162183	1	1/2	1
214 A	1	3.9012468358	1.3657652583	0.0500120425	7.0000000000	1.0
214 B	1	3.4346780132	0.8945585519	0.2604490285	1.0000000000	1.0
214 C	1	3.2209151387	1.0782012651	0.1673749880	2.0000000000	1.0
214 D	0	3.0714435058	2.0476290039	1	2/3	1

TABLE 4: BIRCH-SWINNERTON-DYER DATA 215A-240D

Curve	$r$	$\Omega$	$L^{(r)}(1)/r!$	$R$	$L^{(r)}(1)/r!\Omega R$	$S$
215 A	1	1.3878357096	1.2136934223	0.4372612024	2.0000000000	1.0
216 A	1	3.3065764467	1.2396536502	0.0312421238	12.0000000000	1.0
216 B	0	1.3100970703	1.3100970703	1	1	1
216 C	0	1.3892474299	1.3892474299	1	1	1
216 D	0	0.7284172462	1.4568344924	1	2	1
218 A	1	3.6044066451	1.3776391764	0.5733145475	0.6666666667	1.0
219 A	1	5.6338346986	0.7445712952	0.1321606570	1.0000000000	1.0
219 B	1	3.0575161484	1.2803214992	1.2562368639	0.3333333333	1.0
219 C	1	1.5909301236	1.4044028079	1.7655116175	0.5000000000	1.0
220 A	1	3.1205498611	1.1411181831	0.7313571222	0.5000000000	1.0
220 B	0	3.4764596611	1.7382298305	1	1/2	1
221 A	0	1.9250249682	0.9625124841	1	1/2	1
221 B	0	4.3522001524	2.1761000762	1	1/2	1
222 A	0	2.0529956743	2.0529956743	1	1	1
222 B	0	1.6808078275	1.6808078275	1	1	1
222 C	0	1.7930022995	0.8965011497	1	1/2	1
222 D	0	1.2987881634	1.2987881634	1	1	1
222 E	0	0.6807637973	0.6807637973	1	1	1
224 A	1	2.9056796324	1.1435250754	0.7870964594	0.5000000000	1.0
224 B	0	3.4350375032	1.7175187516	1	1/2	1
225 A	1	4.0529757590	1.2453986751	0.1536400350	2.0000000000	1.0
225 B	0	1.8125458617	1.2083639078	1	2/3	1
225 C	0	0.8242959390	0.8242959390	1	1	1
225 D	0	1.2056681714	2.4113363427	1	2	1
225 E	1	2.6959559895	0.8278123885	0.0255880905	12.0000000000	1.0
226 A	1	3.6884308015	1.3960301214	0.2523259342	1.5000000000	1.0
228 A	0	2.4763879622	1.2381939811	1	1/2	1
228 B	1	2.6951042086	1.2048427141	0.0745081093	6.0000000000	1.0
229 A	1	4.0779758306	1.0708644692	0.2625970613	1.0000000000	1.0
231 A	0	4.6583108957	0.5822888620	1	1/8	1
232 A	1	2.1738325628	1.2149825685	0.2794563365	2.0000000000	1.0
232 B	0	0.7973190120	1.5946380240	1	2	1
233 A	0	2.7842671971	1.3921335986	1	1/2	1
234 A	0	1.0415729062	1.0415729062	1	1	1
234 B	0	0.9776832784	1.9553665569	1	2	1
234 C	1	3.8376981202	1.0636553091	0.2771597129	1.0000000000	1.0
234 D	0	0.4593769991	1.8375079963	1	4	1
234 E	0	2.0087998968	2.0087998968	1	1	1
235 A	1	3.8526221204	0.9646622016	0.0834636923	3.0000000000	1.0
235 B	0	0.6184601660	0.6184601660	1	1	1
235 C	0	2.8253354850	2.8253354850	1	1	1
236 A	1	4.3419651590	1.2389727062	0.0951161253	3.0000000000	1.0
236 B	0	4.9840035894	1.6613345298	1	1/3	1
238 A	1	1.9151889279	1.4310007528	0.1067407377	7.0000000000	1.0
238 B	1	3.3407446902	1.0723237703	0.6419669084	0.5000000000	1.0
238 C	0	3.9826564062	1.9913282031	1	1/2	1
238 D	0	2.3178772183	2.3178772183	1	1	1
238 E	0	1.5219415283	1.5219415283	1	1	1
240 A	0	2.4128899940	1.2064449970	1	1/2	1
240 B	0	1.1583921113	1.1583921113	1	1	1
240 C	1	2.7966571710	1.2467793271	0.8916211397	0.5000000000	1.0
240 D	0	1.5962422221	1.5962422221	1	1	1

TABLE 4: BIRCH-SWINNERTON-DYER DATA 242A–270B

Curve	$r$	$\Omega$	$L^{(r)}(1)/r!$	$R$	$L^{(r)}(1)/r!\Omega R$	$S$
242 A	1	2.9307853161	1.4486447784	0.1235713829	4.0000000000	1.0
242 B	0	0.8024848730	0.5349899154	1	2/3	1
243 A	1	2.5479339785	1.2901905904	0.5063673554	1.0000000000	1.0
243 B	0	3.6747566856	1.2249188952	1	1/3	1
244 A	1	3.0228752686	1.3210444110	0.1456719507	3.0000000000	1.0
245 A	1	3.2744322569	0.6333450086	0.0322368866	6.0000000000	1.0
245 B	0	0.5312987757	1.0625975514	1	2	1
245 C	1	0.8334283978	1.2247323722	0.3673778022	4.0000000000	1.0
246 A	0	0.5888594615	1.7665783844	1	3	1
246 B	0	0.4325831931	2.1629159655	1	5	1
246 C	0	0.1839332913	1.1035997477	1	6	1
246 D	1	3.1765117809	1.0083093657	0.3174266098	1.0000000000	1.0
246 E	0	4.1719564061	2.0859782030	1	1/2	1
246 F	0	3.9949562396	1.3316520799	1	1/3	1
246 G	0	0.9386205914	0.9386205914	1	1	1
248 A	1	4.2937936508	1.2011105983	0.1398658967	2.0000000000	1.0
248 B	0	2.1235184936	1.0617592468	1	1/2	1
248 C	1	2.6434410671	1.3306506590	0.2516891100	2.0000000000	1.0
249 A	1	4.4420811152	0.9837596203	0.2214636777	1.0000000000	1.0
249 B	1	3.5061259800	1.5162589107	0.4324599057	1.0000000000	1.0
252 A	0	1.3797968090	1.3797968090	1	1	1
252 B	1	2.2699063939	1.3316363642	0.0977746900	6.0000000000	1.0
254 A	1	3.4367838321	1.4824320446	0.4313428243	1.0000000000	1.0
254 B	0	3.0580721852	1.5290360926	1	1/2	1
254 C	1	3.1765169064	1.1103341928	0.3495445564	1.0000000000	1.0
254 D	0	2.6996100272	2.0247075204	1	3/4	1
256 A	1	5.0378540936	1.2094018572	0.4801257975	0.5000000000	1.0
256 B	1	4.4097575960	1.3421296388	0.6087090320	0.5000000000	1.0
256 C	0	3.1181694995	1.5590847498	1	1/2	1
256 D	0	3.5623007922	1.7811503961	1	1/2	1
258 A	1	2.0851846863	1.0523025616	0.2523283833	2.0000000000	1.0
258 B	0	1.5081807103	0.7540903551	1	1/2	1
258 C	1	3.5120735391	1.1803278628	0.0336077206	10.0000000000	1.0
258 D	0	2.2171216802	1.6628412601	1	3/4	1
258 E	0	0.9267300968	1.8534601936	1	2	1
258 F	0	1.0680841434	2.1361682868	1	2	1
258 G	0	4.4942612748	2.2471306374	1	1/2	1
259 A	0	1.2860376931	1.9290565397	1	3/2	1
260 A	0	3.5288383291	1.7644191645	1	1/2	1
262 A	1	2.4323576003	1.5125639330	0.0565319064	11.0000000000	1.0
262 B	1	5.2733474636	1.1340473415	0.2150526491	1.0000000000	1.0
264 A	0	3.2306740713	1.6153370356	1	1/2	1
264 B	0	2.5539883833	1.2769941916	1	1/2	1
264 C	0	3.0763437704	1.5381718852	1	1/2	1
264 D	0	0.5045516422	1.7659307477	1	7/2	1
265 A	1	3.9017641877	1.0720624179	1.0990540344	0.2500000000	1.0
267 A	0	4.2548896082	1.4182965361	1	1/3	1
267 B	0	1.1529749720	1.1529749720	1	1	1
268 A	0	1.9329143630	1.9329143630	1	1	1
269 A	1	4.1094064150	1.3612506241	0.3312523724	1.0000000000	1.0
270 A	0	2.9614322886	0.9871440962	1	1/3	1
270 B	0	1.1639830028	1.9399716713	1	5/3	1

TABLE 4: BIRCH-SWINNERTON-DYER DATA 270C–297C

Curve	$r$	$\Omega$	$L^{(r)}(1)/r!$	$R$	$L^{(r)}(1)/r!\Omega R$	$S$
270 C	0	2.0452697337	2.0452697337	1	1	1
270 D	0	3.2587738278	1.0862579426	1	1/3	1
272 A	1	3.6319660374	1.2387792395	0.3410767685	1.0000000000	1.0
272 B	1	2.7457391181	1.3977853806	0.5090743587	1.0000000000	1.0
272 C	0	3.4730634628	1.7365317314	1	1/2	1
272 D	0	1.8641750575	1.8641750575	1	1	1
273 A	1	2.9063397998	0.7937029426	0.0455156082	6.0000000000	1.0
273 B	0	0.3565960398	2.8527683184	1	8	1
274 A	1	3.6347902471	1.5350419553	0.0603313240	7.0000000000	1.0
274 B	1	2.3854034454	1.1270779102	0.4724894283	1.0000000000	1.0
274 C	1	4.1119537843	1.1574087493	0.5629483258	0.5000000000	1.0
275 A	1	1.8401405799	1.0969494293	2.3844904924	0.2500000000	1.0
275 B	0	2.8380382820	2.8380382820	1	1	1
277 A	1	2.6649848531	1.5289849020	0.5737311791	1.0000000000	1.0
278 A	1	2.9825516172	1.5630333549	0.0655073891	8.0000000000	1.0
278 B	0	1.1816539317	0.7877692878	1	2/3	1
280 A	1	3.4289082752	1.3363376683	0.0974317159	4.0000000000	1.0
280 B	1	1.7288713940	1.1698436166	0.0112775269	60.0000000000	1.0
282 A	0	1.2412727555	1.8619091332	1	3/2	1
282 B	1	3.1689198047	1.6378344218	0.1292107818	4.0000000000	1.0
285 A	1	1.7646479001	1.1896124823	0.2696543559	2.5000000000	1.0
285 B	1	1.5380021359	1.6159662807	2.1013836627	0.5000000000	1.0
285 C	0	1.0845657569	1.6268486353	1	3/2	1
286 A	0	2.3766175169	0.79222058390	1	1/3	1
286 B	1	1.7061664868	1.6606489871	0.0374354527	26.0000000000	1.0
286 C	1	4.0135805233	1.0773574603	0.1342140084	2.0000000000	1.0
286 D	0	0.9232396695	1.8464793390	1	2	1
286 E	0	0.8172352255	2.4517056765	1	3	1
286 F	0	2.5074142997	2.5074142997	1	1	1
288 A	1	2.8175842074	1.4121235928	0.5011823920	1.0000000000	1.0
288 B	1	2.3118891803	1.4337635566	1.2403393457	0.5000000000	1.0
288 C	0	2.7052788037	1.3526394018	1	1/2	1
288 D	0	3.0276912696	1.5138456348	1	1/2	1
288 E	0	1.6267330006	1.6267330006	1	1	1
289 A	1	1.5008878200	1.1388947570	3.0352561777	0.2500000000	1.0
290 A	1	1.6518740857	1.1736436288	1.4209843703	0.5000000000	1.0
291 A	0	0.6260093262	0.6260093262	1	1	1
291 B	0	1.9049982068	0.4762495517	1	1/4	1
291 C	1	4.6468112382	1.0274509269	0.4422176302	0.5000000000	1.0
291 D	0	2.4120051562	2.4120051562	1	1	1
294 A	0	1.8280004280	1.8280004280	1	1	1
294 B	0	2.2120648950	2.2120648950	1	1	1
294 C	0	0.5960449739	2.3841798957	1	4	1
294 D	0	1.3860857439	1.3860857439	1	1	1
294 E	0	0.6693039984	0.6693039984	1	1	1
294 F	0	0.5279473056	1.0558946111	1	2	1
294 G	1	2.3005218481	1.2377532023	0.1345078730	4.0000000000	1.0
296 A	1	3.9715557928	1.3559367025	0.0853529935	4.0000000000	1.0
296 B	1	4.1037703943	1.3782253637	0.1679218415	2.0000000000	1.0
297 A	1	2.5629322349	0.8902546662	0.0578929773	6.0000000000	1.0
297 B	1	3.6511448387	1.1489951990	0.3146944999	1.0000000000	1.0
297 C	1	1.6944590385	1.7349705760	0.3413027475	3.0000000000	1.0

TABLE 4: BIRCH-SWINNERTON-DYER DATA 297D-320E

Curve	$r$	$\Omega$	$L^{(r)}(1)/r!$	$R$	$L^{(r)}(1)/r!\Omega R$	$S$
297D	0	1.3749252643	2.7498505287	1	2	1
298A	1	3.3567106288	1.6025685289	0.0530469229	9.0000000000	1.0
298B	1	2.7479579664	1.1527590057	0.4194965934	1.0000000000	1.0
300A	0	1.2133770573	1.2133770573	1	1	1
300B	0	0.5426387165	1.6279161494	1	3	1
300C	0	1.7025229104	1.7025229104	1	1	1
300D	1	3.8069569608	1.3840260497	0.1211839328	3.0000000000	1.0
302A	1	2.4415192618	1.6931432719	1.1557989721	0.6000000000	1.0
302B	0	3.1902035597	1.5951017799	1	1/2	1
302C	1	3.3905862727	1.5310645332	0.0903126722	5.0000000000	1.0
303A	1	1.3761905514	1.4855694061	0.0771056743	14.0000000000	1.0
303B	1	3.8524410972	1.0003648583	0.0649175960	4.0000000000	1.0
304A	1	1.1779812107	1.5451623821	0.3279259398	4.0000000000	1.0
304B	0	0.6013138790	1.2026277580	1	2	1
304C	1	3.3697463259	1.3932747404	0.1033664411	4.0000000000	1.0
304D	0	1.8637144373	1.8637144373	1	1	1
304E	0	2.0635461959	2.0635461959	1	1	1
304F	1	4.3504123451	1.2842245406	0.1475980251	2.0000000000	1.0
306A	0	0.6894353592	2.0683060777	1	3	1
306B	1	2.1525639425	1.2110949196	0.5626290098	1.0000000000	1.0
306C	0	1.1471740369	1.1471740369	1	1	1
306D	0	2.2491921794	2.2491921794	1	1	1
307A	0	1.4189146241	1.4189146241	1	1	1
307B	0	2.3490923578	2.3490923578	1	1	1
307C	0	2.8002613258	2.8002613258	1	1	1
307D	0	3.1747546988	3.1747546988	1	1	1
308A	1	3.1762112278	1.3891063820	0.0728911630	6.0000000000	1.0
309A	1	3.4344206940	1.2276894797	0.0714932496	5.0000000000	1.0
310A	0	0.8355225373	2.5065676119	1	3	1
310B	1	2.5186376495	1.6415121933	0.9776191071	0.6666666667	1.0
312A	0	1.6605942610	1.6605942610	1	1	1
312B	1	3.6898752967	1.4061524822	0.3810840121	1.0000000000	1.0
312C	0	3.5553735765	1.7776867882	1	1/2	1
312D	0	4.5800008728	1.1450002182	1	1/4	1
312E	0	1.4416548405	1.4416548405	1	1	1
312F	1	2.5056872215	1.5607603031	0.2076290408	3.0000000000	1.0
314A	1	1.8289592463	1.2254919999	0.3350244141	2.0000000000	1.0
315A	0	1.2730829064	1.2730829064	1	1	1
315B	1	2.1956280654	1.1391577593	1.0376600456	0.5000000000	1.0
316A	0	1.3028108436	1.3028108436	1	1	1
316B	1	3.1195572511	1.2203951480	0.1304026020	3.0000000000	1.0
318A	0	1.8177609136	1.8177609136	1	1	1
318B	0	3.9710894510	1.3236964837	1	1/3	1
318C	1	1.7722504261	1.1170141948	0.3151400554	2.0000000000	1.0
318D	1	2.4120272485	1.7453725128	0.0328914668	22.0000000000	1.0
318E	0	1.0987950980	1.0987950980	1	1	1
319A	0	0.9677788808	1.9355577615	1	2	1
320A	0	2.8551639918	1.4275819959	1	1/2	1
320B	1	4.1985525041	1.5161085153	0.7222053381	0.5000000000	1.0
320C	0	3.9942696310	1.9971348155	1	1/2	1
320D	0	3.8549380952	1.9274690476	1	1/2	1
320E	0	2.1294891631	1.0647445816	1	1/2	1

TABLE 4: BIRCH-SWINNERTON-DYER DATA 320F-342B

Curve	$r$	$\Omega$	$L^{(r)}(1)/r!$	$R$	$L^{(r)}(1)/r!\Omega R$	$S$
320 F	1	3.2161552676	1.3296773088	0.8268738280	0.5000000000	1.0
322 A	1	2.4232379290	1.2132690207	0.1668936434	3.0000000000	1.0
322 B	0	1.4602213361	1.4602213361	1	1	1
322 C	0	4.9916139661	2.4958069830	1	1/2	1
322 D	1	2.8164413550	1.6590507174	0.2356236837	2.5000000000	1.0
323 A	0	1.8660949120	1.8660949120	1	1	1
324 A	0	4.8202741093	1.6067580364	1	1/3	1
324 B	0	1.6541764509	1.6541764509	1	1	1
324 C	1	3.8631214144	1.4974408733	0.3876245949	1.0000000000	1.0
324 D	0	3.8507505887	1.2835835296	1	1/3	1
325 A	1	2.3706727615	1.5716909753	1.9889176619	0.3333333333	1.0
325 B	1	5.3009854472	1.3630614806	0.2571336017	1.0000000000	1.0
325 C	0	2.4072852546	2.4072852546	1	1	1
325 D	0	1.0054544996	3.0163634989	1	3	1
325 E	0	2.2482646094	0.4496529219	1	1/5	1
326 A	1	1.5955523534	1.2315028128	0.7718347882	1.0000000000	1.0
326 B	1	4.0636363622	1.6801606398	0.0826924700	5.0000000000	1.0
326 C	0	1.3118305721	0.4372768574	1	1/3	1
327 A	1	2.2027451583	1.2543242932	0.1423592158	4.0000000000	1.0
328 A	1	2.6783928660	1.5196480443	1.1347461857	0.5000000000	1.0
328 B	0	4.0075079103	2.0037539552	1	1/2	1
329 A	0	0.7968920264	0.7968920264	1	1	1
330 A	0	0.7813961756	0.7813961756	1	1	1
330 B	0	2.4188689938	2.4188689938	1	1	1
330 C	0	0.9389804493	1.8779608987	1	2	1
330 D	0	0.5190109186	1.8165382150	1	7/2	1
330 E	1	2.2164710033	1.1562800329	0.5216761380	1.0000000000	1.0
331 A	1	5.4083773317	0.9790098108	0.1810172905	1.0000000000	1.0
333 A	1	2.0410609926	1.4792994921	0.7247698611	1.0000000000	1.0
333 B	1	2.0333288908	1.8286710385	1.7986967546	0.5000000000	1.0
333 C	1	2.5034325770	1.2023832503	0.9605876837	0.5000000000	1.0
333 D	0	2.8306206392	2.8306206392	1	1	1
334 A	0	2.2906969318	2.2906969318	1	1	1
335 A	1	4.2194745615	1.4976179639	0.1774649831	2.0000000000	1.0
336 A	0	2.3898781774	1.1949390887	1	1/2	1
336 B	0	5.4362515690	1.3590628923	1	1/4	1
336 C	0	1.1982307057	1.7973460585	1	3/2	1
336 D	0	0.7884933856	1.5769867712	1	2	1
336 E	1	1.9109897808	1.4261701612	0.3731496043	2.0000000000	1.0
336 F	0	3.9315932027	1.9657966013	1	1/2	1
338 A	1	3.7619828722	1.2776773619	0.1698143513	2.0000000000	1.0
338 B	0	1.0433863187	2.0867726374	1	2	1
338 C	0	1.2869571133	2.5739142267	1	2	1
338 D	0	0.5396273391	1.0792546783	1	2	1
338 E	1	1.9456540409	1.7940807919	0.1536827509	6.0000000000	1.0
338 F	1	1.2055736044	0.9530562430	0.1976354325	4.0000000000	1.0
339 A	1	2.5311158528	1.5850840591	0.0695821374	9.0000000000	1.0
339 B	0	2.6056637603	2.6056637603	1	1	1
339 C	1	3.9967355775	1.0125851133	0.0844510137	3.0000000000	1.0
340 A	1	4.7549194562	1.5553431744	0.4361358627	0.7500000000	1.0
342 A	0	0.6943374598	2.0830123794	1	3	1
342 B	0	2.1705272030	2.1705272030	1	1	1

TABLE 4: BIRCH-SWINNERTON-DYER DATA 342C-360D

Curve	$r$	$\Omega$	$L^{(r)}(1)/r!$	$R$	$L^{(r)}(1)/r!\Omega R$	$S$
342 C	1	1.7816724980	1.2648109168	0.3549504520	2.0000000000	1.0
342 D	0	2.2375637156	2.2375637156	1	1	1
342 E	1	3.9793483508	1.2390587277	0.3113722696	1.0000000000	1.0
342 F	0	0.9193234687	0.9193234687	1	1	1
342 G	0	1.3602155382	1.3602155382	1	1	1
344 A	1	2.7525869611	1.5494621523	0.2814556223	2.0000000000	1.0
345 A	0	0.4590292151	0.9180584301	1	2	1
345 B	1	4.2977618837	1.5964898077	0.1857350234	2.0000000000	1.0
345 C	0	0.8426900245	2.1067250613	1	5/2	1
345 D	0	2.1209719918	1.0604859959	1	1/2	1
345 E	0	1.2779994655	2.5559989310	1	2	1
345 F	1	2.0934610738	1.0776581097	0.0214488924	24.0000000000	1.0
346 A	0	2.3864267831	2.3864267831	1	1	1
346 B	1	3.2277857995	1.8161375715	0.0803796288	7.0000000000	1.0
347 A	1	3.0596247368	1.0692572441	0.3494733296	1.0000000000	1.0
348 A	1	3.3700624663	1.4721036783	0.1456059735	3.0000000000	1.0
348 B	0	1.8569948187	1.8569948187	1	1	1
348 C	0	1.1001223703	1.1001223703	1	1	1
348 D	1	2.7246446828	1.6385158325	0.0286366013	21.0000000000	1.0
350 A	0	1.0556963012	1.0556963012	1	1	1
350 B	0	1.2015896516	2.4031793031	1	2	1
350 C	1	2.6868361419	1.1698407546	0.2176985668	2.0000000000	1.0
350 D	0	2.6582491803	2.6582491803	1	1	1
350 E	0	0.8585438894	1.7170877788	1	2	1
350 F	1	1.9197624983	1.6277461855	0.0128468084	66.0000000000	1.0
352 A	0	0.9197112746	1.8394225491	1	2	1
352 B	1	2.6902393719	1.6620028340	0.3088949726	2.0000000000	1.0
352 C	1	3.6135445187	1.4943761442	0.2067742817	2.0000000000	1.0
352 D	1	1.7453844567	1.4403302305	0.4126111657	2.0000000000	1.0
352 E	0	1.1446739244	2.2893478489	1	2	1
352 F	1	1.8476278580	1.2616805128	0.1138108438	6.0000000000	1.0
353 A	0	2.7058312639	1.3529156319	1	1/2	1
354 A	0	3.6819566662	1.8409783331	1	1/2	1
354 B	0	1.8675548347	1.2450365565	1	2/3	1
354 C	1	2.5265851358	1.1762556419	0.2327757781	2.0000000000	1.0
354 D	0	1.9702699829	0.9851349914	1	1/2	1
354 E	0	0.3856294396	2.1209619178	1	11/2	1
354 F	1	3.0155788594	1.8179484925	0.0430608748	14.0000000000	1.0
355 A	0	2.2892784269	0.7630928090	1	1/3	1
356 A	1	1.9261487706	1.4738366671	0.2550576033	3.0000000000	1.0
357 A	0	0.5059809459	1.0119618919	1	2	1
357 B	1	1.3908121474	1.4226357062	0.2557203194	4.0000000000	1.0
357 C	0	1.5730848489	3.1461696978	1	2	1
357 D	1	2.5259384793	1.0297863326	0.0291203318	14.0000000000	1.0
358 A	0	1.4369776837	1.4369776837	1	1	1
358 B	0	4.8020823416	1.6006941139	1	1/3	1
359 A	1	5.2576534953	1.6996723486	0.3232758397	1.0000000000	1.0
359 B	1	5.4008701535	1.2244318944	0.2267101152	1.0000000000	1.0
360 A	0	1.3930826876	1.3930826876	1	1	1
360 B	0	1.4341648133	1.4341648133	1	1	1
360 C	0	1.5689797603	1.5689797603	1	1	1
360 D	0	1.6146507705	1.6146507705	1	1	1

TABLE 4: BIRCH-SWINNERTON-DYER DATA 360E-384A

Curve	$r$	$\Omega$	$L^{(r)}(1)/r!$	$R$	$L^{(r)}(1)/r!\Omega R$	$S$
360 E	1	2.3312316373	1.5940059578	0.6837612927	1.0000000000	1.0
361 A	1	4.1905500198	1.5194236564	0.1812916740	2.0000000000	1.0
361 B	0	0.9468199298	1.8936398596	1	2	1
362 A	1	5.3424976181	1.2148757892	0.2273984709	1.0000000000	1.0
362 B	1	2.4995552224	1.8658498774	0.1066389652	7.0000000000	1.0
363 A	0	1.6550761880	0.4137690470	1	1/4	1
363 B	0	2.7390143163	2.7390143163	1	1	1
363 C	0	0.7861735761	0.7861735761	1	1	1
364 A	1	1.9913710109	1.5755626644	0.0527463292	15.0000000000	1.0
364 B	1	3.4220544534	1.3982710251	0.1362019068	3.0000000000	1.0
366 A	0	0.6308411291	2.5233645163	1	4	1
366 B	0	2.4635740364	2.4635740364	1	1	1
366 C	0	0.4340530637	1.3021591910	1	3	1
366 D	0	0.2600804041	1.8205628289	1	7	1
366 E	0	1.5897058463	0.7948529232	1	1/2	1
366 F	1	2.7041672516	1.3650563331	0.3785979766	1.3333333333	1.0
366 G	1	2.8119685919	1.8579940284	0.0330372472	20.0000000000	1.0
368 A	1	1.9950448236	1.6292204503	0.8166335067	1.0000000000	1.0
368 B	0	1.8184117667	1.8184117667	1	1	1
368 C	0	1.6505359739	1.6505359739	1	1	1
368 D	1	2.3725142889	1.6792666204	0.7078004243	1.0000000000	1.0
368 E	1	3.0187971397	1.5065697188	0.4990629211	1.0000000000	1.0
368 F	0	2.1965830501	2.1965830501	1	1	1
368 G	1	4.9462587640	1.2657315052	0.2558967425	1.0000000000	1.0
369 A	1	2.4151226244	1.5724499828	0.3255424728	2.0000000000	1.0
369 B	0	0.7651091552	3.0604366208	1	4	1
370 A	1	4.2831069879	1.2956210363	0.6049912085	0.5000000000	1.0
370 B	0	1.5799277405	1.5799277405	1	1	1
370 C	0	1.6518622652	0.5506207551	1	1/3	1
370 D	0	1.6806015939	1.6806015939	1	1	1
371 A	1	0.9763159406	1.8303154738	0.9373581839	2.0000000000	1.0
371 B	0	1.0113136188	3.0339408564	1	3	1
372 A	1	4.2046190818	1.4965237117	0.0593206219	6.0000000000	1.0
372 B	0	3.3409804579	1.6704902290	1	1/2	1
372 C	0	0.3199701361	1.9198208165	1	6	1
372 D	1	3.0344782146	1.6984822680	0.0466439958	12.0000000000	1.0
373 A	1	3.9392451210	1.1341580880	0.2879125450	1.0000000000	1.0
374 A	1	2.1703306562	1.3150843335	0.6059373164	1.0000000000	1.0
377 A	1	5.3853739690	1.9439778472	1.4438944136	0.2500000000	1.0
378 A	0	2.1727069014	2.1727069014	1	1	1
378 B	0	3.2456774250	1.0818924750	1	1/3	1
378 C	0	1.1058292241	2.2116584483	1	2	1
378 D	1	3.3687530822	1.3035890492	0.0644941426	6.0000000000	1.0
378 E	0	1.1994469958	2.3988939916	1	2	1
378 F	1	4.3724105667	1.2660299663	1.3029734425	0.2222222222	1.0
378 G	0	0.4860952950	2.4304764752	1	5	1
378 H	0	0.7591617028	0.7591617028	1	1	1
380 A	1	2.9974122712	1.6365169446	1.0919531893	0.5000000000	1.0
380 B	0	1.3073814431	1.9610721647	1	3/2	1
381 A	1	2.6366565023	1.6669090042	0.1264411199	5.0000000000	1.0
381 B	0	3.3176310732	3.3176310732	1	1	1
384 A	0	3.5791319964	1.7895659982	1	1/2	1

TABLE 4: BIRCH-SWINNERTON-DYER DATA 384B-404B

Curve	$r$	$\Omega$	$L^{(r)}(1)/r!$	$R$	$L^{(r)}(1)/r!\Omega R$	$S$
384 B	0	2.5308285054	1.2654142527	1	1/2	1
384 C	0	3.3922393877	1.6961196939	1	1/2	1
384 D	1	4.7973509489	1.5338705503	0.6394656412	0.5000000000	1.0
384 E	0	1.3847627016	2.0771440525	1	3/2	1
384 F	0	2.9677994642	1.4838997321	1	1/2	1
384 G	0	1.9583501933	0.9791750967	1	1/2	1
384 H	1	4.1971022527	1.7104633501	0.2716895685	1.5000000000	1.0
385 A	1	2.3974795614	1.2551027987	1.0470185598	0.5000000000	1.0
385 B	1	3.0431080851	1.0141520788	0.3332619317	1.0000000000	1.0
387 A	0	0.6570811277	1.3141622553	1	2	1
387 B	1	1.1323623368	1.9788330815	0.8737632016	2.0000000000	1.0
387 C	1	4.3310513612	1.2498477542	0.1442891864	2.0000000000	1.0
387 D	0	2.7905613828	0.6976403457	1	1/4	1
387 E	0	1.5740674722	3.1481349443	1	2	1
389 A	2	4.9804251217	0.7593165003	0.1524601779	1.0000000000	1.0
390 A	1	4.0725001283	1.1966774321	0.2938434363	1.0000000000	1.0
390 B	0	1.9598275838	1.9598275838	1	1	1
390 C	0	2.4442145217	2.4442145217	1	1	1
390 D	0	0.4686191249	1.4058573748	1	3	1
390 E	0	1.8466374169	1.8466374169	1	1	1
390 F	0	0.8835342653	0.8835342653	1	1	1
390 G	0	1.3107516519	1.3107516519	1	1	1
392 A	1	0.8678863534	1.6420053999	1.8919590029	1.0000000000	1.0
392 B	0	0.9021374286	1.8042748572	1	2	1
392 C	1	3.5611188974	1.5286009201	0.0715412283	6.0000000000	1.0
392 D	0	1.2749543703	1.2749543703	1	1	1
392 E	0	1.1107639394	2.2215278788	1	2	1
392 F	1	5.0380294438	1.3056845741	0.1295828646	2.0000000000	1.0
395 A	0	3.2068928320	0.8017232080	1	1/4	1
395 B	0	0.9401374803	1.4102062205	1	3/2	1
395 C	0	3.1249773129	0.6249954626	1	1/5	1
396 A	0	0.4597228734	1.3791686201	1	3	1
396 B	1	1.7552831658	1.6410582466	0.3116416919	3.0000000000	1.0
396 C	0	1.7632679755	1.7632679755	1	1	1
398 A	0	2.7300308931	1.3650154466	1	1/2	1
399 A	1	1.3293482923	1.8881722279	2.8407487170	0.5000000000	1.0
399 B	1	2.5299798485	1.1285450388	0.8921375713	0.5000000000	1.0
399 C	0	2.6662366521	1.3331183261	1	1/2	1
400 A	1	1.8057642615	1.6854886296	0.9333935030	1.0000000000	1.0
400 B	0	0.8930706751	1.7861413502	1	2	1
400 C	1	1.9969667383	1.5552187610	0.0648992099	12.0000000000	1.0
400 D	0	4.1418019047	2.0709009524	1	1/2	1
400 E	0	2.0340751908	1.0170375954	1	1/2	1
400 F	0	1.8522701217	0.9261350608	1	1/2	1
400 G	0	1.1310974387	2.2621948774	1	2	1
400 H	1	2.5292107621	1.2987503631	0.1283750629	4.0000000000	1.0
402 A	1	1.5449271648	1.2440174086	0.4026136108	2.0000000000	1.0
402 B	0	2.8944959015	1.4472479508	1	1/2	1
402 C	0	4.1774362503	2.0887181252	1	1/2	1
402 D	1	2.1211176461	1.4143116144	0.3333883005	2.0000000000	1.0
404 A	1	3.3748684624	1.6772917538	0.1656649015	3.0000000000	1.0
404 B	0	3.7312884804	1.2437628268	1	1/3	1

TABLE 4: BIRCH-SWINNERTON-DYER DATA 405A-428A

Curve	$r$	$\Omega$	$L^{(r)}(1)/r!$	$R$	$L^{(r)}(1)/r!\Omega R$	$S$
405 A	0	4.0159643401	1.3386547800	1	1/3	1
405 B	1	4.4575296500	1.5847069791	1.0665371429	0.3333333333	1.0
405 C	1	4.3122245542	2.0170136488	0.4677431853	1.0000000000	1.0
405 D	1	1.3820485348	1.2688418437	0.3060292534	3.0000000000	1.0
405 E	0	2.9578666342	2.9578666342	1	1	1
405 F	1	3.6601877915	0.9965850007	0.2722770135	1.0000000000	1.0
406 A	1	1.6875693147	1.3611714716	0.8065870004	1.0000000000	1.0
406 B	1	1.7971708524	1.4272791044	0.5956358166	1.3333333333	1.0
406 C	1	3.0327084838	1.9468317637	0.0401215566	16.0000000000	1.0
406 D	0	0.3392055689	1.6960278446	1	5	1
408 A	0	1.8120385466	1.8120385466	1	1	1
408 B	0	3.6474030320	1.8237015160	1	1/2	1
408 C	0	0.7343586417	1.4687172834	1	2	1
408 D	1	2.4678501327	1.7688362275	0.0358375941	20.0000000000	1.0
410 A	1	3.2967108102	1.3868548095	0.4206783335	1.0000000000	1.0
410 B	0	0.7852065211	2.3556195632	1	3	1
410 C	0	2.2878165418	0.7626055139	1	1/3	1
410 D	1	2.6404517311	1.8491499415	0.1750789382	4.0000000000	1.0
414 A	0	0.5627606669	2.2510426675	1	4	1
414 B	0	1.1633580465	2.3267160931	1	2	1
414 C	1	1.3905616429	1.3266055581	0.4770035060	2.0000000000	1.0
414 D	1	2.0997210460	2.0793639154	0.0990304840	10.0000000000	1.0
415 A	0	0.7384429369	2.9537717476	1	4	1
416 A	0	1.9071354957	1.9071354957	1	1	1
416 B	1	3.3952295292	1.5990341270	0.2354824782	2.0000000000	1.0
417 A	0	1.7339868091	1.7339868091	1	1	1
418 A	0	4.8048009610	2.4024004805	1	1/2	1
418 B	1	1.2722415997	1.9863516582	0.0600500257	26.0000000000	1.0
418 C	0	1.5273830792	3.0547661583	1	2	1
420 A	0	0.7540181380	1.1310272070	1	3/2	1
420 B	0	2.6795163333	1.3397581666	1	1/2	1
420 C	0	3.4562422219	1.7281211110	1	1/2	1
420 D	0	3.6614886666	1.8307443333	1	1/2	1
422 A	1	2.1324420574	1.4027291428	0.3289020534	2.0000000000	1.0
423 A	1	2.9332316212	1.6367929761	0.1395042386	4.0000000000	1.0
423 B	0	1.9670814874	1.9670814874	1	1	1
423 C	1	1.0527165607	2.0430649788	1.9407550475	1.0000000000	1.0
423 D	0	1.5929150000	3.1858300000	1	2	1
423 E	0	1.5476958786	3.0953917572	1	2	1
423 F	1	3.1909530365	1.0465381336	0.1639851984	2.0000000000	1.0
423 G	1	4.8510516054	0.9620915002	0.0991631896	2.0000000000	1.0
425 A	1	2.7675003964	2.0769440878	1.5009530553	0.5000000000	1.0
425 B	1	2.2952233022	1.9443756342	0.2823800241	3.0000000000	1.0
425 C	1	5.1322753273	1.4080433297	0.2743507002	1.0000000000	1.0
425 D	1	1.2501339247	1.0183803087	1.6292339382	0.5000000000	1.0
426 A	0	2.6994377236	2.6994377236	1	1	1
426 B	1	1.9951714954	1.2152039603	0.6090724347	1.0000000000	1.0
426 C	0	0.9108770414	1.5181284024	1	5/3	1
427 A	0	2.1028874777	2.1028874777	1	1	1
427 B	1	5.3267648633	2.1617002677	0.4058186016	1.0000000000	1.0
427 C	1	2.0761302548	1.4102148914	0.6792516453	1.0000000000	1.0
428 A	0	0.6740067866	2.0220203597	1	3	1

TABLE 4: BIRCH-SWINNERTON-DYER DATA 428B-443A

Curve	$r$	$\Omega$	$L^{(r)}(1)/r!$	$R$	$L^{(r)}(1)/r!\Omega R$	$S$
428 B	1	2.6164175615	1.6383190525	0.2087229343	3.0000000000	1.0
429 A	1	3.2842888785	1.1462496668	0.6980200032	0.5000000000	1.0
429 B	1	2.5841361086	1.3666547477	1.0577265982	0.5000000000	1.0
430 A	1	4.7241011000	1.3745515859	0.2909657429	1.0000000000	1.0
430 B	1	1.7919479982	1.4065602885	0.1569867306	5.0000000000	1.0
430 C	1	2.4806272616	1.8882295645	0.7611903625	1.0000000000	1.0
430 D	1	1.3842895617	1.9231655442	0.0185237308	75.0000000000	1.0
431 A	1	2.4239283338	1.4372881309	0.5929581790	1.0000000000	1.0
431 B	0	1.3899255898	1.3899255898	1	1	1
432 A	0	1.5299540371	1.5299540371	1	1	1
432 B	1	1.9276212967	1.7360954879	0.4503206856	2.0000000000	1.0
432 C	0	0.7563848962	1.5127697924	1	2	1
432 D	1	2.4062471328	1.7185974478	0.0595185973	12.0000000000	1.0
432 E	0	0.8924581010	1.7849162020	1	2	1
432 F	1	1.8227448642	1.6865597223	0.2313214202	4.0000000000	1.0
432 G	0	1.9090528016	1.9090528016	1	1	1
432 H	0	1.2616556796	1.2616556796	1	1	1
433 A	2	4.2147101930	0.9470207809	0.2246941634	1.0000000000	1.0
434 A	1	2.9955292798	1.3951818152	0.9315093827	0.5000000000	1.0
434 B	0	2.8187709466	2.8187709466	1	1	1
434 C	0	3.0097830443	3.0097830443	1	1	1
434 D	1	1.8196638478	1.8789054223	0.2065112658	5.0000000000	1.0
434 E	0	0.3423513497	1.0270540490	1	3	1
435 A	0	4.4008169706	1.4669389902	1	1/3	1
435 B	0	0.8094965277	0.8094965277	1	1	1
435 C	0	4.7719988507	2.3859994254	1	1/2	1
435 D	0	2.0907731352	1.0453865676	1	1/2	1
437 A	1	1.7599083319	1.8940046259	0.2690487612	4.0000000000	1.0
437 B	0	1.8460399927	3.6920799854	1	2	1
438 A	0	0.8715299494	2.6145898483	1	3	1
438 B	0	2.5149090457	2.5149090457	1	1	1
438 C	1	3.3565130070	1.2587504610	0.3750173047	1.0000000000	1.0
438 D	1	1.4530902095	1.5258264643	1.5750843832	0.6666666667	1.0
438 E	0	1.4191115085	1.4191115085	1	1	1
438 F	1	3.0391118606	2.0220564891	0.6653445420	1.0000000000	1.0
438 G	1	3.3567264352	1.4368065918	0.2140190182	2.0000000000	1.0
440 A	1	1.9276140142	1.7340332813	0.8995749504	1.0000000000	1.0
440 B	1	2.1964080283	1.7346746206	0.7897779457	1.0000000000	1.0
440 C	0	2.2356730543	1.6767547907	1	3/4	1
440 D	0	0.8303368442	2.4910105327	1	3	1
441 A	0	0.6045886821	1.2091773641	1	2	1
441 B	1	2.7705733999	1.6517711259	0.8942757802	0.6666666667	1.0
441 C	1	0.7875316161	2.0779091177	1.3192544116	2.0000000000	1.0
441 D	1	2.9531824110	1.2945586181	0.4383605338	1.0000000000	1.0
441 E	0	0.4189900774	0.8379801549	1	2	1
441 F	1	3.2597903746	0.9944972960	0.0762700344	4.0000000000	1.0
442 A	0	2.4942559031	2.4942559031	1	1	1
442 B	1	1.3616952016	2.1459321167	0.1313272428	12.0000000000	1.0
442 C	0	1.7613965761	1.7613965761	1	1	1
442 D	0	2.7807390608	2.7807390608	1	1	1
442 E	0	0.2845834364	3.1304178002	1	11	1
443 A	1	3.9135658341	1.7609825329	0.4499688028	1.0000000000	1.0

TABLE 4: BIRCH-SWINNERTON-DYER DATA 443B-464A

Curve	$r$	$\Omega$	$L^{(r)}(1)/r!$	$R$	$L^{(r)}(1)/r!\Omega R$	$S$
443 B	1	3.6564568242	1.0212452670	0.2792991456	1.0000000000	1.0
443 C	0	1.5792505220	1.5792505220	1	1	1
444 A	0	2.5015053363	1.2507526681	1	1/2	1
444 B	1	3.1314379361	1.8584060832	0.1978224404	3.0000000000	1.0
446 A	1	3.9771573679	1.2749242492	0.1602808402	2.0000000000	1.0
446 B	1	2.0484809659	2.0453212377	0.0713183947	14.0000000000	1.0
446 C	0	1.9305232636	2.8957848955	1	3/2	1
446 D	2	4.8297343529	0.9402826047	0.0973430976	2.0000000000	1.0
448 A	1	2.4735961738	1.7234498942	0.6967385835	1.0000000000	1.0
448 B	1	1.6236666926	1.7358759869	1.0691085768	1.0000000000	1.0
448 C	0	2.1015304995	2.1015304995	1	1	1
448 D	0	2.0546257720	2.0546257720	1	1	1
448 E	0	2.3852212186	2.3852212186	1	1	1
448 F	0	0.9372638440	0.9372638440	1	1	1
448 G	1	2.4289383121	1.4865234745	0.6120054458	1.0000000000	1.0
448 H	0	1.3407014907	1.3407014907	1	1	1
450 A	0	1.1492430291	2.2984860582	1	2	1
450 B	0	2.3058985678	2.3058985678	1	1	1
450 C	1	2.5697855357	1.4111308701	0.1372809959	4.0000000000	1.0
450 D	0	1.0312291894	1.0312291894	1	1	1
450 E	0	1.1001165420	2.2002330841	1	2	1
450 F	1	1.7759273414	1.4100767515	0.1984986546	4.0000000000	1.0
450 G	0	0.5981911141	1.1963822281	1	2	1
451 A	1	2.8355647891	1.7563718021	0.3097040507	2.0000000000	1.0
455 A	1	2.3100747043	2.1253916593	1.8401064307	0.5000000000	1.0
455 B	1	4.2935157508	1.3274338885	2.4733742054	0.1250000000	1.0
456 A	0	3.3984495514	1.6992247757	1	1/2	1
456 B	0	1.3176900889	1.9765351334	1	3/2	1
456 C	1	2.4058503309	1.8547501445	0.0321222210	24.0000000000	1.0
456 D	1	1.4353571813	1.6586130651	0.0962950248	12.0000000000	1.0
458 A	1	4.4546212951	1.0227700195	0.1147987620	2.0000000000	1.0
458 B	1	2.5233506473	2.0857010259	0.0826560125	10.0000000000	1.0
459 A	1	2.3708814092	2.1304937413	0.8986083121	1.0000000000	1.0
459 B	1	2.1438415359	0.9525608247	0.2221621348	2.0000000000	1.0
459 C	0	1.5234809750	1.5234809750	1	1	1
459 D	0	2.8921721983	2.8921721983	1	1	1
459 E	0	1.6822303161	3.3644606323	1	2	1
459 F	0	3.0444866762	1.0148288921	1	1/3	1
459 G	0	0.9552159908	0.9552159908	1	1	1
459 H	1	2.4618961763	1.3287697414	0.1799114241	3.0000000000	1.0
460 A	0	1.3854698570	1.3854698570	1	1	1
460 B	0	1.1935074150	2.3870148301	1	2	1
460 C	1	1.5839825779	1.9113524379	0.6033375823	2.0000000000	1.0
460 D	1	4.0282816130	1.6666314043	0.0689554325	6.0000000000	1.0
462 A	1	1.4946342423	1.2866215632	0.4304135175	2.0000000000	1.0
462 B	0	1.0018600266	1.0018600266	1	1	1
462 C	1	2.4613024381	1.2390297777	1.0068082317	0.5000000000	1.0
462 D	0	0.3229321592	1.2917286370	1	4	1
462 E	1	1.2302485152	2.0363867119	0.0394110599	42.0000000000	1.0
462 F	0	1.3789297070	2.7578594140	1	2	1
462 G	0	1.3136031374	2.6272062748	1	2	1
464 A	1	2.2740483412	1.8709794251	0.4113763527	2.0000000000	1.0

TABLE 4: BIRCH-SWINNERTON-DYER DATA 464B-485B

Curve	$r$	$\Omega$	$L^{(r)}(1)/r!$	$R$	$L^{(r)}(1)/r!\Omega R$	$S$
464 B	1	3.6733647241	1.6722315624	0.2276157812	2.0000000000	1.0
464 C	0	0.9667176524	1.9334353048	1	2	1
464 D	0	1.5984880757	1.5984880757	1	1	1
464 E	0	1.3661402106	0.6830701053	1	1/2	1
464 F	0	2.5655588249	2.5655588249	1	1	1
464 G	0	1.1118048150	2.2236096300	1	2	1
465 A	1	2.9030659041	2.0294354736	1.3981325541	0.5000000000	1.0
465 B	1	2.6840015689	1.4675682335	2.1871346879	0.2500000000	1.0
466 A	0	3.1242578300	1.5621289150	1	1/2	1
466 B	0	3.9592169668	2.6394779779	1	2/3	1
467 A	1	5.1775927316	1.2788013566	0.2469876298	1.0000000000	1.0
468 A	0	0.6621220594	1.9863661783	1	3	1
468 B	0	1.2989007218	1.2989007218	1	1	1
468 C	1	3.2358344502	1.7484928207	0.1801176634	3.0000000000	1.0
468 D	0	1.5799514360	1.5799514360	1	1	1
468 E	0	1.8269518880	1.8269518880	1	1	1
469 A	1	1.6007144150	2.2667465654	1.4160843084	1.0000000000	1.0
469 B	1	5.2760385039	0.9096891283	0.1724189707	1.0000000000	1.0
470 A	1	3.5287956897	1.5542574208	0.2202249092	2.0000000000	1.0
470 B	0	2.0374386103	1.3582924069	1	2/3	1
470 C	1	2.1318477419	1.3213107468	0.0442711443	14.0000000000	1.0
470 D	0	3.9537193611	2.6358129074	1	2/3	1
470 E	1	4.4113118028	2.1138922125	0.1197995238	4.0000000000	1.0
470 F	1	1.6512381529	1.8346862509	0.0264546976	42.0000000000	1.0
471 A	1	3.5535684064	1.1344335682	0.1596189293	2.0000000000	1.0
472 A	1	3.2876310754	1.3378014267	0.2034597855	2.0000000000	1.0
472 B	0	0.5854786616	1.1709573233	1	2	1
472 C	0	2.3105577484	2.3105577484	1	1	1
472 D	0	1.1381594447	2.2763188895	1	2	1
472 E	1	2.7652148704	1.6407951896	0.1483424676	4.0000000000	1.0
473 A	1	2.3797197308	1.1745884799	0.2467913479	2.0000000000	1.0
474 A	1	1.1990226570	1.3453488048	0.5610189253	2.0000000000	1.0
474 B	1	3.0414875397	1.5313917147	0.0503500900	10.0000000000	1.0
475 A	0	1.8243091183	1.8243091183	1	1	1
475 B	1	1.6025344539	2.1875734114	2.7301421271	0.5000000000	1.0
475 C	1	3.5833759752	1.3360934191	0.7457176854	0.5000000000	1.0
477 A	1	1.7789208762	2.1819346902	1.2265496006	1.0000000000	1.0
480 A	1	3.1797233168	1.6466507576	1.0357195225	0.5000000000	1.0
480 B	0	2.6833296776	1.3416648388	1	1/2	1
480 C	0	3.4874928122	1.7437464061	1	1/2	1
480 D	0	1.2325760765	1.8488641147	1	3/2	1
480 E	0	2.0939543480	1.0469771740	1	1/2	1
480 F	1	3.2610572384	1.6836136414	1.0325569399	0.5000000000	1.0
480 G	0	3.8220157083	1.9110078541	1	1/2	1
480 H	0	2.0395949022	2.0395949022	1	1	1
481 A	1	2.6783175658	2.1620581228	3.2289794914	0.2500000000	1.0
482 A	1	0.9101999656	1.1364955128	0.6243108964	2.0000000000	1.0
483 A	0	0.7534884814	3.7674424072	1	5	1
483 B	0	3.4388742008	3.4388742008	1	1	1
484 A	1	0.9208366680	1.9006792135	0.5160196372	4.0000000000	1.0
485 A	0	1.5708346942	0.5236115647	1	1/3	1
485 B	1	4.5625314551	1.7297914316	0.3791297547	1.0000000000	1.0

TABLE 4: BIRCH-SWINNERTON-DYER DATA 486A-506D

Curve	$r$	$\Omega$	$L^{(r)}(1)/r!$	$R$	$L^{(r)}(1)/r!\Omega R$	$S$
486 A	1	2.8478067545	1.4572284936	0.2558510143	2.0000000000	1.0
486 B	1	3.0412502685	1.3830920358	0.4547774480	1.0000000000	1.0
486 C	0	3.7142083977	1.2380694659	1	1/3	1
486 D	0	1.1331617992	2.2663235984	1	2	1
486 E	0	2.6410373364	2.6410373364	1	1	1
486 F	1	2.4821083008	2.2536351937	0.3026506664	3.0000000000	1.0
490 A	1	1.1268749665	1.5859684246	2.1111061188	0.6666666667	1.0
490 B	0	1.4955620274	1.4955620274	1	1	1
490 C	0	0.7299718606	0.7299718606	1	1	1
490 D	1	2.9268743131	1.3457322218	0.2298923831	2.0000000000	1.0
490 E	0	1.5212992086	1.5212992086	1	1	1
490 F	0	1.6419298285	3.2838596569	1	2	1
490 G	1	2.2143485488	1.9926925955	0.0899900152	10.0000000000	1.0
490 H	0	1.1848208922	2.3696417844	1	2	1
490 I	0	1.0309311849	3.0927935547	1	3	1
490 J	0	0.3071649459	3.0716494587	1	10	1
490 K	0	0.7046660037	1.4093320074	1	2	1
492 A	1	3.5983226104	1.6799595493	0.1556243220	3.0000000000	1.0
492 B	1	1.3947922133	1.9348232249	0.0513769139	27.0000000000	1.0
493 A	0	0.4817702232	0.4817702232	1	1	1
493 B	1	2.2243974247	0.9092472733	0.0681268601	6.0000000000	1.0
494 A	1	2.0578845874	1.3430728091	0.3263236474	2.0000000000	1.0
494 B	0	2.7476356194	1.3738178097	1	1/2	1
494 C	0	0.8534817324	1.7069634647	1	2	1
494 D	1	1.3176510859	2.1566805189	0.0209841213	78.0000000000	1.0
495 A	1	1.9875553780	1.3104268430	1.3186317800	0.5000000000	1.0
496 A	1	3.7499429781	1.7858094939	0.4762231064	1.0000000000	1.0
496 B	0	2.3224405828	2.3224405828	1	1	1
496 C	0	2.3037511398	2.3037511398	1	1	1
496 D	0	1.8977267714	1.8977267714	1	1	1
496 E	1	5.2038879824	1.8742408437	0.3601616426	1.0000000000	1.0
496 F	1	1.1195541660	1.7961902528	1.6043799463	1.0000000000	1.0
497 A	1	1.5344348416	2.0670876478	0.2694265787	5.0000000000	1.0
498 A	0	3.2946394322	1.6473197161	1	1/2	1
498 B	1	2.6505109415	1.5703804737	0.0592482170	10.0000000000	1.0
501 A	0	2.6222246447	1.3111123223	1	1/2	1
503 A	1	1.0074334168	2.3519086984	2.3345549783	1.0000000000	1.0
503 B	0	2.9188966226	2.9188966226	1	1	1
503 C	0	0.6270525696	0.6270525696	1	1	1
504 A	1	3.5009394562	1.8034162571	0.2575617602	2.0000000000	1.0
504 B	0	1.7758299335	1.7758299335	1	1	1
504 C	0	1.3257183031	1.3257183031	1	1	1
504 D	0	0.8492127775	1.6984255550	1	2	1
504 E	1	4.3429909590	1.8193359362	0.4189131300	1.0000000000	1.0
504 F	1	3.1386213067	1.8042640647	1.1497175915	0.5000000000	1.0
504 G	0	0.6917988205	1.3835976409	1	2	1
504 H	0	1.9475249698	1.9475249698	1	1	1
505 A	1	5.2536146481	2.2232482832	1.6927379963	0.2500000000	1.0
506 A	1	1.8186526896	1.2018688781	0.6608567348	1.0000000000	1.0
506 B	0	0.8951608921	0.8951608921	1	1	1
506 C	0	3.2096550026	1.0698850009	1	1/3	1
506 D	1	1.8611497781	1.4567809076	0.1565463376	5.0000000000	1.0

TABLE 4: BIRCH-SWINNERTON-DYER DATA 506E-528I

Curve	$r$	$\Omega$	$L^{(r)}(1)/r!$	$R$	$L^{(r)}(1)/r!\Omega R$	$S$
506 E	1	3.5504735863	2.2952032476	0.2154832956	3.0000000000	1.0
506 F	1	2.6021500295	2.0097923473	0.0594121821	13.0000000000	1.0
507 A	1	1.3267718509	2.0594887788	0.2587092344	6.0000000000	1.0
507 B	1	4.7837439392	1.2172344104	0.1272261252	2.0000000000	1.0
507 C	1	0.9171278260	1.1623161893	5.0693748738	0.2500000000	1.0
510 A	0	0.8377889603	0.8377889603	1	1	1
510 B	0	0.4600038552	1.3800115656	1	3	1
510 C	0	1.9361123184	1.9361123184	1	1	1
510 D	1	2.1234819095	2.1812264077	0.3423977694	3.0000000000	1.0
510 E	0	2.0809871839	2.0809871839	1	1	1
510 F	0	2.5858436071	2.5858436071	1	1	1
510 G	0	0.9466241610	2.8398724830	1	3	1
513 A	1	0.9183260617	2.2618541806	2.4630186107	1.0000000000	1.0
513 B	1	4.0784452383	1.3431909599	0.1097796571	3.0000000000	1.0
514 A	1	1.5692657075	2.3372236738	1.4893740829	1.0000000000	1.0
514 B	1	3.7592158470	2.0083555695	0.5342485378	1.0000000000	1.0
516 A	0	1.5157563762	1.5157563762	1	1	1
516 B	1	1.3986133273	1.6697886091	0.1989814455	6.0000000000	1.0
516 C	0	1.2281719842	1.8422579763	1	3/2	1
516 D	0	0.7668761526	2.3006284579	1	3	1
517 A	0	1.5383608886	3.0767217772	1	2	1
517 B	0	1.1898355917	2.3796711833	1	2	1
517 C	1	0.5994133999	2.6598825791	0.3697896671	12.0000000000	1.0
520 A	1	3.9206170977	1.8629119109	0.9503156592	0.5000000000	1.0
520 B	0	2.2507080525	2.2507080525	1	1	1
522 A	1	1.0344899410	1.5670842850	0.7574188124	2.0000000000	1.0
522 B	0	1.4203697590	1.4203697590	1	1	1
522 C	0	1.1900744638	0.7933829759	1	2/3	1
522 D	0	0.6150738882	1.2301477764	1	2	1
522 E	1	2.6723250627	1.4761194092	0.1380931749	4.0000000000	1.0
522 F	1	1.1162693937	1.4521616721	0.6504530539	2.0000000000	1.0
522 G	0	0.2048719257	2.2535911826	1	11	1
522 H	0	3.8963687108	2.5975791405	1	2/3	1
522 I	1	2.8948486012	2.3142517113	0.0799437909	10.0000000000	1.0
522 J	1	1.6391662953	2.3288102501	0.0273217017	52.0000000000	1.0
522 K	0	2.1298310269	2.1298310269	1	1	1
522 L	0	1.2838016184	2.5676032368	1	2	1
522 M	0	0.1265100626	2.7832213780	1	22	1
524 A	1	3.3330958841	1.9866907710	0.5960496908	1.0000000000	1.0
525 A	1	2.6222161011	1.2004647677	1.8312217169	0.2500000000	1.0
525 B	0	1.6139595394	1.6139595394	1	1	1
525 C	1	1.6844284064	2.1137948119	2.5098066546	0.5000000000	1.0
525 D	1	3.7664964200	1.5211195389	0.2692368662	1.5000000000	1.0
528 A	1	2.9816925531	1.7218133021	0.5774617173	1.0000000000	1.0
528 B	0	1.8534676594	0.9267338297	1	1/2	1
528 C	0	1.7314419103	1.7314419103	1	1	1
528 D	0	4.0963917014	2.0481958507	1	1/2	1
528 E	0	3.0402396248	1.5201198124	1	1/2	1
528 F	0	0.9402796053	0.9402796053	1	1	1
528 G	1	1.5635201774	1.7226781594	1.1017946454	1.0000000000	1.0
528 H	1	2.7446333575	1.9892866004	0.2415971269	3.0000000000	1.0
528 I	0	0.7962633741	1.9906584352	1	5/2	1

TABLE 4: BIRCH-SWINNERTON-DYER DATA 528J-550K

Curve	$r$	$\Omega$	$L^{(r)}(1)/r!$	$R$	$L^{(r)}(1)/r!\Omega R$	$S$
528 J	0	2.1940597110	2.1940597110	1	1	1
530 A	0	0.9734826979	1.2979769306	1	4/3	1
530 B	1	3.5353430676	1.5252750504	0.8628724405	0.5000000000	1.0
530 C	1	0.6481692597	1.0573504270	0.0815643762	20.0000000000	1.0
530 D	1	2.2585592113	2.2262282010	0.0821404264	12.0000000000	1.0
532 A	0	2.7311532120	1.3655766060	1	1/2	1
534 A	1	3.3954589269	2.2001094030	0.2159854726	3.0000000000	1.0
537 A	0	1.5587177967	1.5587177967	1	1	1
537 B	0	0.8102552899	1.6205105797	1	2	1
537 C	0	1.9799268697	1.3199512465	1	2/3	1
537 D	0	2.7531352269	2.7531352269	1	1	1
537 E	0	2.2873633818	0.9149453527	1	2/5	1
539 A	0	0.2934722056	0.5869444112	1	2	1
539 B	0	1.1393038364	2.2786076728	1	2	1
539 C	1	0.6771987829	2.0049171697	1.4803018112	2.0000000000	1.0
539 D	1	1.1027617077	1.2255668741	0.5556807357	2.0000000000	1.0
540 A	0	4.5731234994	1.5243744998	1	1/3	1
540 B	1	2.9454449340	1.9340458009	0.6566226306	1.0000000000	1.0
540 C	1	1.8649915990	1.8854414951	0.5054825706	2.0000000000	1.0
540 D	1	1.5026305749	1.8616866147	1.2389516397	1.0000000000	1.0
540 E	0	0.8192711081	1.6385422162	1	2	1
540 F	0	1.7249938232	1.7249938232	1	1	1
542 A	0	0.9359576219	3.2758516767	1	7/2	1
542 B	1	3.4021967825	2.2585197861	0.0948345156	7.0000000000	1.0
544 A	1	4.7941960623	1.9135747397	0.7982880611	0.5000000000	1.0
544 B	0	4.8723530805	2.4361765402	1	1/2	1
544 C	0	2.1962622352	1.0981311176	1	1/2	1
544 D	0	3.2086213244	1.6043106622	1	1/2	1
544 E	0	4.8633070873	2.4316535436	1	1/2	1
544 F	0	3.0166594192	1.5083297096	1	1/2	1
545 A	1	3.5241168854	2.3342244963	0.8831430482	0.7500000000	1.0
546 A	0	0.7389168563	0.7389168563	1	1	1
546 B	0	1.4270848853	1.4270848853	1	1	1
546 C	1	1.7445566571	1.6107831676	0.6155463285	1.5000000000	1.0
546 D	0	1.6909566492	1.6909566492	1	1	1
546 E	0	0.1340210485	2.2783578242	1	17	1
546 F	0	0.3816525370	2.6715677591	1	7	1
546 G	0	2.9547312604	2.9547312604	1	1	1
549 A	1	2.9764069065	2.3235893668	1.5613385131	0.5000000000	1.0
549 B	1	1.5545806290	1.3699084867	1.7624154851	0.5000000000	1.0
549 C	0	1.1514737028	2.3029474055	1	2	1
550 A	1	2.0671294787	1.3714836430	0.1658681347	4.0000000000	1.0
550 B	0	0.6080055832	1.2160111664	1	2	1
550 C	0	0.6304349988	0.6304349988	1	1	1
550 D	0	1.4466970381	0.4822323460	1	1/3	1
550 E	0	0.9764911272	1.9529822544	1	2	1
550 F	1	0.4639646208	1.6665638073	1.7960031139	2.0000000000	1.0
550 G	1	3.4565462699	1.2030087826	0.3480378067	1.0000000000	1.0
550 H	0	3.2349129201	3.2349129201	1	1	1
550 I	1	1.2639033911	2.2720084494	0.0214001480	84.0000000000	1.0
550 J	1	2.1835005398	1.9169774850	0.0399062600	22.0000000000	1.0
550 K	0	1.0374564312	2.0749128624	1	2	1

TABLE 4: BIRCH-SWINNERTON-DYER DATA 550L-570H

Curve	$r$	$\Omega$	$L^{(r)}(1)/r!$	$R$	$L^{(r)}(1)/r!\Omega R$	$S$
550 L	0	1.5458144854	3.0916289708	1	2	1
550 M	0	0.2819391026	3.1013301282	1	11	1
551 A	1	1.9602738232	2.4701875222	0.6300618549	2.0000000000	1.0
551 B	1	3.9902199840	1.5318935051	0.1919560214	2.0000000000	1.0
551 C	1	0.3338943271	2.6025453385	0.5567512849	14.0000000000	1.0
551 D	1	3.7489876608	0.7883877278	0.1051467488	2.0000000000	1.0
552 A	1	0.8208541864	1.7081772832	2.0809752957	1.0000000000	1.0
552 B	0	1.1877091685	1.1877091685	1	1	1
552 C	0	1.7517459385	1.7517459385	1	1	1
552 D	1	1.2581503271	1.8063895256	2.8715003075	0.5000000000	1.0
552 E	1	2.4465110075	2.0234563853	0.8270783900	1.0000000000	1.0
555 A	0	1.3704794284	1.3704794284	1	1	1
555 B	0	0.3400020988	1.7000104939	1	5	1
556 A	1	4.5857844464	1.9014122128	0.1382106111	3.0000000000	1.0
557 A	1	4.3192896340	2.1645043698	0.5011250815	1.0000000000	1.0
557 B	0	4.1429400648	4.1429400648	1	1	1
558 A	1	3.8035017777	1.5014219878	0.1973736409	2.0000000000	1.0
558 B	0	1.8840962993	1.2560641995	1	2/3	1
558 C	0	1.2927497983	1.2927497983	1	1	1
558 D	1	1.0317785645	1.4837330244	0.3595085892	4.0000000000	1.0
558 E	0	1.2371828219	2.4743656437	1	2	1
558 F	1	1.4723271192	2.3825303332	0.4854621576	3.3333333333	1.0
558 G	1	2.3163764160	2.4016041200	0.0370283410	28.0000000000	1.0
558 H	0	1.2640616931	2.5281233863	1	2	1
560 A	0	1.7924218478	1.7924218478	1	1	1
560 B	0	0.5287383956	2.6436919780	1	5	1
560 C	0	1.1025221381	1.1025221381	1	1	1
560 D	1	1.5673707144	1.9245473164	0.6139413282	2.0000000000	1.0
560 E	1	1.0762429023	1.3838587046	0.1285823769	10.0000000000	1.0
560 F	1	2.6665625486	1.7989783239	0.1124405354	6.0000000000	1.0
561 A	0	0.3054651772	0.6109303543	1	2	1
561 B	1	2.1348844998	1.9186947105	0.0898734667	10.0000000000	1.0
561 C	1	3.7556570477	1.2558191146	0.0835951671	4.0000000000	1.0
561 D	0	5.2004058717	1.3001014679	1	1/4	1
562 A	0	3.9206453206	1.9603226603	1	1/2	1
563 A	2	5.1752090225	1.1345559170	0.2192290035	1.0000000000	1.0
564 A	1	1.2379453765	1.7326473476	1.3996153469	1.0000000000	1.0
564 B	1	3.0040996567	2.0285919557	0.6752745207	1.0000000000	1.0
565 A	0	1.1493097892	1.1493097892	1	1	1
566 A	1	3.8013747648	1.5506939100	0.2039648819	2.0000000000	1.0
566 B	0	2.5982764742	2.5982764742	1	1	1
567 A	1	2.0002970970	2.3242602526	0.5809787596	2.0000000000	1.0
567 B	1	2.0373477589	1.4299998225	0.1169821415	6.0000000000	1.0
568 A	0	1.6374033064	1.6374033064	1	1	1
570 A	1	2.1867251701	1.3629838038	0.6232990878	1.0000000000	1.0
570 B	0	0.7141450332	0.7141450332	1	1	1
570 C	1	2.2776827930	1.4027686580	0.2052917790	3.0000000000	1.0
570 D	0	0.2865166301	1.4325831504	1	5	1
570 E	1	1.7120662755	1.7232305643	1.0065209443	1.0000000000	1.0
570 F	0	1.5439230957	1.5439230957	1	1	1
570 G	0	3.8258404870	1.9129202435	1	1/2	1
570 H	0	2.0418363509	2.0418363509	1	1	1

TABLE 4: BIRCH-SWINNERTON-DYER DATA 570I-585E

Curve	$r$	$\Omega$	$L^{(r)}(1)/r!$	$R$	$L^{(r)}(1)/r!\Omega R$	$S$
570 I	0	1.1330304803	2.2660609607	1	2	1
570 J	0	0.3863130601	2.7041914208	1	7	1
570 K	0	0.6858933343	2.7435733371	1	4	1
570 L	0	0.2800031252	2.8000312519	1	10	1
570 M	0	3.0009972891	3.0009972891	1	1	1
571 A	0	0.4323412563	1.7293650251	1	4	4
571 B	2	5.0953146197	0.9031605170	0.1772531403	1.0000000000	1.0
572 A	0	1.1186077536	2.2372155072	1	2	1
573 A	0	2.7728744064	1.3864372032	1	1/2	1
573 B	0	0.7774083687	3.8870418435	1	5	1
573 C	1	3.5896805447	1.1959599002	0.1110553697	3.0000000000	1.0
574 A	1	3.8864860069	1.4097851799	0.3627403205	1.0000000000	1.0
574 B	1	1.8130899302	1.8100407779	0.9983182565	1.0000000000	1.0
574 C	0	1.8417870162	1.8417870162	1	1	1
574 D	0	0.3594839537	1.0784518611	1	3	1
574 E	0	1.8962043734	1.8962043734	1	1	1
574 F	1	2.0605345766	1.6140546542	2.3499552095	0.3333333333	1.0
574 G	1	2.4854639550	2.3048347394	0.0843023414	11.0000000000	1.0
574 H	1	2.7772218686	2.4117764641	0.5789422135	1.5000000000	1.0
574 I	1	0.6002081912	1.9219551260	1.0673824817	3.0000000000	1.0
574 J	0	2.1296506458	2.1296506458	1	1	1
575 A	1	4.5838545934	2.3699937601	0.5170307460	1.0000000000	1.0
575 B	1	0.8085795688	1.1252987905	0.3479245686	4.0000000000	1.0
575 C	0	2.0323726487	4.0647452974	1	2	1
575 D	1	2.0499620940	1.4098509776	0.2292483004	3.0000000000	1.0
575 E	1	4.5445233981	0.8318833192	0.0915259144	2.0000000000	1.0
576 A	1	2.9744774254	1.9430318018	0.6532346775	1.0000000000	1.0
576 B	0	1.9129209871	1.9129209871	1	1	1
576 C	0	3.2695050335	1.6347525168	1	1/2	1
576 D	0	1.3764094010	1.3764094010	1	1	1
576 E	0	1.7173153423	1.7173153423	1	1	1
576 F	0	3.9846657992	1.9923328996	1	1/2	1
576 G	0	2.3005478718	1.1502739359	1	1/2	1
576 H	1	2.1409010281	1.9024600490	1.7772517497	0.5000000000	1.0
576 I	1	1.7607876529	1.9003720950	0.5396369323	2.0000000000	1.0
578 A	0	1.0903585148	3.2710755444	1	3	1
579 A	0	2.9882076413	2.9882076413	1	1	1
579 B	1	4.0476524302	1.5828958511	0.7821303229	0.5000000000	1.0
580 A	1	2.8796164808	1.9398167218	0.4490914524	1.5000000000	1.0
580 B	1	2.0989217355	2.0014236886	0.2118996684	4.5000000000	1.0
582 A	1	2.4268265774	1.3742277699	0.5662653371	1.0000000000	1.0
582 B	0	0.3248421567	1.9490529401	1	6	1
582 C	1	2.6532549743	2.2748039425	0.1714726978	5.0000000000	1.0
582 D	0	2.5584585727	2.5584585727	1	1	1
583 A	0	1.9615186600	3.9230373200	1	2	1
583 B	0	0.5373731951	2.1494927803	1	4	1
583 C	0	0.7126191531	4.2757149188	1	6	1
585 A	1	1.7604418018	1.3938971243	0.7917882448	1.0000000000	1.0
585 B	0	1.6235990929	1.0823993953	1	2/3	1
585 C	0	1.0680848227	2.1361696453	1	2	1
585 D	1	3.6227637614	1.8522954214	0.7669401913	0.6666666667	1.0
585 E	0	0.3703609311	0.7407218623	1	2	1

TABLE 4: BIRCH-SWINNERTON-DYER DATA 585F-602C

Curve	$r$	$\Omega$	$L^{(r)}(1)/r!$	$R$	$L^{(r)}(1)/r!\Omega R$	$S$
585 F	1	0.8510814529	2.3595617156	5.5448552134	0.5000000000	1.0
585 G	1	2.7101707231	1.0788350163	0.0995172562	4.0000000000	1.0
585 H	1	2.9358589644	2.4047265041	1.6381757661	0.5000000000	1.0
585 I	1	1.1139515047	1.1749876122	0.0376711581	28.0000000000	1.0
586 A	0	1.9224714698	1.9224714698	1	1	1
586 B	1	1.5864971379	2.3468475653	0.0821813145	18.0000000000	1.0
586 C	1	4.2827446200	2.2831695064	0.1332772386	4.0000000000	1.0
588 A	0	1.0627828254	1.0627828254	1	1	1
588 B	1	0.9032890459	1.8046862614	0.6659685401	3.0000000000	1.0
588 C	1	2.7659029546	1.7240643602	0.4155519044	1.5000000000	1.0
588 D	0	0.4247946359	2.1239731795	1	5	1
588 E	0	1.4059030758	2.1088546137	1	3/2	1
588 F	0	1.4860025529	1.4860025529	1	1	1
590 A	0	1.0745734886	0.7163823257	1	2/3	1
590 B	0	2.6948119120	1.3474059560	1	1/2	1
590 C	1	3.1049556815	1.6137866012	0.2598727271	2.0000000000	1.0
590 D	1	2.1842665685	2.1864656914	0.0278057445	36.0000000000	1.0
591 A	1	4.2440165034	1.6471095314	0.1940507925	2.0000000000	1.0
592 A	1	2.7500416450	2.1008484303	0.7639333150	1.0000000000	1.0
592 B	0	1.9871937616	1.9871937616	1	1	1
592 C	0	2.4513893820	2.4513893820	1	1	1
592 D	1	3.5284992325	2.0579305688	0.2916155614	2.0000000000	1.0
592 E	1	1.7676106702	1.8129978972	1.0256771628	1.0000000000	1.0
593 A	1	4.6326474009	2.5297477726	0.5460695697	1.0000000000	1.0
593 B	0	1.2822317043	0.6411158522	1	1/2	1
594 A	1	3.5551559587	1.5031473990	0.0704679540	6.0000000000	1.0
594 B	0	1.3661755860	1.3661755860	1	1	1
594 C	0	1.9745189169	0.6581729723	1	1/3	1
594 D	1	1.0795971017	1.4819597787	0.1372697070	10.0000000000	1.0
594 E	0	0.3224010209	2.5792081669	1	8	1
594 F	0	2.4423323193	2.4423323193	1	1	1
594 G	0	0.6648978941	2.6595915765	1	4	1
594 H	0	0.5152499152	2.5762495760	1	5	1
595 A	0	0.9778986867	0.9778986867	1	1	1
595 B	0	0.5740270845	4.0181895917	1	7	1
595 C	0	4.2213530436	4.2213530436	1	1	1
598 A	1	2.5667675804	1.5698916376	0.3058110227	2.0000000000	1.0
598 B	1	1.3807484571	0.9723774253	0.1760598428	4.0000000000	1.0
598 C	0	1.2303609822	2.4607219645	1	2	1
598 D	1	0.7246534041	2.3415704004	0.0950381483	34.0000000000	1.0
600 A	1	2.2709404021	1.8182269343	0.8006493401	1.0000000000	1.0
600 B	1	2.2718298778	1.7882616021	0.1967864781	4.0000000000	1.0
600 C	0	1.3641047525	1.3641047525	1	1	1
600 D	0	1.9288462329	1.9288462329	1	1	1
600 E	1	1.6232936555	2.1589881844	0.0158333892	84.0000000000	1.0
600 F	0	1.1134814845	1.1134814845	1	1	1
600 G	0	0.7259589922	1.4519179844	1	2	1
600 H	0	0.6100461910	1.8301385731	1	3	1
600 I	0	1.0159932080	2.0319864160	1	2	1
602 A	0	0.6308611400	0.6308611400	1	1	1
602 B	0	1.0174606853	1.0174606853	1	1	1
602 C	0	2.1063872057	2.1063872057	1	1	1

TABLE 4: BIRCH-SWINNERTON-DYER DATA 603A-621B

Curve	$r$	$\Omega$	$L^{(r)}(1)/r!$	$R$	$L^{(r)}(1)/r!\Omega R$	$S$
603 A	0	3.7681340880	1.8840670440	1	1/2	1
603 B	0	2.3992410444	1.1996205222	1	1/2	1
603 C	0	0.2595867981	1.0383471925	1	4	1
603 D	0	1.5982816107	3.1965632214	1	2	1
603 E	1	1.1635621891	2.4252104008	1.0421490246	2.0000000000	1.0
603 F	1	3.4987061444	1.0565412255	0.1509902778	2.0000000000	1.0
605 A	1	0.3648079087	1.8671028100	0.3412029117	15.0000000000	1.0
605 B	1	1.0379669438	1.4632185424	5.6387866729	0.2500000000	1.0
605 C	1	2.6758306612	0.9214319585	0.0688707228	5.0000000000	1.0
606 A	0	1.1774603810	1.7661905715	1	3/2	1
606 B	1	2.6663147092	1.7325801440	0.3249016588	2.0000000000	1.0
606 C	0	0.9957737146	1.9915474292	1	2	1
606 D	0	0.3527718822	2.4694031751	1	7	1
606 E	1	1.9676984559	2.6292883984	0.0247449124	54.0000000000	1.0
606 F	0	2.8467624701	2.8467624701	1	1	1
608 A	1	1.3513123907	1.9841616741	0.7341609860	2.0000000000	1.0
608 B	0	1.0430839617	2.0861679234	1	2	1
608 C	0	2.5878393778	2.5878393778	1	1	1
608 D	1	3.0958399938	1.9643514437	0.3172566166	2.0000000000	1.0
608 E	1	0.5785570780	2.0903172801	0.3612983679	10.0000000000	1.0
608 F	1	2.3045386410	1.4518436127	0.3149965869	2.0000000000	1.0
609 A	1	3.5623621078	2.2343678812	1.2544305231	0.5000000000	1.0
609 B	1	1.3484815516	1.1844590786	1.7567301195	0.5000000000	1.0
610 A	0	0.9772220217	0.9772220217	1	1	1
610 B	1	2.6389744505	1.6222091650	0.4098079754	1.5000000000	1.0
610 C	0	3.2804783161	3.2804783161	1	1	1
611 A	0	4.4507748026	4.4507748026	1	1	1
612 A	0	3.0101774280	2.0067849520	1	2/3	1
612 B	1	0.8947231692	1.9203816974	1.0731708776	2.0000000000	1.0
612 C	1	2.1134557877	1.9847891382	0.0782600212	12.0000000000	1.0
612 D	0	0.9210983643	1.8421967286	1	2	1
614 A	1	3.8235505367	2.5202550314	0.1098566636	6.0000000000	1.0
614 B	1	1.6220180852	2.1964097812	1.0155912261	1.3333333333	1.0
615 A	1	3.1476280915	1.2171094498	0.3866751136	1.0000000000	1.0
615 B	1	1.0766896496	2.0130725659	0.1335490665	14.0000000000	1.0
616 A	1	1.2592832385	2.0157852699	1.6007401736	1.0000000000	1.0
616 B	0	0.4967001346	2.4835006732	1	5	1
616 C	0	1.2228749426	1.2228749426	1	1	1
616 D	1	1.7515268442	1.7957577414	0.0427188652	24.0000000000	1.0
616 E	1	2.1143298453	1.9497931917	1.8443604682	0.5000000000	1.0
618 A	1	3.2025259469	1.3562810365	0.2117517639	2.0000000000	1.0
618 B	1	0.3275850164	1.4815330940	4.5225911437	1.0000000000	1.0
618 C	1	4.3034232575	1.7322241586	1.2075671308	0.3333333333	1.0
618 D	1	0.5996924071	1.6716285286	0.8362429684	3.3333333333	1.0
618 E	1	3.1261472585	2.3263678897	0.1488329050	5.0000000000	1.0
618 F	1	1.5379775186	2.6608279159	0.0224686033	77.0000000000	1.0
618 G	0	0.3846002426	3.0768019409	1	8	1
620 A	1	3.5636105700	2.1477266018	1.8080482362	0.3333333333	1.0
620 B	1	1.9747591044	2.0518524948	0.1385385853	7.5000000004	1.0
620 C	1	2.3002922132	1.4718967298	0.2132912682	3.0000000000	1.0
621 A	0	2.4706496111	2.4706496111	1	1	1
621 B	1	2.4850697914	1.3566125441	0.5459052091	1.0000000000	1.0

TABLE 4: BIRCH-SWINNERTON-DYER DATA 622A-643A

Curve	$r$	$\Omega$	$L^{(r)}(1)/r!$	$R$	$L^{(r)}(1)/r!\Omega R$	$S$
622 A	1	2.0911722409	2.4885586945	0.1700043535	7.0000000000	1.0
623 A	1	1.6365441158	2.2881851242	0.2330301907	6.0000000000	1.0
624 A	1	3.6944854092	1.8414108744	0.9968429540	0.5000000000	1.0
624 B	1	1.7240319882	1.7131634804	1.9873917563	0.5000000000	1.0
624 C	0	2.9977977348	1.4988988674	1	1/2	1
624 D	0	4.1998547381	2.0999273690	1	1/2	1
624 E	0	0.9490741088	2.3726852720	1	5/2	1
624 F	1	1.9064113550	2.1165060726	2.2204085882	0.5000000000	1.0
624 G	1	2.7365561607	1.8217793937	1.3314394346	0.5000000000	1.0
624 H	0	2.2865886337	2.2865886337	1	1	1
624 I	0	0.3978321511	1.9891607556	1	5	1
624 J	0	3.1643734930	1.5821867465	1	1/2	1
626 A	1	4.8236248257	1.5953820026	0.6614867699	0.5000000000	1.0
626 B	0	1.7509727378	1.7509727378	1	1	1
627 A	0	2.0728597236	2.0728597236	1	1	1
627 B	0	0.5438530027	1.6315590080	1	3	1
628 A	0	2.6439246550	2.6439246550	1	1	1
629 A	1	1.7091284174	2.4969954466	1.4609759110	1.0000000000	1.0
629 B	0	2.2266969590	4.4533939180	1	2	1
629 C	1	2.2765689140	1.3037797972	0.1431737679	4.0000000000	1.0
629 D	1	1.3686582300	1.5536888031	0.2270382436	5.0000000000	1.0
630 A	0	3.1915635134	1.0638545045	1	1/3	1
630 B	0	1.1585165872	1.1585165872	1	1	1
630 C	0	0.4975637810	0.9951275620	1	2	1
630 D	1	1.2617923560	1.5738501163	0.6236565425	2.0000000000	1.0
630 E	1	1.8098438078	1.6379676457	0.4525162997	2.0000000000	1.0
630 F	0	1.2655347079	1.2655347079	1	1	1
630 G	0	0.3258351084	2.2808457589	1	7	1
630 H	0	2.5822999144	2.5822999144	1	1	1
630 I	0	0.5836435418	2.3345741671	1	4	1
630 J	0	2.5079578706	2.5079578706	1	1	1
632 A	1	3.2690386003	2.1533299446	0.3293521747	2.0000000000	1.0
633 A	1	1.0939894596	1.1623092920	0.5312250871	2.0000000000	1.0
635 A	1	2.6532748870	2.1046502583	2.3796821076	0.3333333333	1.0
635 B	1	5.1560085835	1.0641729808	0.2063947264	1.0000000000	1.0
637 A	1	3.6103936643	2.4744038023	0.6853556793	1.0000000000	1.0
637 B	0	0.5482023406	2.1928093623	1	4	1
637 C	1	0.2804003378	2.4750227405	8.8267466432	1.0000000000	1.0
637 D	1	1.2618475557	1.2952727037	0.5132445269	2.0000000000	1.0
639 A	1	1.4159216040	1.3874418666	0.9798860775	1.0000000000	1.0
640 A	1	2.5146785012	2.0316664632	3.2316917845	0.2500000000	1.0
640 B	1	5.1408789950	1.9898721132	1.5482738381	0.2500000000	1.0
640 C	0	1.7781462207	1.7781462207	1	1	1
640 D	0	1.1829167593	2.3658335187	1	2	1
640 E	0	4.2937310983	2.1468655491	1	1/2	1
640 F	0	1.6728969242	0.8364484621	1	1/2	1
640 G	1	3.6351503986	2.0751281923	0.5708507117	1.0000000000	1.0
640 H	1	3.0361263762	1.6979739838	0.2796283444	2.0000000000	1.0
642 A	0	2.3935636629	1.1967818315	1	1/2	1
642 B	0	0.8833018943	1.1777358591	1	4/3	1
642 C	1	1.3096864637	2.4034651156	0.0705825162	26.0000000000	1.0
643 A	2	5.0103134331	1.1482617366	0.2291796216	1.0000000000	1.0

TABLE 4: BIRCH-SWINNERTON-DYER DATA 644A-658F

Curve	$r$	$\Omega$	$L^{(r)}(1)/r!$	$R$	$L^{(r)}(1)/r!\Omega R$	$S$
644 A	1	1.3458310330	2.1671360619	0.8051293248	2.0000000000	1.0
644 B	1	1.8677219381	1.8666034248	0.1665668558	6.0000000000	1.0
645 A	0	2.9547633309	1.4773816655	1	1/2	1
645 B	0	3.7246680737	1.8623340369	1	1/2	1
645 C	0	0.7287600670	2.9150402680	1	4	1
645 D	0	0.2060864423	0.8243457694	1	4	1
645 E	1	0.5418428107	2.1123636266	0.0406091718	96.0000000000	1.0
645 F	1	2.0680590222	1.3395707765	0.0539785842	12.0000000000	1.0
646 A	0	1.4274356437	1.4274356437	1	1	1
646 B	0	1.7333045886	3.4666091772	1	2	1
646 C	0	2.3277953903	2.3277953903	1	1	1
646 D	1	2.1316501109	2.5834562462	0.2019918930	6.0000000000	1.0
646 E	0	1.7417182315	1.7417182315	1	1	1
648 A	1	2.8579610545	2.0264323657	0.3545241393	2.0000000000	1.0
648 B	1	3.7739500820	1.9947552563	0.2642794967	2.0000000000	1.0
648 C	0	0.8564595017	1.7129190035	1	2	1
648 D	1	2.5144198042	2.0822444144	0.1380202046	6.0000000000	1.0
649 A	1	3.4660507043	1.6065376871	0.2317533447	2.0000000000	1.0
650 A	1	1.3995225281	1.6156045801	1.1543969802	1.0000000000	1.0
650 B	1	0.6941100694	1.9367249330	1.3951136990	2.0000000000	1.0
650 C	1	4.1558626857	1.0826851427	0.1302599754	2.0000000000	1.0
650 D	0	0.7630894957	1.5261789915	1	2	1
650 E	0	0.3964760735	0.7929521471	1	2	1
650 F	0	1.9439290266	1.9439290266	1	1	1
650 G	1	3.6999544999	1.2442250387	0.5044217593	0.6666666667	1.0
650 H	0	2.0751559918	2.0751559918	1	1	1
650 I	0	1.6546699551	3.3093399101	1	2	1
650 J	0	1.6923586570	3.3847173140	1	2	1
650 K	1	1.7063199854	2.4329160966	0.0339482478	42.0000000000	1.0
650 L	0	0.3104154598	1.8624927590	1	6	1
650 M	0	1.8585582941	3.7171165882	1	2	1
651 A	0	0.2759207512	1.3796037560	1	5	1
651 B	0	4.2374957336	2.1187478668	1	1/2	1
651 C	1	2.0362564170	2.6338964695	1.2934994078	1.0000000000	1.0
651 D	1	1.2854998192	1.5714303035	1.2224274792	1.0000000000	1.0
651 E	0	1.2556913761	1.2556913761	1	1	1
654 A	1	2.2676191686	1.7461630175	0.0481276530	16.0000000000	1.0
654 B	1	1.3654234799	2.4192177359	0.0553678440	32.0000000000	1.0
655 A	2	4.4879258049	0.8881921108	0.0989535199	2.0000000000	1.0
656 A	1	3.3657759082	2.0060295839	0.5960080643	1.0000000000	1.0
656 B	0	2.5555950990	1.2777975495	1	1/2	1
656 C	0	2.2320363680	2.2320363680	1	1	1
657 A	0	1.3920168887	1.3920168887	1	1	1
657 B	0	0.8683578148	3.4734312592	1	4	1
657 C	1	1.4732708732	1.9853109738	0.6737766320	2.0000000000	1.0
657 D	1	3.2248295382	1.3989934744	0.4338193563	1.0000000000	1.0
658 A	0	0.3453570447	0.6907140895	1	2	1
658 B	0	3.6139800621	1.8069900311	1	1/2	1
658 C	0	2.5856452314	1.7237634876	1	2/3	1
658 D	1	1.4893191366	2.4281008908	0.1358619089	12.0000000000	1.0
658 E	1	0.6112087497	2.5417115238	0.1890227227	22.0000000000	1.0
658 F	1	4.3216254957	2.0088664210	0.1162101172	4.0000000000	1.0

TABLE 4: BIRCH-SWINNERTON-DYER DATA 659A-676B

Curve	$r$	$\Omega$	$L^{(r)}(1)/r!$	$R$	$L^{(r)}(1)/r!\Omega R$	$S$
659 A	1	1.5987465961	2.8102618562	1.7577906737	1.0000000000	1.0
659 B	0	3.9580875305	3.9580875305	1	1	1
660 A	0	1.0700232126	1.0700232126	1	1	1
660 B	1	2.9740851833	1.8332170918	0.2054656562	3.0000000000	1.0
660 C	1	2.3631542925	2.2071066960	0.9339663953	1.0000000000	1.0
660 D	0	0.6405269388	1.9215808163	1	3	1
662 A	1	1.0766666723	1.2847762864	0.5966453311	2.0000000000	1.0
663 A	0	1.1861398733	1.1861398733	1	1	1
663 B	1	3.2047641001	1.1920969618	1.4879060356	0.2500000000	1.0
663 C	1	1.9988726759	1.6326154359	0.4083840496	2.0000000000	1.0
664 A	2	3.5536274747	1.3742026761	0.0966760505	4.0000000000	1.0
664 B	1	3.6509416469	2.1908129135	0.3000339536	2.0000000000	1.0
664 C	1	4.5567302944	1.8865952753	0.2070119530	2.0000000000	1.0
665 A	1	1.3794131390	1.2423862408	0.1801325804	5.0000000000	1.0
665 B	1	2.4602431252	2.5513395947	4.1481097027	0.2500000000	1.0
665 C	1	4.8049229586	2.3451929413	0.4880812786	1.0000000000	1.0
665 D	1	1.0294222183	1.0781458036	0.5236655011	2.0000000000	1.0
665 E	0	0.7606298483	1.5212596966	1	2	1
666 A	0	0.6115596244	1.2231192488	1	2	1
666 B	0	0.6266921957	1.2533843913	1	2	1
666 C	1	1.7584042022	1.6232934654	0.2307907168	4.0000000000	1.0
666 D	1	3.7060696315	2.6092064873	0.0704036013	10.0000000000	1.0
666 E	1	1.2684154139	2.5396068527	0.0385036265	52.0000000000	1.0
666 F	0	1.1123286520	2.2246573039	1	2	1
666 G	0	0.0666962770	3.0680287440	1	46	1
669 A	1	2.0309614263	2.3967060910	1.1800844960	1.0000000000	1.0
670 A	1	0.4721151649	1.6886117386	0.3251540503	11.0000000000	1.0
670 B	1	2.8685877138	1.3009484555	1.3605459397	0.3333333333	1.0
670 C	1	4.0108342189	2.6312306772	0.1312061548	5.0000000000	1.0
670 D	1	0.8786739264	2.2406781479	0.1342140984	19.0000000000	1.0
672 A	1	3.0552339984	1.8770484002	0.6143714037	1.0000000000	1.0
672 B	1	1.0195945289	2.1403725794	0.1399492654	15.0000000000	1.0
672 C	0	2.9459785698	1.4729892849	1	1/2	1
672 D	0	0.7784733987	0.7784733987	1	1	1
672 E	1	3.6459594937	1.8104178877	0.9931091615	0.5000000000	1.0
672 F	1	2.4672111687	2.2099943158	1.7914918219	0.5000000000	1.0
672 G	0	1.9947625016	1.9947625016	1	1	1
672 H	0	2.2280058144	2.2280058144	1	1	1
674 A	1	2.7092586874	1.7379082664	0.6414700355	1.0000000000	1.0
674 B	1	4.0104450489	2.6033014713	0.6491303184	1.0000000000	1.0
674 C	1	0.5759572330	1.9868787305	0.1112805927	31.0000000000	1.0
675 A	1	2.3701946024	1.9226596103	0.4055910870	2.0000000000	1.0
675 B	1	3.7197181779	1.4725103035	0.1319553645	3.0000000000	1.0
675 C	0	3.0994098257	1.0331366086	1	1/3	1
675 D	0	0.8904557232	0.8904557232	1	1	1
675 E	0	1.3860982121	1.3860982121	1	1	1
675 F	0	1.9911195281	1.9911195281	1	1	1
675 G	0	1.6911045184	3.3822090368	1	2	1
675 H	0	0.4397610737	0.8795221474	1	2	1
675 I	1	1.6635085406	2.5377208007	0.5085077190	3.0000000000	1.0
676 A	0	0.9379794035	1.4069691052	1	3/2	1
676 B	0	1.4965418840	1.4965418840	1	1	1

TABLE 4: BIRCH-SWINNERTON-DYER DATA 676C-699A

Curve	$r$	$\Omega$	$L^{(r)}(1)/r!$	$R$	$L^{(r)}(1)/r!\Omega R$	$S$
676 C	0	0.4150660384	0.4150660384	1	1	1
676 D	0	2.9442542341	2.9442542341	1	1	1
676 E	0	0.8165892007	2.4497676021	1	3	1
677 A	1	2.8368146928	1.2893981935	0.4545232358	1.0000000000	1.0
678 A	1	4.8406123729	1.5171515354	0.1567107030	2.0000000000	1.0
678 B	1	1.5883609701	1.7574538605	0.1844095783	6.0000000000	1.0
678 C	1	1.4205258825	2.4773594939	0.2491390713	7.0000000000	1.0
678 D	0	1.3970457314	2.7940914629	1	2	1
678 E	0	3.1622103101	3.1622103101	1	1	1
678 F	0	1.2858801950	2.5717603900	1	2	1
680 A	1	3.2750305235	2.0532909813	1.2539064699	0.5000000000	1.0
680 B	0	1.4663778907	1.4663778907	1	1	1
680 C	0	0.6189257201	2.4757028802	1	4	1
681 A	1	3.8078769894	1.7148309965	0.2251689066	2.0000000000	1.0
681 B	0	0.8199178694	1.8448152061	1	9/4	<b>9</b>
681 C	2	3.7708461685	1.0262711474	0.1360796890	2.0000000000	1.0
681 D	0	0.5238009112	2.0952036450	1	4	1
681 E	1	2.2367233352	2.0523231219	0.0917557880	10.0000000000	1.0
682 A	1	3.1826703234	2.2812508096	0.7167725770	1.0000000000	1.0
682 B	1	0.6115533121	2.6265637235	0.0753492204	57.0000000000	1.0
684 A	1	2.5117117385	2.1232510164	0.1408900408	6.0000000000	1.0
684 B	1	0.8914338511	2.0174937497	0.3772001230	6.0000000000	1.0
684 C	0	1.0106719472	2.0213438944	1	2	1
685 A	1	5.0493985695	2.5294065402	0.5009322408	1.0000000000	1.0
688 A	1	2.1361539012	2.0384041307	0.9542402959	1.0000000000	1.0
688 B	0	1.2461451514	2.4922903027	1	2	1
688 C	1	1.3631824182	2.3637294196	1.7339788043	1.0000000000	1.0
689 A	1	5.1047223290	1.0333048176	0.8096854253	0.2500000000	1.0
690 A	1	0.7448541864	1.3963979050	0.9373632655	2.0000000000	1.0
690 B	0	0.9529657858	0.9529657858	1	1	1
690 C	0	0.1132251968	0.9058015746	1	8	1
690 D	0	1.2098350005	1.2098350005	1	1	1
690 E	1	0.9634951715	1.8051068282	0.7493994289	2.5000000000	1.0
690 F	0	3.0827918116	1.5413959058	1	1/2	1
690 G	0	0.2784647670	1.9492533690	1	7	1
690 H	1	2.3108328098	2.4704452833	0.1781785678	6.0000000000	1.0
690 I	0	0.9226753489	2.7680260467	1	3	1
690 J	0	0.6031690708	3.0158453540	1	5	1
690 K	0	1.5219655531	3.0439311063	1	2	1
692 A	0	2.1861975957	1.0930987979	1	1/2	1
693 A	0	1.0344382277	1.0344382277	1	1	1
693 B	1	1.7403153566	1.9629786598	0.5639721136	2.0000000000	1.0
693 C	0	0.4482861989	0.8965723977	1	2	1
693 D	0	1.1413329845	2.2826659690	1	2	1
696 A	1	3.8717115384	1.8979933552	0.2451103777	2.0000000000	1.0
696 B	0	1.6317277401	1.6317277401	1	1	1
696 C	1	2.0763110581	2.2838622912	0.1099961531	10.0000000000	1.0
696 D	0	1.2519112526	1.2519112526	1	1	1
696 E	0	0.9609707865	1.9219415730	1	2	1
696 F	1	0.7587994985	1.8510015342	0.4065635999	6.0000000000	1.0
696 G	1	3.6032980856	2.2393010521	0.1035764550	6.0000000000	1.0
699 A	0	1.3274184293	3.9822552879	1	3	1

TABLE 4: BIRCH-SWINNERTON-DYER DATA 700A-707A

Curve	$r$	$\Omega$	$L^{(r)}(1)/r!$	$R$	$L^{(r)}(1)/r!\Omega R$	$S$
700 A	0	0.6011899261	1.2023798523	1	2	1
700 B	0	2.2739538827	2.2739538827	1	1	1
700 C	1	4.3423658689	2.1348487950	0.1638775466	3.0000000000	1.0
700 D	1	0.6956459498	1.5021159277	0.0359885161	60.0000000000	1.0
700 E	1	0.7139819035	2.1110581354	0.9855796648	3.0000000000	1.0
700 F	1	1.9419650532	2.1076136836	0.3617664970	3.0000000000	1.0
700 G	1	3.1315375430	1.4807661532	0.0788093246	6.0000000000	1.0
700 H	0	1.5965120710	1.5965120710	1	1	1
700 I	0	1.0169430919	1.0169430919	1	1	1
700 J	0	1.4004661640	2.8009323281	1	2	1
701 A	0	4.5057330241	4.5057330241	1	1	1
702 A	1	1.2959189179	1.6511976366	0.6370759828	2.0000000000	1.0
702 B	1	3.6218545346	1.5825343783	0.4369403473	1.0000000000	1.0
702 C	0	1.5516100045	1.5516100045	1	1	1
702 D	0	1.0950637552	1.0950637552	1	1	1
702 E	0	1.1045333203	0.7363555469	1	2/3	1
702 F	0	1.1196604817	1.1196604817	1	1	1
702 G	0	1.6442531135	1.6442531135	1	1	1
702 H	1	4.4173331953	1.6516890684	3.3651981768	0.1111111111	1.0
702 I	0	2.7852340926	2.7852340926	1	1	1
702 J	0	0.2651042420	2.9161466624	1	11	1
702 K	1	2.9521289967	2.6395534641	0.0425770765	21.0000000000	1.0
702 L	1	1.6844372293	2.6868354521	0.0531697947	30.0000000000	1.0
702 M	1	0.7927472332	2.6131420167	0.0578300306	57.0000000000	1.0
702 N	0	2.4387240231	2.4387240231	1	1	1
702 O	0	2.3848948730	2.3848948730	1	1	1
702 P	0	0.4731564099	2.8389384593	1	6	1
703 A	0	1.0265530673	2.0531061346	1	2	1
703 B	1	1.7712720083	1.1006854340	0.3107048011	2.0000000000	1.0
704 A	1	4.4873325290	2.2759885635	0.5072030095	1.0000000000	1.0
704 B	1	3.8045730058	2.0086088735	0.5279459404	1.0000000000	1.0
704 C	0	2.4683463702	2.4683463702	1	1	1
704 D	0	1.7069125392	1.7069125392	1	1	1
704 E	0	3.0069924701	3.0069924701	1	1	1
704 F	0	2.1595534099	2.1595534099	1	1	1
704 G	0	1.3006681580	1.3006681580	1	1	1
704 H	0	2.6129403750	2.6129403750	1	1	1
704 I	0	1.1705612909	1.1705612909	1	1	1
704 J	1	5.1103236666	2.2490865778	0.4401064834	1.0000000000	1.0
704 K	1	2.0630782447	1.8879135472	0.9150954658	1.0000000000	1.0
704 L	1	1.6188133885	1.4443889285	0.2974172191	3.0000000000	1.0
705 A	1	0.8998713610	1.6952055621	0.9419154979	2.0000000000	1.0
705 B	1	0.7197724152	1.2855968706	0.1190743855	15.0000000000	1.0
705 C	0	2.2422368953	1.4948245969	1	2/3	1
705 D	1	2.3563327671	2.7399409039	1.1627987957	1.0000000000	1.0
705 E	1	3.5400966154	1.6577969123	0.0936582863	5.0000000000	1.0
705 F	0	3.3938962532	2.5454221899	1	3/4	1
706 A	1	2.4288257338	1.9200718399	0.7905350364	1.0000000000	1.0
706 B	1	1.2043004068	2.6991718144	0.0974468626	23.0000000000	1.0
706 C	1	2.9766469907	2.6216013820	1.7614459425	0.5000000000	1.0
706 D	1	2.6150443165	2.3202308347	0.3549050117	2.5000000000	1.0
707 A	2	4.3145192962	0.9738513460	0.1128574563	2.0000000000	1.0

TABLE 4: BIRCH-SWINNERTON-DYER DATA 708A-726H

Curve	$r$	$\Omega$	$L^{(r)}(1)/r!$	$R$	$L^{(r)}(1)/r!\Omega R$	$S$
708 A	0	2.0619546003	1.0309773002	1	1/2	1
709 A	2	4.0733289400	1.0537016538	0.2586831727	1.0000000000	1.0
710 A	1	2.1059977182	1.5321809045	0.1818830205	4.0000000000	1.0
710 B	1	1.7560060271	2.4992935440	0.0418612650	34.0000000000	1.0
710 C	1	3.1589551069	2.5747640635	0.0582191619	14.0000000000	1.0
710 D	0	1.1567437634	2.3134875269	1	2	1
711 A	1	2.5535933872	2.5771593912	0.5046142828	2.0000000000	1.0
711 B	1	1.7397204637	1.4841485905	0.4265480063	2.0000000000	1.0
711 C	0	2.3245918204	2.3245918204	1	1	1
712 A	0	2.0050824245	1.0025412123	1	1/2	1
713 A	1	4.2159507277	2.7924101607	0.6623441167	1.0000000000	1.0
714 A	1	0.8814893885	1.5642040390	1.7745012696	1.0000000000	1.0
714 B	0	0.9622645215	0.9622645215	1	1	1
714 C	0	0.2171317499	1.0856587497	1	5	1
714 D	1	2.6839654336	1.3951533217	0.5198104656	1.0000000000	1.0
714 E	0	0.3477949055	2.4345643386	1	7	1
714 F	1	1.9409723197	2.4625037273	0.8457973022	1.5000000000	1.0
714 G	0	0.6275698389	1.8827095167	1	3	1
714 H	0	2.5311266382	2.5311266382	1	1	1
714 I	0	0.8643306617	2.5929919852	1	3	1
715 A	1	3.5289602069	1.5787090658	1.3420744128	0.3333333333	1.0
715 B	1	0.6975196333	1.2547951053	0.0856637506	21.0000000000	1.0
718 A	0	0.9761894668	0.9761894668	1	1	1
718 B	2	3.6847793558	1.2517811528	0.1698583595	2.0000000000	1.0
718 C	1	2.5755975942	2.6764950054	0.0865978641	12.0000000000	1.0
720 A	1	2.7175526609	2.0753361001	0.3818391691	2.0000000000	1.0
720 B	0	0.8280154410	1.6560308820	1	2	1
720 C	0	2.9317714525	1.4658857262	1	1/2	1
720 D	0	3.4281037645	1.7140518822	1	1/2	1
720 E	1	1.4374984153	2.1527060376	1.4975362857	1.0000000000	1.0
720 F	0	0.7101221744	1.4202443487	1	2	1
720 G	1	1.1463561696	2.1771249053	0.3165282837	6.0000000000	1.0
720 H	1	1.6172770870	2.1029661686	0.3250782110	4.0000000000	1.0
720 I	0	3.2613074970	1.6306537485	1	1/2	1
720 J	0	0.9676241149	1.9352482298	1	2	1
722 A	1	0.5289503653	1.8191706374	10.317625755	0.3333333333	1.0
722 B	1	1.5826710943	1.1653365368	0.3681549947	2.0000000000	1.0
722 C	0	0.5404948479	1.0809896957	1	2	1
722 D	0	0.6600950502	3.9605703013	1	6	1
722 E	1	0.2759017297	2.5648119356	0.7746755637	12.0000000000	1.0
722 F	1	3.2014095799	2.5300549410	0.2634313498	3.0000000000	1.0
723 A	1	3.4502808494	1.2092337952	0.7009480376	0.5000000000	1.0
723 B	1	1.7498147728	2.1513753427	1.2294874727	1.0000000000	1.0
725 A	1	2.5453515525	2.6227061923	2.0607811048	0.5000000000	1.0
726 A	1	2.0448157422	1.4899240842	0.7286348855	1.0000000000	1.0
726 B	0	0.2420836944	0.9683347776	1	4	1
726 C	0	1.3230677871	1.3230677871	1	1	1
726 D	1	3.5176356020	1.7815333279	0.0633072015	8.0000000000	1.0
726 E	1	0.5670099361	1.7173298337	0.3028747336	10.0000000000	1.0
726 F	0	0.6987232202	2.0961696607	1	3	1
726 G	1	1.0589008371	2.4891357710	0.0391779803	60.0000000000	1.0
726 H	0	0.9428381419	2.8285144257	1	3	1

TABLE 4: BIRCH-SWINNERTON-DYER DATA 726I-742D

Curve	$r$	$\Omega$	$L^{(r)}(1)/r!$	$R$	$L^{(r)}(1)/r!\Omega R$	$S$
726 I	0	0.3723785106	2.9790280849	1	8	1
728 A	0	1.3003620819	1.3003620819	1	1	1
728 B	0	0.6814404408	2.7257617631	1	4	1
728 C	1	0.8260062433	2.0890611620	0.4215184367	6.0000000000	1.0
728 D	1	2.2030843903	1.6802562364	0.1271139260	6.0000000000	1.0
730 A	0	0.8825509340	0.8825509340	1	1	1
730 B	0	0.9049726844	0.3016575615	1	1/3	1
730 C	0	2.0285045409	2.0285045409	1	1	1
730 D	0	1.1089286592	1.1089286592	1	1	1
730 E	0	1.7926088874	1.7926088874	1	1	1
730 F	1	2.5571125379	1.7537639412	0.3429188030	2.0000000000	1.0
730 G	1	3.3565977387	1.1443062568	0.3409125388	1.0000000000	1.0
730 H	0	1.7236786394	1.7236786394	1	1	1
730 I	1	3.5781506698	2.5255155328	0.1008308388	7.0000000000	1.0
730 J	1	1.1012771596	2.6051012065	0.0375480527	63.0000000000	1.0
730 K	0	3.2768778391	3.2768778391	1	1	1
731 A	1	2.8737517466	2.8068624879	0.9767240651	1.0000000000	1.0
732 A	0	3.2997896421	1.6498948210	1	1/2	1
732 B	1	2.7343523122	1.9306520942	0.1176788183	6.0000000000	1.0
732 C	1	2.6755394130	2.2682272678	0.1883921057	4.5000000000	1.0
733 A	0	1.6195086138	1.6195086138	1	1	1
734 A	0	1.3368249040	3.3420622601	1	5/2	1
735 A	0	1.4373759725	1.4373759725	1	1	1
735 B	0	0.2066678812	0.4133357625	1	2	1
735 C	1	2.5974756723	1.7905882921	0.3446785491	2.0000000000	1.0
735 D	0	0.7149316291	1.4298632582	1	2	1
735 E	1	1.2066457006	1.6631875266	2.7567123073	0.5000000000	1.0
735 F	1	1.2882643756	1.4518853833	0.0134167723	84.0000000000	1.0
737 A	1	0.8056517670	1.4537684161	0.1503718765	12.0000000000	1.0
738 A	1	1.3681269310	1.6904101465	0.6177826444	2.0000000000	1.0
738 B	0	0.4498240118	0.8996480237	1	2	1
738 C	0	1.5977768394	1.5977768394	1	1	1
738 D	1	1.6152729786	1.6730284056	0.2589389577	4.0000000000	1.0
738 E	1	2.0318963871	2.7547337823	0.1355745204	10.0000000000	1.0
738 F	1	1.7902683597	2.6751400081	0.0339606273	44.0000000000	1.0
738 G	0	0.9655401711	2.8966205133	1	3	1
738 H	0	0.4071435598	2.8500049188	1	7	1
738 I	0	2.5773335958	2.5773335958	1	1	1
738 J	0	1.1131778064	2.2263556127	1	2	1
739 A	0	3.6774435209	3.6774435209	1	1	1
740 A	0	0.4224994326	2.5349965954	1	6	1
740 B	1	1.3678317161	2.3309157286	0.8520476975	2.0000000000	1.0
740 C	1	2.0445936737	2.0073801537	0.0818165886	12.0000000000	1.0
741 A	0	1.8564415480	1.8564415480	1	1	1
741 B	0	0.4119061199	1.2357183596	1	3	1
741 C	0	0.2794796202	3.0742758221	1	11	1
741 D	0	0.1985518805	3.9710376102	1	20	1
741 E	1	2.6257324397	2.2064827886	0.1050412999	8.0000000000	1.0
742 A	1	4.0625082193	1.6214759738	0.1995658699	2.0000000000	1.0
742 B	0	2.0545031092	2.0545031092	1	1	1
742 C	0	0.7444499769	1.4888999537	1	2	1
742 D	0	0.2649897578	2.1199180628	1	8	1

TABLE 4: BIRCH-SWINNERTON-DYER DATA 742E-762F

Curve	$r$	$\Omega$	$L^{(r)}(1)/r!$	$R$	$L^{(r)}(1)/r!\Omega R$	$S$
742 E	1	0.5772565826	1.9175643082	0.3321857846	10.000000000	1.0
742 F	0	0.8960291889	3.5841167558	1	4	1
742 G	1	2.1897835762	2.5093311207	0.0572963271	20.000000000	1.0
744 A	1	2.4148251947	1.9176814067	0.1985321143	4.000000000	1.0
744 B	0	1.1678014455	1.7517021682	1	3/2	1
744 C	1	1.9190973642	2.2681277304	0.0738670095	16.000000000	1.0
744 D	0	0.4891399315	1.9565597260	1	4	1
744 E	0	0.9794154660	0.9794154660	1	1	1
744 F	1	1.9869542434	1.9646208882	0.0823966671	12.000000000	1.0
744 G	1	3.0362477634	2.3164305927	0.0635771181	12.000000000	1.0
747 A	1	1.7571979728	1.4144734403	1.6099192716	0.500000000	1.0
747 B	0	4.5044550320	2.2522275160	1	1/2	1
747 C	1	0.5060273272	2.5853819361	2.5545872695	2.000000000	1.0
747 D	1	2.2599386817	2.7052674428	1.1970534708	1.000000000	1.0
747 E	1	1.8087956133	1.5131984023	0.4182889408	2.000000000	1.0
748 A	0	0.5058218300	3.0349309803	1	6	1
749 A	1	1.6335946125	1.6287624673	0.4985210084	2.000000000	1.0
752 A	1	2.1590990894	2.1778815538	1.0086992137	1.000000000	1.0
753 A	0	1.6329306908	3.2658613816	1	2	1
753 B	0	2.8471750728	1.8981167152	1	2/3	1
753 C	1	2.6391949788	2.1958740551	0.2080060466	4.000000000	1.0
754 A	0	2.4638722502	1.6425815001	1	2/3	1
754 B	1	1.0757562718	1.9362290724	0.4499692735	4.000000000	1.0
754 C	1	3.0286050243	1.2261926627	0.8097408892	0.500000000	1.0
754 D	1	1.3796837741	2.9335184328	0.1181236232	18.000000000	1.0
755 A	1	2.7886799378	1.9583126075	0.7022364169	1.000000000	1.0
755 B	1	3.5020797733	2.8444156107	0.8122075438	1.000000000	1.0
755 C	0	2.1787770859	1.0893885430	1	1/2	1
755 D	0	4.1290425737	4.1290425737	1	1	1
755 E	0	5.0574520557	5.0574520557	1	1	1
755 F	0	0.1545463751	2.0091028768	1	13	1
756 A	0	1.7063838931	1.7063838931	1	1	1
756 B	1	2.1611676117	2.0476009778	0.9474512605	1.000000000	1.0
756 C	1	1.8177688025	2.1245818910	0.3895951799	3.000000000	1.0
756 D	0	2.0527415348	2.0527415348	1	1	1
756 E	0	2.0818495119	2.0818495119	1	1	1
756 F	0	1.2639024702	1.2639024702	1	1	1
758 A	1	2.0017018367	1.2248470767	0.3059514295	2.000000000	1.0
758 B	0	0.9266980553	3.7067922210	1	4	1
759 A	1	0.8052905555	1.2941612047	1.6070736157	1.000000000	1.0
759 B	1	1.0932448414	1.6306147760	1.4915366753	1.000000000	1.0
760 A	0	2.6248441565	2.6248441565	1	1	1
760 B	0	0.1879117839	1.3153824873	1	7	1
760 C	0	1.4515241647	2.9030483294	1	2	1
760 D	1	2.7369997770	1.7874773125	0.2176930286	3.000000000	1.0
760 E	1	2.6012959156	2.2403249976	1.7224683929	0.500000000	1.0
762 A	0	1.5128246531	1.5128246531	1	1	1
762 B	0	0.4542920018	1.8171680074	1	4	1
762 C	1	2.7594600422	1.8102970129	0.1640082648	4.000000000	1.0
762 D	1	3.6331443577	2.5474201408	0.0701161278	10.000000000	1.0
762 E	1	1.7475576222	2.9286927531	0.0253920855	66.000000000	1.0
762 F	0	0.9694108898	2.9082326695	1	3	1

TABLE 4: BIRCH-SWINNERTON-DYER DATA 762G-782E

Curve	$r$	$\Omega$	$L^{(r)}(1)/r!$	$R$	$L^{(r)}(1)/r!\Omega R$	$S$
762G	0	0.4859865783	2.9159194697	1	6	1
763A	1	3.2220719485	1.2429317687	0.1285851453	3.0000000000	1.0
765A	0	2.0616348322	2.0616348322	1	1	1
765B	0	1.1759321797	1.1759321797	1	1	1
765C	1	3.0783495607	1.5493056096	0.5032909938	1.0000000000	1.0
766A	0	2.0523827032	2.0523827032	1	1	1
768A	1	4.3656747146	1.9178228339	0.4392958613	1.0000000000	1.0
768B	1	3.3463601247	1.8962429969	0.5666583769	1.0000000000	1.0
768C	0	2.1726561662	2.1726561662	1	1	1
768D	0	4.7324678729	2.3662339365	1	1/2	1
768E	0	1.5362999083	1.5362999083	1	1	1
768F	0	2.9074554322	1.4537277161	1	1/2	1
768G	1	3.0869981951	2.3829930020	0.3859725292	2.0000000000	1.0
768H	1	2.0558814521	2.3075439492	1.1224109964	1.0000000000	1.0
770A	0	1.6305047714	1.6305047714	1	1	1
770B	0	1.6894669604	0.5631556535	1	1/3	1
770C	0	0.2245966433	1.1229832167	1	5	1
770D	1	1.3934589960	1.3476401147	0.2417796502	4.0000000000	1.0
770E	1	0.7940452690	1.7753382914	2.2358149600	1.0000000000	1.0
770F	1	1.1288970583	2.3511646469	0.5206773792	4.0000000000	1.0
770G	0	1.8601556792	1.8601556792	1	1	1
774A	0	1.0875097482	1.4500129977	1	4/3	1
774B	0	1.5541356320	1.5541356320	1	1	1
774C	0	0.0950910435	0.7607283478	1	8	1
774D	1	0.4431002071	1.7881748996	1.0088998329	4.0000000000	1.0
774E	1	2.4922340340	1.5855794875	0.3181040516	2.0000000000	1.0
774F	1	2.4512293565	2.7370287348	0.4187228636	2.6666666667	1.0
774G	1	1.7182765282	2.7922038752	0.0677084429	24.0000000000	1.0
774H	0	0.4166411653	2.9164881572	1	7	1
774I	0	0.7011646252	2.8046585008	1	4	1
775A	1	2.3905216902	2.2177911110	0.4638717817	2.0000000000	1.0
775B	0	0.9454718718	0.9454718718	1	1	1
775C	0	0.9912538890	3.9650155558	1	4	1
776A	1	3.7983234120	2.1229515512	0.5589180596	1.0000000000	1.0
777A	0	5.0397845548	1.2599461387	1	1/4	1
777B	0	0.3038812313	0.6077624625	1	2	1
777C	0	0.6617332035	1.3234664070	1	2	1
777D	1	2.8360196315	1.2399116897	1.7488055103	0.2500000000	1.0
777E	1	0.7933334438	2.8167539819	2.8404237877	1.2500000000	1.0
777F	1	3.7264393331	1.4653365029	0.1966134924	2.0000000000	1.0
777G	1	1.5621913918	2.1958152307	0.0702799683	20.0000000000	1.0
780A	1	2.9965748479	2.0100038393	0.2235890354	3.0000000000	1.0
780B	0	0.3205650494	1.6028252468	1	5	1
780C	1	1.7695272041	2.3706082461	0.1116403787	12.0000000000	1.0
780D	0	1.8390125650	1.8390125650	1	1	1
781A	0	0.8627373069	0.8627373069	1	1	1
781B	1	2.8846769626	1.9767169681	0.2284157514	3.0000000000	1.0
782A	1	2.5499874086	1.4230642485	1.1161343336	0.5000000000	1.0
782B	0	0.8576115978	2.5728347933	1	3	1
782C	0	0.2690438605	1.8833070233	1	7	1
782D	0	3.8984248290	3.8984248290	1	1	1
782E	0	1.1016692094	2.7541730235	1	5/2	1

TABLE 4: BIRCH-SWINNERTON-DYER DATA 784A-798H

Curve	$r$	$\Omega$	$L^{(r)}(1)/r!$	$R$	$L^{(r)}(1)/r!\Omega R$	$S$
784 A	1	2.3868312845	2.3969872725	1.0042550088	1.0000000000	1.0
784 B	1	1.9041961437	1.4763178646	0.2584323871	3.0000000000	1.0
784 C	0	1.3221927708	1.3221927708	1	1	1
784 D	0	1.3459764274	1.3459764274	1	1	1
784 E	0	0.7166350909	2.8665403635	1	4	1
784 F	0	2.9388051489	2.9388051489	1	1	1
784 G	0	1.6482722736	1.6482722736	1	1	1
784 H	1	2.5575309899	2.2075638093	0.4315810479	2.0000000000	1.0
784 I	1	4.1466198122	2.2889418179	0.5520018525	1.0000000000	1.0
784 J	1	1.1233153024	1.7509775464	0.3896896852	4.0000000000	1.0
786 A	1	5.0581564923	1.4518567044	0.2870327770	1.0000000000	1.0
786 B	1	3.0058818246	1.4457554465	0.2404877388	2.0000000000	1.0
786 C	1	0.3058839233	1.7237614871	2.8176725807	2.0000000000	1.0
786 D	0	0.6243670999	0.6243670999	1	1	1
786 E	0	2.2980284444	1.1490142222	1	1/2	1
786 F	0	4.1760155624	1.3920051875	1	1/3	1
786 G	1	1.5009743618	1.9166428447	1.2769324337	1.0000000000	1.0
786 H	1	2.4343976800	1.8060854772	0.0529930284	14.0000000000	1.0
786 I	0	1.6451388054	2.4677082081	1	3/2	1
786 J	1	1.5930966388	2.5762182307	0.0770054092	21.0000000000	1.0
786 K	1	2.1879905064	2.4916678812	0.1897988035	6.0000000000	1.0
786 L	1	2.1896861019	2.9938328080	0.0390640833	35.0000000000	1.0
786 M	0	1.0935574545	3.2806723636	1	3	1
790 A	1	2.7861735231	2.4402283805	0.2189587583	4.0000000000	1.0
791 A	0	2.2117095243	1.1058547621	1	1/2	1
791 B	0	0.9636216384	0.4818108192	1	1/2	1
791 C	1	2.3695463432	1.6526782132	2.7898643434	0.2500000000	1.0
792 A	1	1.4206345211	2.1984987673	1.5475470536	1.0000000000	1.0
792 B	0	1.7214809982	1.7214809982	1	1	1
792 C	1	3.2592957589	2.2026699195	0.3379058058	2.0000000000	1.0
792 D	1	2.3650528515	2.1181494566	0.8956034345	1.0000000000	1.0
792 E	0	1.0701000521	2.1402001041	1	2	1
792 F	0	0.9557592918	1.9115185836	1	2	1
792 G	0	0.9996484530	0.9996484530	1	1	1
793 A	1	2.3803932304	2.7443839416	4.6116480361	0.2500000000	1.0
794 A	2	4.3426433734	1.2945419121	0.1490499911	2.0000000000	1.0
794 B	1	4.3358043302	2.9800260413	2.0619191834	0.3333333333	1.0
794 C	1	2.0929914585	2.6163624910	0.2500117696	5.0000000000	1.0
794 D	1	0.9328062669	2.4030580639	1.2880799311	2.0000000000	1.0
795 A	1	3.5382943332	2.4330443998	1.3752639948	0.5000000000	1.0
795 B	0	0.6187438638	0.6187438638	1	1	1
795 C	0	0.9180185975	1.5300309959	1	5/3	1
795 D	0	1.5531710671	2.3297566006	1	3/2	1
797 A	1	3.2937076036	1.7511687923	0.5316709930	1.0000000000	1.0
798 A	1	3.3055085609	1.5173058616	0.4590234252	1.0000000000	1.0
798 B	0	1.6218747329	1.6218747329	1	1	1
798 C	1	2.8121213632	1.8270977124	0.1299444424	5.0000000000	1.0
798 D	1	1.3827775712	1.8586019292	0.1344107663	10.0000000000	1.0
798 E	0	1.5364303383	1.5364303383	1	1	1
798 F	0	1.9304569995	1.9304569995	1	1	1
798 G	1	1.1169891799	2.5627859695	0.1529579704	15.0000000000	1.0
798 H	1	1.2821112156	2.9833490048	0.0554024630	42.0000000000	1.0

TABLE 4: BIRCH-SWINNERTON-DYER DATA 798I-816A

Curve	$r$	$\Omega$	$L^{(r)}(1)/r!$	$R$	$L^{(r)}(1)/r!\Omega R$	$S$
798 I	0	1.6166094707	3.2332189414	1	2	1
799 A	0	3.5646854576	1.7823427288	1	1/2	1
799 B	1	2.2398831435	1.9428746696	0.5782666759	1.5000000000	1.0
800 A	1	2.3452395729	2.2273703795	1.8994821725	0.5000000000	1.0
800 B	1	3.8271616725	2.4376901920	0.3184723302	2.0000000000	1.0
800 C	1	1.3468072016	1.7318693925	1.2859074338	1.0000000000	1.0
800 D	0	1.5683562272	1.5683562272	1	1	1
800 E	0	0.6216204919	1.8648614756	1	3	1
800 F	0	1.3899856760	1.3899856760	1	1	1
800 G	0	2.4380769240	2.4380769240	1	1	1
800 H	1	3.5069511370	2.2287681477	0.6355287144	1.0000000000	1.0
800 I	1	1.7115587321	2.0166727413	0.1963777913	6.0000000000	1.0
801 A	0	0.2874283226	0.5748566451	1	2	1
801 B	0	2.5228982039	1.2614491020	1	1/2	1
801 C	1	0.9932060231	2.0400693564	0.5135060876	4.0000000000	1.0
801 D	1	1.3275315217	2.7050732537	2.0376715803	1.0000000000	1.0
802 A	0	2.9586860920	2.9586860920	1	1	1
802 B	0	2.7580954859	1.3790477430	1	1/2	1
804 A	0	1.2181961170	1.8272941755	1	3/2	1
804 B	1	0.3920429442	2.0038536354	0.8518852612	6.0000000000	1.0
804 C	1	3.3871101427	1.8789758549	0.1849143543	3.0000000000	1.0
804 D	1	1.2304488171	2.3844031579	0.0922777168	21.0000000000	1.0
805 A	1	0.3121746385	3.2924658901	5.2734358970	2.0000000000	1.0
805 B	0	1.3368165187	0.6684082593	1	1/2	1
805 C	0	1.1515660853	0.5757830427	1	1/2	1
805 D	0	2.4472776600	4.8945553199	1	2	1
806 A	1	2.4438911360	1.9545918895	0.3998934037	2.0000000000	1.0
806 B	1	1.1144535359	1.4834831912	0.6655652943	2.0000000000	1.0
806 C	1	3.0117139374	3.0094615134	0.0999252112	10.0000000000	1.0
806 D	1	0.7414216038	2.1907922082	0.0447705073	66.0000000000	1.0
806 E	0	0.5520548375	3.3123290252	1	6	1
806 F	0	1.1935183996	2.3870367992	1	2	1
807 A	0	3.1886904948	2.1257936632	1	2/3	1
808 A	0	1.2470006143	1.2470006143	1	1	1
808 B	0	1.4157114782	2.8314229564	1	2	1
810 A	0	3.6661316994	1.2220438998	1	1/3	1
810 B	0	1.5814478510	1.0542985673	1	2/3	1
810 C	0	0.5080077512	1.5240232535	1	3	1
810 D	1	2.4563334791	1.7806753746	0.3624661288	2.0000000000	1.0
810 E	0	2.3454927808	2.3454927808	1	1	1
810 F	0	1.7955568582	2.3940758110	1	4/3	1
810 G	0	1.6014313405	2.6690522342	1	5/3	1
810 H	1	2.0683411935	2.8535912313	0.2299420135	6.0000000000	1.0
811 A	1	1.9340514664	2.0684791373	1.0695057361	1.0000000000	1.0
812 A	0	0.9323743908	2.7971231723	1	3	1
812 B	1	1.9151319254	1.9569919894	0.0851547946	12.0000000000	1.0
813 A	0	4.2392844940	4.2392844940	1	1	1
813 B	1	2.3320513620	2.2554368624	0.9671471646	1.0000000000	1.0
814 A	1	2.2458764704	1.1895559609	1.5889867184	0.3333333333	1.0
814 B	1	4.0087531499	2.8487110366	0.1421245425	5.0000000000	1.0
815 A	1	1.2781104061	1.6300946134	1.9130913171	0.6666666667	1.0
816 A	1	3.2521275353	1.9819661024	0.3047183853	2.0000000000	1.0

TABLE 4: BIRCH-SWINNERTON-DYER DATA 816B-834C

Curve	$r$	$\Omega$	$L^{(r)}(1)/r!$	$R$	$L^{(r)}(1)/r!\Omega R$	$S$
816 B	0	1.7752905638	1.7752905638	1	1	1
816 C	0	1.1027496746	1.1027496746	1	1	1
816 D	0	0.8104871336	2.4314614009	1	3	1
816 E	0	0.5970685354	1.1941370708	1	2	1
816 F	0	1.9526773174	1.9526773174	1	1	1
816 G	1	3.6606128038	2.0695270453	0.2826749449	2.0000000000	1.0
816 H	1	0.9934818585	1.9010184804	0.9567454424	2.0000000000	1.0
816 I	1	1.5953891658	2.3777937997	0.0677461892	22.0000000000	1.0
816 J	1	1.9478575653	2.3068323672	0.5921460604	2.0000000000	1.0
817 A	2	3.0564514640	1.5664703894	0.2562563823	2.0000000000	1.0
817 B	1	1.0755524992	1.4907042069	0.1385989255	10.0000000000	1.0
819 A	1	1.9019631700	2.7129683860	2.8528085388	0.5000000000	1.0
819 B	1	4.3270924952	1.5410481142	0.7122787950	0.5000000000	1.0
819 C	0	1.9275039799	3.8550079598	1	2	1
819 D	0	0.2993838632	0.5987677264	1	2	1
819 E	0	0.8373929073	1.6747858145	1	2	1
819 F	0	0.6025246471	3.6151478828	1	6	1
822 A	1	1.5796960506	1.5173956623	0.4802808938	2.0000000000	1.0
822 B	0	0.4081775441	1.6327101766	1	4	1
822 C	0	1.4591472676	1.9455296901	1	4/3	1
822 D	1	1.6107354638	1.8697090304	0.1160779701	10.0000000000	1.0
822 E	0	2.1838655335	3.2757983002	1	3/2	1
822 F	0	1.6654990728	3.3309981457	1	2	1
825 A	1	3.3747765340	1.8040304300	0.2672814647	2.0000000000	1.0
825 B	1	1.3368809093	1.7134165818	0.8544349113	1.5000000000	1.0
825 C	1	1.5092459478	2.2662910335	0.7508024245	2.0000000000	1.0
826 A	0	1.3649054369	1.3649054369	1	1	1
826 B	0	0.6982483960	2.0947451879	1	3	1
827 A	1	5.0436182817	1.3222292482	0.2621588658	1.0000000000	1.0
828 A	0	4.1001947929	2.0500973964	1	1/2	1
828 B	1	1.2458224988	2.1792708496	1.1661751450	1.5000000000	1.0
828 C	1	1.2681978153	2.3181073582	1.8278752181	1.0000000000	1.0
828 D	0	1.7429033412	1.7429033412	1	1	1
829 A	1	3.4016683815	1.2057007713	0.3544439481	1.0000000000	1.0
830 A	0	1.3300813679	1.7734418239	1	4/3	1
830 B	1	0.8272891182	2.7304793867	0.0257852663	128.0000000000	1.0
830 C	1	2.0301023316	2.2133179782	0.0545124732	20.0000000000	1.0
831 A	1	2.0541939187	1.7484352839	0.0851153958	10.0000000000	1.0
832 A	1	2.4007898238	2.4019028404	0.2501159011	4.0000000000	1.0
832 B	1	1.3485484416	2.0036945644	0.3714539468	4.0000000000	1.0
832 C	1	1.6405548585	2.1713281808	0.3308832023	4.0000000000	1.0
832 D	0	2.3913876409	1.1956938204	1	1/2	1
832 E	0	0.8369394685	1.6738789370	1	2	1
832 F	0	1.5368108334	3.0736216668	1	2	1
832 G	0	1.2301336856	2.4602673712	1	2	1
832 H	1	3.9630716475	2.1688159289	1.0945126012	0.5000000000	1.0
832 I	1	2.6223391999	2.4833924059	0.2367535449	4.0000000000	1.0
832 J	1	0.6378305375	1.5951492806	0.6252245646	4.0000000000	1.0
833 A	0	2.0755836776	1.0377918388	1	1/2	1
834 A	0	0.4778202483	1.6723708692	1	7/2	1
834 B	0	0.8593990205	1.7187980411	1	2	1
834 C	1	2.8261629299	1.8333472976	0.0810881814	8.0000000000	1.0

TABLE 4: BIRCH-SWINNERTON-DYER DATA 834D-855A

Curve	$r$	$\Omega$	$L^{(r)}(1)/r!$	$R$	$L^{(r)}(1)/r!\Omega R$	$S$
834D	0	4.7123016890	2.3561508445	1	1/2	1
834E	1	2.4708181999	2.7025662830	0.5468970325	2.0000000000	1.0
834F	1	1.7964026865	2.5729930149	0.0511536797	28.0000000000	1.0
834G	1	1.8880547711	3.0211249880	0.8000628568	2.0000000000	1.0
836A	1	1.2193960008	2.0763611931	0.8513892090	2.0000000000	1.0
836B	0	1.7821670818	2.6732506227	1	3/2	1
840A	1	1.1320487150	1.9611172165	3.4647223049	0.5000000000	1.0
840B	0	1.2212883443	1.2212883443	1	1	1
840C	0	2.7757566445	1.3878783223	1	1/2	1
840D	0	0.3691044282	1.8455221409	1	5	1
840E	1	2.2308313793	1.9866164430	0.8905273887	1.0000000000	1.0
840F	1	3.7748216876	2.0729414081	2.1965979638	0.2500000000	1.0
840G	0	3.0559620739	1.5279810369	1	1/2	1
840H	1	1.6475613042	2.4547357754	0.4966402503	3.0000000000	1.0
840I	0	1.9451617258	1.9451617258	1	1	1
840J	0	2.1289344074	2.1289344074	1	1	1
842A	1	2.7237772439	1.4033951345	0.5152385855	1.0000000000	1.0
842B	1	2.4004300386	2.3619845303	0.0756910698	13.0000000000	1.0
843A	1	2.6718170788	2.5244694756	0.9448511635	1.0000000000	1.0
845A	0	1.4929349382	1.4929349382	1	1	1
846A	0	0.6897576384	1.3795152768	1	2	1
846B	1	2.4931128810	1.7694946429	0.3548765594	2.0000000000	1.0
846C	1	0.8110632878	1.6551206746	1.0203400275	2.0000000000	1.0
847A	0	0.2341098321	1.8728786567	1	8	1
847B	1	0.9088500537	1.2780958682	0.1757847545	8.0000000000	1.0
847C	1	0.5402177457	1.9187378840	1.1839287023	3.0000000000	1.0
848A	0	0.7199604717	1.4399209433	1	2	1
848B	0	0.7428842336	1.4857684673	1	2	1
848C	0	1.3433600285	2.6867200570	1	2	1
848D	0	2.5003648541	1.2501824271	1	1/2	1
848E	0	1.5405906701	3.0811813403	1	2	1
848F	1	1.5703419300	2.4421024255	1.5551405582	1.0000000000	1.0
848G	1	2.3425055207	1.8785649168	0.2004867118	4.0000000000	1.0
849A	1	2.0010953407	1.1472977579	0.2866674402	2.0000000000	1.0
850A	0	0.3539825981	0.7079651961	1	2	1
850B	0	2.0105217603	2.0105217603	1	1	1
850C	1	1.2971425667	1.9776460914	0.7623086861	2.0000000000	1.0
850D	1	0.2669383439	1.8987366857	0.5080725646	14.0000000000	1.0
850E	1	2.2753196437	1.1214812335	0.0821482553	6.0000000000	1.0
850F	0	0.5968922828	2.3875691312	1	4	1
850G	0	1.8071584322	3.6143168644	1	2	1
850H	0	0.8549748907	3.4198995626	1	4	1
850I	0	1.0175538788	4.0702155151	1	4	1
850J	0	0.5974888457	1.1949776915	1	2	1
850K	1	1.4888215440	2.7115121406	0.1517706040	12.0000000000	1.0
850L	1	2.9004989556	2.7415419874	0.0675140487	14.0000000000	1.0
851A	1	3.8742025615	1.4039603600	0.1811934634	2.0000000000	1.0
854A	1	2.1225419878	1.8547964065	0.4369280837	2.0000000000	1.0
854B	1	2.7912216525	2.0035028254	3.2300418371	0.2222222222	1.0
854C	1	2.9994943944	2.7291045757	0.1137318585	8.0000000000	1.0
854D	1	1.2693965422	2.6429141568	0.0495720017	42.0000000000	1.0
855A	0	0.9424032711	0.9424032711	1	1	1

TABLE 4: BIRCH-SWINNERTON-DYER DATA 855B-870A

Curve	$r$	$\Omega$	$L^{(r)}(1)/r!$	$R$	$L^{(r)}(1)/r!\Omega R$	$S$
855 B	1	1.4708261859	1.6027786295	0.3632377152	3.0000000000	1.0
855 C	0	1.0322612259	2.0645224517	1	2	1
856 A	1	4.4255910442	2.4629930198	0.2782671281	2.0000000000	1.0
856 B	1	1.5228754070	2.3348898990	0.7666056882	2.0000000000	1.0
856 C	1	3.7638167988	2.0348872808	0.1351611535	4.0000000000	1.0
856 D	1	0.5234970512	2.6183951496	5.0017381060	1.0000000000	1.0
858 A	0	1.1358111272	1.1358111272	1	1	1
858 B	1	0.8964019921	1.9329491676	2.1563418918	1.0000000000	1.0
858 C	0	1.4531272382	1.4531272382	1	1	1
858 D	0	0.8847016726	1.7694033452	1	2	1
858 E	0	1.7801749731	2.6702624597	1	3/2	1
858 F	1	0.6144950596	2.5969082820	0.0384189535	110.00000000	1.0
858 G	1	2.8332583986	2.6549896366	0.0520599972	18.0000000000	1.0
858 H	0	1.8422546597	1.8422546597	1	1	1
858 I	0	0.3445543329	2.7564346634	1	8	1
858 J	0	1.4366901998	2.8733803997	1	2	1
858 K	0	0.2109237587	2.9529326224	1	14	1
858 L	0	0.5152748186	3.6069237304	1	7	1
858 M	0	1.7091732041	3.4183464083	1	2	1
861 A	0	1.8859710003	0.9429855001	1	1/2	1
861 B	1	0.4004425393	2.9817201838	0.4380036777	17.0000000000	1.0
861 C	1	0.5198123568	1.9612976333	0.1078025070	35.0000000000	1.0
861 D	1	3.0961653380	1.6446967712	0.1062408878	5.0000000000	1.0
862 A	1	2.3772088260	1.8963864630	0.3988682951	2.0000000000	1.0
862 B	1	3.7125048067	1.0545502107	0.1420267805	2.0000000000	1.0
862 C	0	2.0389535297	3.0584302946	1	3/2	1
862 D	0	1.9962060868	2.6616081157	1	4/3	1
862 E	1	1.6300467988	2.7877433020	2.1377785779	0.8000000000	1.0
862 F	1	2.7368168553	2.6102377901	0.1192186913	8.0000000000	1.0
864 A	1	3.4479342806	2.1886718012	0.3173888513	2.0000000000	1.0
864 B	1	3.2770629245	2.3652195151	0.3608749007	2.0000000000	1.0
864 C	1	1.5867673970	2.1953723773	0.2305917029	6.0000000000	1.0
864 D	0	1.6436559999	1.6436559999	1	1	1
864 E	0	0.9161205838	1.8322411676	1	2	1
864 F	0	1.0740205877	2.1480411753	1	2	1
864 G	0	1.9906657850	1.9906657850	1	1	1
864 H	0	1.0026005839	2.0052011678	1	2	1
864 I	0	0.6200860754	1.2401721508	1	2	1
864 J	1	0.9489652340	2.3079806750	0.4053504091	6.0000000000	1.0
864 K	1	1.7365551510	2.1621840308	0.6225497732	2.0000000000	1.0
864 L	1	1.8920131616	2.2253261072	0.1960280679	6.0000000000	1.0
866 A	1	2.2101758802	2.4744969079	0.8396945680	1.3333333333	1.0
867 A	1	0.6257848531	1.6987250823	0.6786378233	4.0000000000	1.0
867 B	1	2.7849176519	1.2964049615	0.4655092622	1.0000000000	1.0
867 C	1	0.5370146722	3.3192111933	3.0904287770	2.0000000000	1.0
867 D	0	0.6754417434	1.3508834868	1	2	1
867 E	0	2.2141682160	4.4283364320	1	2	1
869 A	1	3.8207898925	3.0401844953	0.3978476416	2.0000000000	1.0
869 B	1	1.9650475386	1.4849690043	0.3778455674	2.0000000000	1.0
869 C	0	1.7377151949	0.8688575975	1	1/2	1
869 D	1	1.9846117144	2.5742151775	0.2161812610	6.0000000000	1.0
870 A	1	2.3986779297	1.6315300055	0.2267262847	3.0000000000	1.0

TABLE 4: BIRCH-SWINNERTON-DYER DATA 870B-886D

Curve	$r$	$\Omega$	$L^{(r)}(1)/r!$	$R$	$L^{(r)}(1)/r!\Omega R$	$S$
870 B	1	1.0644927048	1.9885607215	1.8680829963	1.0000000000	1.0
870 C	1	2.0189872282	2.0033437922	0.9922518400	1.0000000000	1.0
870 D	0	1.5632095609	1.5632095609	1	1	1
870 E	1	2.8225873469	2.6829769303	0.3168460471	3.0000000000	1.0
870 F	1	1.2569671923	2.7740230622	0.0630547895	35.0000000000	1.0
870 G	0	2.5341570608	2.5341570608	1	1	1
870 H	0	3.2900075814	3.2900075814	1	1	1
870 I	0	0.6243667517	3.1218337583	1	5	1
871 A	0	2.5120439338	5.0240878676	1	2	1
872 A	1	2.6621279676	1.8625114998	0.3498162978	2.0000000000	1.0
873 A	0	2.1363788789	2.1363788789	1	1	1
873 B	1	0.7702196484	2.8470655353	3.6964332722	1.0000000000	1.0
873 C	1	0.1777801853	3.5817480649	5.0367650056	4.0000000000	1.0
873 D	1	2.6074609607	1.2665575443	0.1214359067	4.0000000000	1.0
874 A	0	2.3626280616	2.3626280616	1	1	1
874 B	0	0.7640162400	0.7640162400	1	1	1
874 C	1	4.3943660458	1.4639454722	0.3331414491	1.0000000000	1.0
874 D	1	2.5757683247	3.1207398502	0.2423152595	5.0000000000	1.0
874 E	1	1.2290033293	2.8015532327	2.2795326635	1.0000000000	1.0
874 F	0	0.5062034509	3.5434241560	1	7	1
876 A	1	1.1285506284	2.0503245410	1.8167767484	1.0000000000	1.0
876 B	1	2.3538774689	2.4725343055	0.0700272731	15.0000000000	1.0
880 A	1	3.1380735450	2.2742262829	1.4494410346	0.5000000000	1.0
880 B	0	3.0983312416	1.5491656208	1	1/2	1
880 C	1	0.5665638294	2.2927808355	2.6978788227	1.5000000000	1.0
880 D	1	2.4941606033	1.6190601765	0.0540950255	12.0000000000	1.0
880 E	0	0.3888578280	0.7777156559	1	2	1
880 F	1	1.0869015844	2.0045110340	0.4610608409	4.0000000000	1.0
880 G	1	1.0122129857	2.5733079776	0.1271129700	20.0000000000	1.0
880 H	1	3.4266195477	1.8690062115	1.0908746568	0.5000000000	1.0
880 I	0	1.7212734487	1.7212734487	1	1	1
880 J	0	1.8425381207	2.7638071810	1	3/2	1
882 A	1	1.4743501869	1.6179112815	1.6460586799	0.6666666667	1.0
882 B	0	0.7682933291	1.5365866583	1	2	1
882 C	0	0.4827121345	0.9654242689	1	2	1
882 D	1	2.7923167773	1.8519608668	0.1658086290	4.0000000000	1.0
882 E	1	0.7584048118	1.6782922276	0.5532310059	4.0000000000	1.0
882 F	0	0.5029660481	3.0177962886	1	6	1
882 G	1	2.2521071108	2.8881331620	0.0712452092	18.0000000000	1.0
882 H	1	1.0223787452	2.8863902281	0.0470535054	60.0000000000	1.0
882 I	0	1.2970927845	2.5941855689	1	2	1
882 J	0	0.3024687067	3.0246870671	1	10	1
882 K	0	0.8064528302	3.2258113209	1	4	1
882 L	0	0.5020150241	2.0080600965	1	4	1
885 A	0	2.8904036931	2.8904036931	1	1	1
885 B	1	1.5393627999	2.5812771705	3.3536956599	0.5000000000	1.0
885 C	1	3.2915493122	2.3961058957	0.2426522860	3.0000000000	1.0
885 D	1	2.0244640686	1.5083772548	0.7450748463	1.0000000000	1.0
886 A	1	4.7336407225	1.5970001613	0.1686862454	2.0000000000	1.0
886 B	1	2.6526645889	1.4452458189	0.5448279534	1.0000000000	1.0
886 C	0	1.1782593182	2.3565186364	1	2	1
886 D	1	0.5609213187	3.0178292399	0.1415823508	38.0000000000	1.0

TABLE 4: BIRCH-SWINNERTON-DYER DATA 886E-900C

Curve	$r$	$\Omega$	$L^{(r)}(1)/r!$	$R$	$L^{(r)}(1)/r!\Omega R$	$S$
886 E	1	3.4991428175	2.8836435055	0.1648199948	5.0000000000	1.0
888 A	0	0.6337216869	0.6337216869	1	1	1
888 B	1	2.0800736558	2.4590584170	1.1821977603	1.0000000000	1.0
888 C	1	1.2894745254	2.0698576775	1.6051947027	1.0000000000	1.0
888 D	0	2.6073010855	2.6073010855	1	1	1
890 A	1	3.4473615420	1.7674639432	0.5127004875	1.0000000000	1.0
890 B	1	2.9585607938	1.2590202825	0.4255516010	1.0000000000	1.0
890 C	0	1.8431917777	1.8431917777	1	1	1
890 D	1	4.4512040152	1.9993135464	0.4491624153	1.0000000000	1.0
890 E	1	0.8221408346	1.4484961589	0.8809294576	2.0000000000	1.0
890 F	1	1.8577167478	2.1818938580	0.0903463831	13.0000000000	1.0
890 G	1	1.7698498471	2.8194525619	1.5930461934	1.0000000000	1.0
890 H	0	2.8880852693	2.8880852693	1	1	1
891 A	1	2.3510028056	1.4926709205	0.3174540917	2.0000000000	1.0
891 B	0	1.6877732673	0.5625910891	1	1/3	1
891 C	0	1.0225312693	2.0450625386	1	2	1
891 D	0	2.3923630414	2.3923630414	1	1	1
891 E	0	0.7912355109	0.7912355109	1	1	1
891 F	0	4.1487915620	1.3829305207	1	1/3	1
891 G	0	0.9633519031	0.9633519031	1	1	1
891 H	0	4.0505896063	4.0505896063	1	1	1
892 A	0	3.1558649438	3.1558649438	1	1	1
892 B	1	3.3588715764	2.5062487345	2.2384738542	0.3333333333	1.0
892 C	1	2.6003499001	2.1454643693	0.2750225228	3.0000000000	1.0
894 A	1	1.1906736040	1.5789258426	0.6630389039	2.0000000000	1.0
894 B	1	1.7191484425	1.3981098223	0.8132571846	1.0000000000	1.0
894 C	0	1.1568928656	1.9281547759	1	5/3	1
894 D	1	2.5631776678	2.0563466857	0.2674215306	3.0000000000	1.0
894 E	1	0.4843074326	2.7362803060	0.1228235424	46.0000000000	1.0
894 F	1	3.9572511003	2.6445527611	0.1336560503	5.0000000000	1.0
894 G	1	1.4668493690	3.1291749777	0.0277047098	77.0000000000	1.0
895 A	1	4.9464687269	1.7538892145	0.3545740024	1.0000000000	1.0
895 B	0	1.5004138844	1.5004138844	1	1	1
896 A	1	2.6873620768	2.2979189861	1.7101670117	0.5000000000	1.0
896 B	1	3.8005038960	2.2943272655	1.2073805623	0.5000000000	1.0
896 C	0	3.3322500870	1.6661250435	1	1/2	1
896 D	1	4.7125132663	2.3323381619	0.9898489532	0.5000000000	1.0
897 A	0	1.0302057840	1.0302057840	1	1	1
897 B	0	2.2513865211	1.1256932605	1	1/2	1
897 C	1	2.2862457182	1.2516489192	2.1898764585	0.2500000000	1.0
897 D	1	0.1325510626	3.0756516640	0.7734507752	30.0000000000	1.0
897 E	1	0.7081406416	1.8699514540	1.0562599259	2.5000000000	1.0
897 F	1	1.6831372042	1.6264676608	0.9663310019	1.0000000000	1.0
898 A	1	3.3421121540	1.9128614257	0.5723510575	1.0000000000	1.0
898 B	0	1.5337032793	1.5337032793	1	1	1
898 C	0	2.5896817775	3.8845226663	1	3/2	1
898 D	1	3.5510202364	2.7167655369	0.2550220646	3.0000000000	1.0
899 A	1	3.9981065199	2.3407393199	0.5854619701	1.0000000000	1.0
899 B	0	4.6049071056	4.6049071056	1	1	1
900 A	0	0.8731871573	1.7463743146	1	2	1
900 B	0	1.8812247026	1.8812247026	1	1	1
900 C	1	1.9525058408	2.3172745410	0.5934103992	2.0000000000	1.0

TABLE 4: BIRCH-SWINNERTON-DYER DATA 900D-912K

Curve	$r$	$\Omega$	$L^{(r)}(1)/r!$	$R$	$L^{(r)}(1)/r!\Omega R$	$S$
900D	1	1.7136269959	2.3474457037	0.1141558086	12.000000000	1.0
900E	1	1.1743738590	2.2986343680	0.3262212668	6.000000000	1.0
900F	0	0.7663572902	1.5327145804	1	2	1
900G	0	0.6478758022	1.9436274067	1	3	1
900H	0	1.4486943348	1.4486943348	1	1	1
901A	1	1.5965166331	1.6122697072	2.0197343064	0.500000000	1.0
901B	1	1.1813876044	1.9820576840	3.3554739809	0.500000000	1.0
901C	0	2.7871636011	0.9290545337	1	1/3	1
901D	0	0.3712575011	1.1137725033	1	3	1
901E	1	0.8647721717	2.9384268771	0.2265280169	15.000000000	1.0
901F	1	3.3303214003	1.3138606461	0.3945146693	1.000000000	1.0
902A	1	0.7602202342	1.5657216063	1.0297815921	2.000000000	1.0
902B	0	3.7125501906	2.4750334604	1	2/3	1
903A	1	2.3072778935	2.3301434116	0.2524775427	4.000000000	1.0
903B	0	0.4081046798	1.6324187193	1	4	1
904A	1	3.3170381291	2.2509942877	1.3572314819	0.500000000	1.0
905A	1	4.9675540093	3.2826026256	2.6432345734	0.250000000	1.0
905B	0	0.5380139112	2.6900695561	1	5	1
906A	1	0.3410288839	1.5305099601	2.2439594301	2.000000000	1.0
906B	1	2.3722659293	1.7692736909	0.7458159176	1.000000000	1.0
906C	1	1.4178407129	2.0227288128	0.7133131368	2.000000000	1.0
906D	1	2.6185194041	1.8951624465	2.1712603430	0.3333333333	1.0
906E	0	0.4571735518	2.2858677589	1	5	1
906F	0	1.3091802355	2.6183604710	1	2	1
906G	1	2.2339918210	2.7197368860	0.4058112270	3.000000000	1.0
906H	1	1.8388370165	3.1439048924	0.0310859019	55.000000000	1.0
906I	0	3.0548337452	3.0548337452	1	1	1
909A	0	0.8230901504	1.6461803008	1	2	1
909B	0	1.7762665291	3.5525330582	1	2	1
909C	1	3.1448957012	2.1205886995	0.3371476992	2.000000000	1.0
910A	0	1.0509058342	1.0509058342	1	1	1
910B	1	2.1311572863	1.9847671663	1.3969643482	0.6666666667	1.0
910C	1	2.6028837106	1.3176683943	1.5187021867	0.3333333333	1.0
910D	1	2.0695112831	1.8764854850	0.3022429338	3.000000000	1.0
910E	0	0.2537944386	1.5227666315	1	6	1
910F	1	0.5215759252	3.0174721366	0.1051872356	55.000000000	1.0
910G	1	3.4576823605	2.1767073443	0.0629527851	10.000000000	1.0
910H	1	1.0529878541	2.7611188149	0.0257076017	102.000000000	1.0
910I	0	3.5045156420	3.5045156420	1	1	1
910J	0	1.5932468473	1.5932468473	1	1	1
910K	1	1.1077876976	2.5781642664	0.0664945425	35.000000000	1.0
912A	1	0.8595022649	1.9507400215	1.1348079587	2.000000000	1.0
912B	0	3.2036916115	1.6018458057	1	1/2	1
912C	0	1.2142468377	2.4284936753	1	2	1
912D	0	2.3936541672	2.3936541672	1	1	1
912E	0	1.5429736445	1.5429736445	1	1	1
912F	1	0.9267225427	2.0970333294	1.1314245812	2.000000000	1.0
912G	1	3.0080919221	1.9566840158	0.6504734784	1.000000000	1.0
912H	1	1.8797316974	2.5332700532	0.2695352807	5.000000000	1.0
912I	1	1.7505351624	2.4090814409	0.3440492789	4.000000000	1.0
912J	0	1.5440087217	2.3160130825	1	3/2	1
912K	0	0.7961574782	2.3884724345	1	3	1

TABLE 4: BIRCH-SWINNERTON-DYER DATA 912L-930A

Curve	$r$	$\Omega$	$L^{(r)}(1)/r!$	$R$	$L^{(r)}(1)/r!\Omega R$	$S$
912 L	0	0.9591647519	1.9183295038	1	2	1
913 A	0	0.7261078737	0.7261078737	1	1	1
913 B	0	2.7848137078	5.5696274157	1	2	1
914 A	1	1.8616267621	1.8025054924	1.9364842933	0.5000000000	1.0
914 B	0	2.0072142904	2.0072142904	1	1	1
915 A	0	0.4655714661	3.2590002627	1	7	1
915 B	1	4.3738322547	2.6130796804	1.1948696375	0.5000000000	1.0
915 C	0	1.3320394729	3.9961184186	1	3	1
915 D	1	1.4688651520	1.8627134122	0.2818068856	4.5000000000	1.0
916 A	0	0.8084778532	1.2127167798	1	3/2	1
916 B	0	1.0750718596	3.2252155789	1	3	1
916 C	2	3.9021255757	1.5975481506	0.1364681992	3.0000000000	1.0
916 D	1	4.2153960915	2.4420882822	1.7379778051	0.3333333333	1.0
916 E	1	3.1904104520	2.1723205570	0.2269635407	3.0000000000	1.0
918 A	1	1.3010831327	1.7144756707	0.6588647672	2.0000000000	1.0
918 B	1	1.4955878600	1.8094793603	0.2016463903	6.0000000000	1.0
918 C	1	0.4499146685	1.9056874752	4.2356642461	1.0000000000	1.0
918 D	0	0.7550553757	1.5101107513	1	2	1
918 E	1	2.3462922188	1.7463400878	0.7442977792	1.0000000000	1.0
918 F	1	1.7651732561	1.6690879842	1.4183491437	0.6666666667	1.0
918 G	0	2.3989561499	3.1986081999	1	4/3	1
918 H	1	2.2570175348	2.9626885215	0.0397774668	33.0000000000	1.0
918 I	1	1.7369042247	3.0516986095	1.7569757538	1.0000000000	1.0
918 J	1	0.8491152910	2.9088946006	0.3425794626	10.0000000000	1.0
918 K	0	0.3288423901	2.6307391207	1	8	1
918 L	0	1.5039717658	3.0079435315	1	2	1
920 A	1	0.5880378493	2.4148869343	0.0684447704	60.0000000000	1.0
920 B	1	2.4127978013	1.6168440738	0.0558426430	12.0000000000	1.0
920 C	1	2.8080443019	2.5036279661	0.2228978336	4.0000000000	1.0
920 D	1	1.4333203773	2.1460465556	0.1871569146	8.0000000000	1.0
921 A	0	0.3209950628	0.6419901256	1	2	1
921 B	1	3.0340231314	2.3484673295	1.1610659648	0.6666666667	1.0
922 A	0	1.9239190433	1.9239190433	1	1	1
923 A	0	2.7221586012	2.7221586012	1	1	1
924 A	0	0.2719911704	0.8159735113	1	3	1
924 B	1	1.2992812640	2.0082329065	0.1030432728	15.0000000000	1.0
924 C	1	1.8340344156	2.0474653986	0.3721241327	3.0000000000	1.0
924 D	0	0.5078494253	1.5235482760	1	3	1
924 E	1	2.9265647575	2.4104695147	0.0549101014	15.0000000000	1.0
924 F	0	0.3714094030	1.8570470150	1	5	1
924 G	0	2.5196994926	2.5196994926	1	1	1
924 H	1	0.7490531114	2.4534577552	0.0727869394	45.0000000000	1.0
925 A	1	2.1906183485	2.4066435608	0.5493069029	2.0000000000	1.0
925 B	1	2.9208099321	1.8478028504	0.3163168596	2.0000000000	1.0
925 C	0	1.5623454535	1.5623454535	1	1	1
925 D	0	1.6068744035	3.2137488070	1	2	1
925 E	0	2.6774308083	5.3548616166	1	2	1
926 A	0	2.3944486185	3.5916729278	1	3/2	1
927 A	1	0.8448400033	2.8850974564	1.7074815616	2.0000000000	1.0
928 A	1	1.4888902545	2.5431935125	0.4270283698	4.0000000000	1.0
928 B	1	2.6895458659	2.0226680670	0.1880120444	4.0000000000	1.0
930 A	1	1.4909281319	1.5301618707	2.0526299530	0.5000000000	1.0

TABLE 4: BIRCH-SWINNERTON-DYER DATA 930B-944B

Curve	$r$	$\Omega$	$L^{(r)}(1)/r!$	$R$	$L^{(r)}(1)/r!\Omega R$	$S$
930 B	0	0.6265047032	0.6265047032	1	1	1
930 C	0	1.2362640714	1.2362640714	1	1	1
930 D	1	0.5179840083	1.7003818844	0.4689559791	7.0000000000	1.0
930 E	1	2.7841974936	1.5851902223	0.2846763252	2.0000000000	1.0
930 F	0	0.1346848356	1.4815331915	1	11	1
930 G	0	3.0709626286	1.5354813143	1	1/2	1
930 H	1	0.7521873500	2.0821067538	0.1845379571	15.0000000000	1.0
930 I	0	1.4978178696	1.4978178696	1	1	1
930 J	0	0.9353812860	1.8707625720	1	2	1
930 K	0	0.9415552095	1.8831104190	1	2	1
930 L	0	0.7411152604	2.2233457812	1	3	1
930 M	1	1.5250007887	2.7780796862	0.3036151092	6.0000000000	1.0
930 N	0	0.5072789872	3.0436739229	1	6	1
930 O	0	0.8109446204	3.2437784816	1	4	1
931 A	0	1.7334096346	5.2002289037	1	3	1
931 B	0	1.5598943009	1.5598943009	1	1	1
931 C	0	1.8757939810	1.8757939810	1	1	1
933 A	1	3.5910691959	1.8296030548	0.5094869954	1.0000000000	1.0
933 B	1	1.0684901563	2.3006452064	0.1957430894	11.0000000000	1.0
934 A	1	4.3580455357	2.0713329133	0.4752894150	1.0000000000	1.0
934 B	0	2.1730807250	3.6218012083	1	5/3	1
934 C	0	1.2985913057	3.8957739172	1	3	1
935 A	1	1.8682654972	1.5708761577	0.4204103111	2.0000000000	1.0
935 B	0	1.4462050325	0.9641366883	1	2/3	1
936 A	1	2.2570695652	2.2673570478	1.0045578935	1.0000000000	1.0
936 B	0	2.1411309907	2.1411309907	1	1	1
936 C	0	0.9953703325	1.9907406649	1	2	1
936 D	0	0.5479481922	1.0958963844	1	2	1
936 E	1	1.7307793292	2.2335648552	0.6452483045	2.0000000000	1.0
936 F	0	1.0573903107	2.1147806214	1	2	1
936 G	1	2.1330121455	2.3589685594	0.5529665090	2.0000000000	1.0
936 H	1	2.4247872636	2.2877842319	0.4717494739	2.0000000000	1.0
936 I	0	1.1006671090	2.2013342180	1	2	1
938 A	1	3.6024689923	2.0114613919	0.2791781687	2.0000000000	1.0
938 B	1	0.9200292966	1.5169169330	0.3297540499	5.0000000000	1.0
938 C	1	1.7860118886	2.7904680859	0.0651000726	24.0000000000	1.0
938 D	0	1.7647855022	3.5295710044	1	2	1
939 A	1	0.4879438291	1.8494900042	3.7903748214	1.0000000000	1.0
939 B	1	3.1462027883	3.0969548932	1.9686937566	0.5000000000	1.0
939 C	1	2.5507838076	1.3745564274	0.1077752198	5.0000000000	1.0
940 A	0	0.3036041233	0.9108123700	1	3	1
940 B	0	2.6935919591	2.6935919591	1	1	1
940 C	1	1.0823244188	2.5466599781	2.3529543766	1.0000000000	1.0
940 D	1	3.4473780398	2.1758274460	0.2103847640	3.0000000000	1.0
940 E	0	0.9196309029	2.7588927086	1	3	1
942 A	0	1.8983844340	1.8983844340	1	1	1
942 B	0	0.1107867230	1.7725875672	1	16	1
942 C	1	0.7173734051	3.2430106243	0.0282542066	160.0000000000	1.0
942 D	1	2.8179267391	3.1731945642	0.0469197578	24.0000000000	1.0
943 A	0	3.5161617758	1.7580808879	1	1/2	1
944 A	1	2.0241263360	2.5461928917	0.6289609612	2.0000000000	1.0
944 B	1	3.5140200888	2.5384601650	0.3611903320	2.0000000000	1.0

TABLE 4: BIRCH-SWINNERTON-DYER DATA 944C-960P

Curve	$r$	$\Omega$	$L^{(r)}(1)/r!$	$R$	$L^{(r)}(1)/r!\Omega R$	$S$
944 C	1	1.7116935681	1.9540124811	0.2853916901	4.0000000000	1.0
944 D	0	2.6857753111	2.6857753111	1	1	1
944 E	2	3.4396916312	1.6216175829	0.1178606803	4.0000000000	1.0
944 F	0	2.0369179593	2.0369179593	1	1	1
944 G	0	0.7123740916	1.4247481832	1	2	1
944 H	1	0.5325676265	2.6349557864	1.2369113588	4.0000000000	1.0
944 I	1	1.3545068719	2.4534358947	0.4528282480	4.0000000000	1.0
944 J	1	1.3648615266	2.3102708075	1.6926778010	1.0000000000	1.0
944 K	1	2.9562562217	1.7643718252	0.1492066057	4.0000000000	1.0
946 A	0	2.6183705859	1.3091852930	1	1/2	1
946 B	1	1.7794979329	1.9736736156	1.6636773602	0.6666666667	1.0
946 C	0	0.3661751353	3.6617513529	1	10	1
948 A	0	1.0595880585	1.5893820878	1	3/2	1
948 B	0	1.6952296957	1.6952296957	1	1	1
948 C	0	2.0612524126	2.0612524126	1	1	1
950 A	1	1.8318889258	2.0016845509	0.5463444106	2.0000000000	1.0
950 B	0	0.4410560617	0.8821121233	1	2	1
950 C	0	1.2198252026	2.4396504053	1	2	1
950 D	0	1.5541474188	3.1082948376	1	2	1
950 E	1	2.5365493120	2.8728001790	0.1887603870	6.0000000000	1.0
954 A	1	0.7259892615	1.9067839158	1.3132314877	2.0000000000	1.0
954 B	0	1.1953320239	1.1953320239	1	1	1
954 C	0	0.6676539457	1.3353078914	1	2	1
954 D	1	1.6378943272	1.8540254793	0.2829891783	4.0000000000	1.0
954 E	1	0.8578088245	1.7557498068	1.0233922505	2.0000000000	1.0
954 F	1	1.5511785481	1.6924692457	0.5455430156	2.0000000000	1.0
954 G	0	3.1990540814	3.1990540814	1	1	1
954 H	1	2.8839207271	2.9846183138	0.0739226361	14.0000000000	1.0
954 I	1	2.7048923859	3.0682460481	0.1134332022	10.0000000000	1.0
954 J	1	0.6041744008	2.9240611399	0.0711729909	68.0000000000	1.0
954 K	0	0.4941064717	2.9646388300	1	6	1
954 L	0	1.3885180426	2.7770360851	1	2	1
954 M	0	0.8313387442	3.3253549770	1	4	1
955 A	0	1.4863405386	0.7431702693	1	1/2	1
956 A	0	1.9246145311	1.9246145311	1	1	1
957 A	0	2.1597414573	1.0798707286	1	1/2	1
960 A	1	2.7025732251	2.0503200250	1.5173095078	0.5000000000	1.0
960 B	1	3.5906720505	2.0578659516	0.5731144261	1.0000000000	1.0
960 C	0	1.7605688118	1.7605688118	1	1	1
960 D	0	0.8715629020	1.7431258040	1	2	4
960 E	0	1.1850926721	1.1850926721	1	1	1
960 F	0	1.8974006112	1.8974006112	1	1	1
960 G	0	1.9807518180	1.9807518180	1	1	1
960 H	1	2.9612986380	2.6461902538	0.5957274330	1.5000000000	1.0
960 I	0	1.1287136997	1.1287136997	1	1	1
960 J	0	1.4422113862	1.4422113862	1	1	1
960 K	1	4.9320596338	2.1856460521	1.7726031024	0.2500000000	1.0
960 L	1	1.7061708770	2.5949647962	1.5209290178	1.0000000000	1.0
960 M	1	2.3059156871	2.5176290280	1.0918131318	1.0000000000	1.0
960 N	0	2.2484039196	2.2484039196	1	1	4
960 O	0	0.8191069172	2.4573207515	1	3	1
960 P	0	1.9775352502	1.9775352502	1	1	1

TABLE 4: BIRCH-SWINNERTON-DYER DATA 962A-978B

Curve	$r$	$\Omega$	$L^{(r)}(1)/r!$	$R$	$L^{(r)}(1)/r!\Omega R$	$S$
962 A	0	2.7999393875	2.7999393875	1	1	1
964 A	0	1.1198415821	1.1198415821	1	1	1
965 A	0	4.0716220074	2.0358110037	1	1/2	1
966 A	1	0.8853869237	1.4614322919	0.8253071357	2.0000000000	1.0
966 B	0	0.2819418097	1.4097090486	1	5	1
966 C	1	0.5664715755	1.7653369522	1.5581867021	2.0000000000	1.0
966 D	1	1.7441234008	1.3761745479	0.3945175402	2.0000000000	1.0
966 E	1	1.9082662943	2.0669379979	0.2707874163	4.0000000000	1.0
966 F	0	0.4082792341	1.6331169366	1	4	1
966 G	1	1.1385943933	2.7656988559	0.6072616535	4.0000000000	1.0
966 H	0	0.4792307183	2.3961535917	1	5	1
966 I	0	0.4643098624	2.7858591746	1	6	1
966 J	0	0.3992807787	3.5935270082	1	9	1
966 K	0	2.7119467172	2.7119467172	1	1	1
968 A	1	1.6556466339	2.6417815152	0.1994523968	8.0000000000	1.0
968 B	0	0.3816352236	2.2898113418	1	6	1
968 C	0	0.6021890261	2.4087561044	1	4	1
968 D	1	3.0267578391	2.5010482433	0.4131563171	2.0000000000	1.0
968 E	1	0.4991290115	1.4384836253	0.3602484508	8.0000000000	1.0
969 A	0	2.9869009292	2.9869009292	1	1	1
970 A	0	0.5310141996	0.5310141996	1	1	1
970 B	0	1.5883427578	1.5883427578	1	1	1
972 A	0	1.6050978266	1.6050978266	1	1	1
972 B	0	2.0222965389	2.0222965389	1	1	1
972 C	1	2.9166563143	2.3761866009	0.8146954406	1.0000000000	1.0
972 D	1	2.3149516507	2.3144639469	0.9997893244	1.0000000000	1.0
973 A	0	4.8789961045	4.8789961045	1	1	1
973 B	1	4.1607442392	2.4129023423	5.2192876639	0.1111111111	1.0
974 A	0	1.2046434315	1.2046434315	1	1	1
974 B	0	0.2422921289	0.2422921289	1	1	1
974 C	0	2.1052734500	1.0526367250	1	1/2	1
974 D	0	2.2001897331	2.2001897331	1	1	1
974 E	1	4.1853626672	2.8758677503	0.2290417007	3.0000000000	1.0
974 F	1	3.1291701195	2.8497837722	0.1011906126	9.0000000000	1.0
974 G	1	2.4046637022	2.3325867716	0.3233420637	3.0000000000	1.0
974 H	1	1.4607794760	2.1312789050	0.0972667419	15.0000000000	1.0
975 A	1	1.7990725603	2.6002925141	1.4453516615	1.0000000000	1.0
975 B	1	1.1088014849	1.1952547420	0.2694925012	4.0000000000	1.0
975 C	0	0.8069461169	1.6138922337	1	2	1
975 D	0	0.3611376073	0.7222752146	1	2	1
975 E	0	0.4098572926	0.8197145851	1	2	1
975 F	1	1.1032705873	1.8832551063	0.8534874073	2.0000000000	1.0
975 G	0	1.4788241842	1.4788241842	1	1	1
975 H	1	0.9164687672	3.1593865372	0.5745579573	6.0000000000	1.0
975 I	1	0.9486309445	1.4720753967	0.0184736827	84.0000000000	1.0
975 J	1	2.4669880308	2.3914244965	0.0969370125	10.0000000000	1.0
975 K	1	1.8043863715	1.8568392911	0.0571705373	18.0000000000	1.0
976 A	0	1.4719422687	2.9438845375	1	2	1
976 B	0	0.9972054784	1.9944109568	1	2	1
976 C	1	1.8569859777	2.2379967092	1.2051769567	1.0000000000	1.0
978 A	0	1.0617344731	1.0617344731	1	1	1
978 B	0	2.7212716532	1.3606358266	1	1/2	1

TABLE 4: BIRCH-SWINNERTON-DYER DATA 978C-990J

Curve	$r$	$\Omega$	$L^{(r)}(1)/r!$	$R$	$L^{(r)}(1)/r!\Omega R$	$S$
978 C	0	0.1241533014	0.2483066027	1	2	1
978 D	0	0.7283045343	0.7283045343	1	1	1
978 E	1	4.1996664677	1.9268524917	0.2294054190	2.0000000000	1.0
978 F	1	2.5393784966	2.8120225559	0.0503348387	22.0000000000	1.0
978 G	1	1.6105329585	3.2537064683	0.0360761951	56.0000000000	1.0
978 H	0	3.1205326016	3.1205326016	1	1	1
979 A	0	2.3873792165	2.3873792165	1	1	1
979 B	1	0.4339769970	3.3551350704	2.5770452456	3.0000000000	1.0
980 A	0	1.9162261352	1.9162261352	1	1	1
980 B	0	0.5248079970	0.5248079970	1	1	1
980 C	1	1.7233973087	2.5976248754	0.7536349460	2.0000000000	1.0
980 D	1	1.0078659084	2.0479221272	0.1693282567	12.0000000000	1.0
980 E	0	0.6921975851	1.3843951703	1	2	1
980 F	0	0.1605835588	1.4452520290	1	9	1
980 G	0	1.7191073020	2.5786609530	1	3/2	1
980 H	0	3.1333036925	3.1333036925	1	1	1
980 I	0	0.4067815814	0.8135631628	1	2	1
981 A	1	1.5965483661	2.9392815103	0.9205112644	2.0000000000	1.0
981 B	1	3.4310796281	1.4755066121	0.2150207474	2.0000000000	1.0
982 A	1	3.2102819765	1.9893672757	0.3098430746	2.0000000000	1.0
984 A	0	1.0445702608	1.0445702608	1	1	1
984 B	0	0.4869816017	1.9479264069	1	4	1
984 C	1	1.2706245285	1.9979012463	0.2620628939	6.0000000000	1.0
984 D	1	2.2574282587	2.6460535196	0.1953589968	6.0000000000	1.0
985 A	0	0.7767573734	2.3302721201	1	3	1
985 B	1	3.1840958685	1.0139872562	0.0796134364	4.0000000000	1.0
986 A	0	1.4557074439	0.9704716293	1	2/3	1
986 B	1	0.2363375503	1.6316897708	1.7260162095	4.0000000000	1.0
986 C	1	1.9736513369	2.1668844307	1.0979063983	1.0000000000	1.0
986 D	1	2.2888169878	3.2671750193	0.1784314253	8.0000000000	1.0
986 E	1	0.4067622872	2.6151822165	0.0918466316	70.0000000000	1.0
986 F	1	2.6487806372	3.0414018081	0.1435283921	8.0000000000	1.0
987 A	0	2.1704014659	2.1704014659	1	1	1
987 B	0	1.7012497719	0.8506248859	1	1/2	1
987 C	0	2.9294495045	2.9294495045	1	1	1
987 D	0	0.6856950713	4.7998654990	1	7	1
987 E	1	0.6097264187	1.7241936701	0.1885210172	15.0000000000	1.0
988 A	0	1.0584031179	3.1752093536	1	3	1
988 B	1	0.2075922181	2.4883343573	0.3073498884	39.0000000000	1.0
988 C	1	1.9393544817	2.2502125023	0.1933815713	6.0000000000	1.0
988 D	0	1.0820810042	1.0820810042	1	1	1
989 A	0	4.0825015085	4.0825015085	1	1	1
990 A	1	3.6418359797	1.7927380911	0.2461310862	2.0000000000	1.0
990 B	0	1.4891045559	0.9927363706	1	2/3	1
990 C	0	0.5287307010	1.0574614021	1	2	1
990 D	0	1.1688028795	1.1688028795	1	1	1
990 E	1	0.9415811183	1.7973283849	1.9088407255	1.0000000000	1.0
990 F	0	1.2550458447	1.2550458447	1	1	1
990 G	0	0.1953396646	1.5627173170	1	8	1
990 H	1	0.8123963142	3.0762047385	0.6310968930	6.0000000000	1.0
990 I	0	1.4030386758	2.8060773515	1	2	1
990 J	1	1.7426021642	3.0722751578	0.4407596899	4.0000000000	1.0

TABLE 4: BIRCH-SWINNERTON-DYER DATA 990K-999B

Curve	$r$	$\Omega$	$L^{(r)}(1)/r!$	$R$	$L^{(r)}(1)/r!\Omega R$	$S$
990K	0	1.3965264783	2.7930529567	1	2	1
990L	0	0.4490143433	3.1431004032	1	7	1
994A	1	3.3666422532	2.0603062005	0.3059882883	2.0000000000	1.0
994B	0	0.8538300680	0.8538300680	1	1	1
994C	0	0.5412944368	1.6238833103	1	3	1
994D	1	1.0902271710	2.1101578430	2.9032818559	0.6666666667	1.0
994E	0	4.6778604868	2.3389302434	1	1/2	1
994F	1	2.4540446205	3.0834509733	0.6282385715	2.0000000000	1.0
994G	1	0.9475612683	2.6207661260	1.8438674899	1.5000000000	1.0
995A	0	3.0420956800	1.5210478400	1	1/2	1
995B	1	3.7214583261	2.5126961150	2.0255737629	0.3333333333	1.0
996A	0	1.4835654563	2.2253481845	1	3/2	1
996B	1	0.5549429367	2.5867487904	0.1195202023	39.0000000000	1.0
996C	1	2.5646016409	2.5309557847	0.9868806696	1.0000000000	1.0
997A	1	4.9334464641	1.2116129751	0.2455915928	1.0000000000	1.0
997B	2	3.1532626948	1.8005737283	0.5710192593	1.0000000000	1.0
997C	2	4.8868977083	1.2202850721	0.2497054665	1.0000000000	1.0
999A	1	0.8267057148	2.9754511153	3.5991660178	1.0000000000	1.0
999B	1	4.9408397836	1.5561970558	0.3149661037	1.0000000000	1.0