TABLE 1

ELLIPTIC CURVES

The table is arranged in blocks by conductor. Each conductor is given in factorized form at the top of its block (repeated, if necessary, on continuation pages), together with the number of isogeny classes of curves with that conductor. Each block is subdivided into isogeny classes by a row of dashes.

The columns of the table give the following data for each curve E:

- (1) an identifying letter (A, B, C, ...) for each isogeny class of curves with the same conductor, choosing consecutive letters for the curves in the order in which they were computed. Within each isogeny class we also number the curves in that class, with curve 1 being the "strong Weil curve". For ease of reference, when $N \leq 200$ we also give the identifying letter of each curve as given in Table 1 of [2].
- (2) The integer coefficients a_1 , a_2 , a_3 , a_4 and a_6 of a minimal equation for E.
- (3) The rank r of $E(\mathbb{Q})$.
- (4) The order |T| of the torsion subgroup T of $E(\mathbb{Q})$.
- (5) The sign of the discriminant Δ of E, and its factorization.
- (6) The prime factorization of the denominator of j(E).
- (7) The local indices c_p for the primes of bad reduction.
- (8) The Kodaira symbols for E at each prime of bad reduction.
- (9) The curves isogenous to E via an isogeny of prime degree, with the degree l in bold face. For example, the entry "2: 3; 3: 2, 6" for curve 448C4 indicates it is 2-isogenous to 448C3 and 3-isogenous to both 448C2 and 448C6. From these entries it is easy to draw isogeny diagrams for each isogeny class in the manner of the Antwerp tables [2]. We regret that we could not persuade Birch to draw little diagrams for us in this column, as he did for [2].

For convenience, we give the factorization of N at the head of each section of the table. This order of the 'bad' prime factors p_1, \ldots, p_k of N is used within the table itself. We give the discriminant $\Delta = \pm p_1^{e_1} \ldots p_k^{e_k}$ in factorized form as \pm, e_1, \ldots, e_k in the columns headed s, ord (Δ) . The column headed ord(j) contains the exponents of these same primes in the denominator of the j-invariant, as in [2]. Finally the local factors c_p , and then the Kodaira symbols, are given for each of these primes in order.

¹For class 990H the "strong" curve is 990H3 and not 990H1.

110					IADLE		LLLI		0 001011	ED IIA-ZIA	-		
	a_1	a_2	a_3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
11					N = 1	11 =	= 11	(-	1 isogen	y class)			11
A1(B)		-1		-10	-20	0	5	_	5	5	5	I_5	5:2,3
A2(C)					-263580	0	$\frac{1}{5}$	_	1	1	1	I_1	5 :1
A3(A)	U	-1	1	0	0	0	Э	_	1	1	1	I_1	5 : 1
<u>14</u>					N = 1	4 =	2 · 7	7 ((1 isogei	ny class)			14
A1(C)	1	0	1	4	-6	0	6	_	6, 3	6,3	2,3	I_6,I_3	2:2;3:3,4
A2(D)	1	0	1	-36	-70	0	6	+	3,6	3,6	1,6	I_3,I_6	2:1;3:5,6
A3(E)	1 1	0	1 1	$-171 \\ -1$	$-874 \\ 0$	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$\frac{2}{6}$	_	18,1	18,1	$\begin{bmatrix} 2, 1 \\ 2 \end{bmatrix}$	I_{18},I_1	2:5;3:1
A4(A) A5(F)	$\begin{array}{c c} 1 \\ 1 \end{array}$	0		-1 -2731	-55146	$0 \\ 0$	$\frac{6}{2}$	- +	$2, 1 \\ 9, 2$	$2, 1 \\ 9, 2$	$\begin{bmatrix} 2, 1 \\ 1, 2 \end{bmatrix}$	$egin{array}{c} \mathrm{I}_2,\!\mathrm{I}_1\ \mathrm{I}_9,\!\mathrm{I}_2 \end{array}$	$egin{array}{c} {f 2}:6;{f 3}:1 \ {f 2}:3;{f 3}:2 \end{array}$
A6(B)	1	0	1	-11	12	0	6	+	1, 2	1, 2	1, 2 $1, 2$	I_1,I_2	2:4;3:2
()								<u> </u>		,		1 / 2	,
15	Γ				N = 1			ó (ny class)	П	Т	15
A1(C)	1		1	-10	-10	0	8	+	4, 4	4,4	2,4	I_4,I_4	2:2,3,4
A2(E)	1	1	1	-135	-660	0	4	+	8,2	8,2	2,2	I_8,I_2	2:1,5,6
A3(B) A4(F)	1 1	1 1	1 1	-5 35	$\begin{array}{c} 2 \\ -28 \end{array}$	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	8	+	$2, 2 \\ 2, 8$	$2, 2 \\ 2, 8$	$\begin{bmatrix} 2, 2 \\ 2, 8 \end{bmatrix}$	$egin{array}{c} \mathrm{I}_2,\mathrm{I}_2 \ \mathrm{I}_2,\mathrm{I}_8 \end{array}$	$\begin{vmatrix} 2 : 1, 7, 8 \\ 2 : 1 \end{vmatrix}$
A5(H)	$\begin{array}{c c} 1 \\ 1 \end{array}$	1		-2160	-39540	0	$\frac{3}{2}$	+	$\frac{2}{4}, 0$	$\frac{2}{4}, 1$	2, 0 $2, 1$	I_{2},I_{8} I_{4},I_{1}	2:1 2:2
A6(G)	1	1	1	-110	-880	0	$\frac{2}{2}$	_	16, 1	16, 1	2, 1 $2, 1$	I_{16}, I_{1}	2:2 2:2
A7(D)	1	1	1	-80	242	0	$\overline{4}$	+	1, 1	1,1	1, 1	I_1,I_1	2 :3
A8(A)	1	1	1	0	0	0	4	_	1, 1	1,1	1,1	I_1, I_1	2 :3
										*	,	1, 1	
17					N = 1	17 =	= 17	(-	1 isogen	, ·		1,1	17
17 A1(C)	1		1	-1	N = 3 -14		4	(:	1 isogen	, ·	4	I_4	17 2:2
				$-1 \\ -6$	-14	0	4	1		y class)	4 2		1
A1(C) A2(B) A3(D)	1 1	$-1 \\ -1$	1 1	$-6 \\ -91$	-14 -4 -310	0 0 0	4 4 2	- + +	4 2 1	y class) 4 2 1	2 1	$\begin{matrix} \mathrm{I}_4 \\ \mathrm{I}_2 \\ \mathrm{I}_1 \end{matrix}$	2:2 2:1,3,4 2:2
A1(C) A2(B)	1 1	-1	1 1	-6	$-14 \\ -4$	0 0	4	- +	4 2	y class) 4 2	2	$\begin{array}{c} \mathrm{I}_4 \\ \mathrm{I}_2 \end{array}$	2:2 2:1,3,4
A1(C) A2(B) A3(D)	1 1	$-1 \\ -1$	1 1	$-6 \\ -91$	-14 -4 -310	0 0 0 0	4 4 2 4	- + + +	4 2 1	y class) 4 2 1	2 1	$\begin{matrix} \mathrm{I}_4 \\ \mathrm{I}_2 \\ \mathrm{I}_1 \end{matrix}$	2:2 2:1,3,4 2:2
A1(C) A2(B) A3(D) A4(A) 19	1 1	-1 -1 -1	1 1	$-6 \\ -91$	-14 -4 -310 0 $N = 1$ -15	0 0 0 0	4 4 2 4	- + + +	4 2 1 1	y class) 4 2 1	2 1	$\begin{matrix} \mathrm{I}_4 \\ \mathrm{I}_2 \\ \mathrm{I}_1 \end{matrix}$	2:2 2:1,3,4 2:2 2:2
A1(C) A2(B) A3(D) A4(A) 19 A1(B) A2(C)	1 1 1 0 0	-1 -1 -1 1 1	1 1 1 1	$ \begin{array}{r} -6 \\ -91 \\ -1 \end{array} $ $ \begin{array}{r} -9 \\ -769 \end{array} $	$ \begin{array}{r} -14 \\ -4 \\ -310 \\ 0 \end{array} $ $ \begin{array}{r} N = 1 \\ -15 \\ -8470 \end{array} $	0 0 0 0	$ \begin{array}{c} 4 \\ 4 \\ 2 \\ 4 \end{array} $ $= 19$ 3 1	- + + +	4 2 1 1 1 isogen 3 1	y class) 4 2 1 1 y class) 3 1	3 1	$egin{array}{c} I_4 & I_2 & \\ I_1 & I_1 & \\ I_3 & I_1 & \\ I_4 & I_2 & \\ I_5 & I_5 & \\ I_7 & I_8 & \\ I_8 & I_8 & \\ I_8 & I_8 & \\ I_9 & I_9 & $	2:2 2:1,3,4 2:2 2:2 3:23
A1(C) A2(B) A3(D) A4(A) 19	1 1 1	-1 -1 -1 1 1	1 1 1	$ \begin{array}{r} -6 \\ -91 \\ -1 \end{array} $	-14 -4 -310 0 $N = 1$ -15	0 0 0 0	$ \begin{array}{r} 4 \\ 4 \\ 2 \\ 4 \end{array} $ $ = 19$ $ 3$	- + + + -	4 2 1 1 1 isogen 3	y class) 4 2 1 1 y class)	2 1 1	$egin{array}{cccccccccccccccccccccccccccccccccccc$	2:2 2:1,3,4 2:2 2:2 3:23
A1(C) A2(B) A3(D) A4(A) 19 A1(B) A2(C)	1 1 1 0 0	-1 -1 -1 1 1	1 1 1 1	$ \begin{array}{r} -6 \\ -91 \\ -1 \end{array} $ $ \begin{array}{r} -9 \\ -769 \end{array} $	$ \begin{array}{r} -14 \\ -4 \\ -310 \\ 0 \end{array} $ $ \begin{array}{r} N = 1 \\ -15 \\ -8470 \end{array} $	0 0 0 0	$ \begin{array}{c} 4 \\ 4 \\ 2 \\ 4 \end{array} $ $ = 19 \\ \hline 3 \\ 1 \\ 3 $	- + + + - - -	4 2 1 1 1 isogen 3 1 1	y class) 4 2 1 1 y class) 3 1	3 1	$egin{array}{c} I_4 & I_2 & \\ I_1 & I_1 & \\ I_3 & I_1 & \\ I_4 & I_2 & \\ I_5 & I_5 & \\ I_7 & I_8 & \\ I_8 & I_8 & \\ I_8 & I_8 & \\ I_9 & I_9 & $	2:2 2:1,3,4 2:2 2:2 3:23
A1(C) A2(B) A3(D) A4(A) 19 A1(B) A2(C) A3(A) 20 A1(B)	1 1 1 0 0	-1 -1 -1 1 1 1	1 1 1 1	$ \begin{array}{r} -6 \\ -91 \\ -1 \end{array} $ $ \begin{array}{r} -9 \\ -769 \end{array} $	$ \begin{array}{c} -14 \\ -4 \\ -310 \\ 0 \end{array} $ $ \begin{array}{c} N = 1 \\ \hline -15 \\ -8470 \\ 0 \end{array} $	0 0 0 0	$ \begin{array}{c} 4 \\ 4 \\ 2 \\ 4 \end{array} $ $ = 19 \\ \hline 3 \\ 1 \\ 3 $	- + + + - - -	4 2 1 1 1 isogen 3 1 1	y class) 4 2 1 1 y class) 3 1 1	3 1	$egin{array}{c} I_4 & I_2 & \\ I_1 & I_1 & \\ I_3 & I_1 & \\ I_4 & I_2 & \\ I_5 & I_5 & \\ I_7 & I_7 & \\ I_8 & I_8 & \\ I_8 & I_8 & \\ I_9 & I_9 & \\ I_{10} & I_{10} I_{10} & I_{10} & I_{10} & \\ I_{10} & I_{10} & I_{10} & I_{10} & \\ I_{10} & I_{10} & I_{10} & I_$	2:2 2:1,3,4 2:2 2:2 3:1 3:1 3:1
A1(C) A2(B) A3(D) A4(A) 19 A1(B) A2(C) A3(A) 20 A1(B) A2(A)	1 1 1 0 0 0 0	-1 -1 -1 1 1 1 1	1 1 1 1 1 1 0 0	$ \begin{array}{r} -6 \\ -91 \\ -1 \end{array} $ $ \begin{array}{r} -9 \\ -769 \\ 1 \end{array} $ $ \begin{array}{r} 4 \\ -1 \end{array} $	$ \begin{array}{r} -14 \\ -4 \\ -310 \\ 0 \end{array} $ $ \begin{array}{r} N = 1 \\ -15 \\ -8470 \\ 0 \end{array} $ $ \begin{array}{r} N = 20 \\ 4 \\ 0 \end{array} $	$ \begin{array}{c} 0 \\ 0 \\ 0 \\ 0 \end{array} $ $ \begin{array}{c} 0 \\ 0 \\ 0 \\ 0 \end{array} $	$ \begin{array}{c} 4 \\ 4 \\ 2 \\ 4 \end{array} $ $= 19$ $3 \\ 1 \\ 3 \\ 2^2 \cdot 3 \\ 6 \\ 6 $	- + + + + (:	4 2 1 1 1 isogen 3 1 1 (1 isoge 8, 2 4, 1	y class) 4 2 1 1 y class) 3 1 1 ny class) 0, 2 0, 1	3 1 1 3 1 1 3,2 3,1	$\begin{array}{c} I_4 \\ I_2 \\ I_1 \\ I_1 \\ \end{array}$ $\begin{array}{c} I_3 \\ I_1 \\ I_1 \\ \end{array}$ $\begin{array}{c} I_1 \\ I_1 \\ \end{array}$ $\begin{array}{c} IV^*, I_2 \\ IV, I_1 \\ \end{array}$	2:2 2:1,3,4 2:2 2:2 2:2 19 3:2,3 3:1 3:1 20 2:2;3:3 2:1;3:4
A1(C) A2(B) A3(D) A4(A) 19 A1(B) A2(C) A3(A) 20 A1(B) A2(A) A2(A) A3(D)	1 1 1 0 0 0 0	-1 -1 -1 1 1 1 1 1 1	1 1 1 1 1 1 1 0 0 0	$ \begin{array}{r} -6 \\ -91 \\ -1 \end{array} $ $ \begin{array}{r} -9 \\ -769 \\ 1 \end{array} $ $ \begin{array}{r} 4 \\ -1 \\ -36 \end{array} $	$ \begin{array}{r} -14 \\ -4 \\ -310 \\ 0 \end{array} $ $ \begin{array}{r} N = 1 \\ -15 \\ -8470 \\ 0 \end{array} $ $ \begin{array}{r} N = 20 \\ 4 \\ 0 \\ -140 \end{array} $	0 0 0 0 0 0 0 0 0 0	$ \begin{array}{c} 4 \\ 4 \\ 2 \\ 4 \end{array} $ $= 19$ $3 \\ 1 \\ 3 \\ 2^2 \cdot 3 \\ 6 \\ 6 \\ 2 $	- + + + + - - - - - - - - - -	4 2 1 1 1 isogen 3 1 1 (1 isogen 8, 2 4, 1 8, 6	y class) 4 2 1 1 y class) 3 1 1 ny class) 0, 2 0, 1 0, 6	3 1 1 3 1 1 1,2	$\begin{array}{c c} I_4 \\ I_2 \\ I_1 \\ I_1 \\ I_1 \\ \end{array}$ $\begin{array}{c c} I_3 \\ I_1 \\ I_1 \\ \end{array}$ $\begin{array}{c c} IV^*, I_2 \\ IV, I_1 \\ IV^*, I_6 \\ \end{array}$	2:2 2:1,3,4 2:2 2:2 2:2 3:1 3:1 20 2:2;3:3 2:1;3:4 2:4;3:1
A1(C) A2(B) A3(D) A4(A) 19 A1(B) A2(C) A3(A) 20 A1(B) A2(A)	1 1 1 0 0 0 0	-1 -1 -1 1 1 1 1 1 1	1 1 1 1 1 1 0 0	$ \begin{array}{r} -6 \\ -91 \\ -1 \end{array} $ $ \begin{array}{r} -9 \\ -769 \\ 1 \end{array} $ $ \begin{array}{r} 4 \\ -1 \end{array} $	$ \begin{array}{r} -14 \\ -4 \\ -310 \\ 0 \end{array} $ $ \begin{array}{r} N = 1 \\ -15 \\ -8470 \\ 0 \end{array} $ $ \begin{array}{r} N = 20 \\ 4 \\ 0 \end{array} $	$ \begin{array}{c} 0 \\ 0 \\ 0 \\ 0 \end{array} $ $ \begin{array}{c} 0 \\ 0 \\ 0 \\ 0 \end{array} $	$ \begin{array}{c} 4 \\ 4 \\ 2 \\ 4 \end{array} $ $= 19$ $3 \\ 1 \\ 3 \\ 2^2 \cdot 3 \\ 6 \\ 6 $	- + + + + (:	4 2 1 1 1 isogen 3 1 1 (1 isoge 8, 2 4, 1	y class) 4 2 1 1 y class) 3 1 1 ny class) 0, 2 0, 1	3 1 1 3 1 1 3,2 3,1	$\begin{array}{c} I_4 \\ I_2 \\ I_1 \\ I_1 \\ \end{array}$ $\begin{array}{c} I_3 \\ I_1 \\ I_1 \\ \end{array}$ $\begin{array}{c} I_1 \\ I_1 \\ \end{array}$ $\begin{array}{c} IV^*, I_2 \\ IV, I_1 \\ \end{array}$	2:2 2:1,3,4 2:2 2:2 2:2 19 3:2,3 3:1 3:1 20 2:2;3:3 2:1;3:4
A1(C) A2(B) A3(D) A4(A) 19 A1(B) A2(C) A3(A) 20 A1(B) A2(A) A2(A) A3(D)	1 1 1 0 0 0 0	-1 -1 -1 1 1 1 1 1 1	1 1 1 1 1 1 1 0 0 0	$ \begin{array}{r} -6 \\ -91 \\ -1 \end{array} $ $ \begin{array}{r} -9 \\ -769 \\ 1 \end{array} $ $ \begin{array}{r} 4 \\ -1 \\ -36 \end{array} $	$ \begin{array}{r} -14 \\ -4 \\ -310 \\ 0 \end{array} $ $ \begin{array}{r} N = 1 \\ -15 \\ -8470 \\ 0 \end{array} $ $ \begin{array}{r} N = 20 \\ 4 \\ 0 \\ -140 \end{array} $	0 0 0 0 19 = 0 0 0 0 0	$ \begin{array}{c} 4 \\ 4 \\ 2 \\ 4 \end{array} $ $ = 19 \\ 3 \\ 1 \\ 3 \\ 2^2 \cdot 3 \\ 6 \\ 6 \\ 2 \\ 2 $	- + + + + - - - - + +	4 2 1 1 1 isogen 3 1 1 (1 isoge 8, 2 4, 1 8, 6 4, 3	y class) 4 2 1 1 y class) 3 1 1 ny class) 0, 2 0, 1 0, 6	3 1 1 3 1 1 1,2	$\begin{array}{c c} I_4 \\ I_2 \\ I_1 \\ I_1 \\ I_1 \\ \end{array}$ $\begin{array}{c c} I_3 \\ I_1 \\ I_1 \\ \end{array}$ $\begin{array}{c c} IV^*, I_2 \\ IV, I_1 \\ IV^*, I_6 \\ \end{array}$	2:2 2:1,3,4 2:2 2:2 2:2 3:1 3:1 20 2:2;3:3 2:1;3:4 2:4;3:1
A1(C) A2(B) A3(D) A4(A) 19 A1(B) A2(C) A3(A) 20 A1(B) A2(A) A3(D) A4(C) 21 A1(B)	1 1 1 0 0 0 0	-1 -1 -1 1 1 1 1 1 1	1 1 1 1 1 1 1 0 0 0	$ \begin{array}{r} -6 \\ -91 \\ -1 \end{array} $ $ \begin{array}{r} -9 \\ -769 \\ 1 \end{array} $ $ \begin{array}{r} 4 \\ -1 \\ -36 \end{array} $		0 0 0 0 19 = 0 0 0 0 0	$ \begin{array}{c} 4 \\ 4 \\ 2 \\ 4 \end{array} $ $ = 19 \\ 3 \\ 1 \\ 3 \\ 2^2 \cdot 3 \\ 6 \\ 6 \\ 2 \\ 2 $	- + + + + - - - - + +	4 2 1 1 1 isogen 3 1 1 (1 isoge 8, 2 4, 1 8, 6 4, 3	y class) 4 2 1 1 y class) 3 1 1 ny class) 0, 2 0, 1 0, 6 0, 3	3 1 1 3,2 3,1 1,2 1,1	$\begin{array}{c c} I_4 \\ I_2 \\ I_1 \\ I_1 \\ I_1 \\ \end{array}$ $\begin{array}{c c} I_3 \\ I_1 \\ I_1 \\ \end{array}$ $\begin{array}{c c} IV^*, I_2 \\ IV, I_1 \\ IV^*, I_6 \\ \end{array}$	2:2 2:1,3,4 2:2 2:2 2:2 3:1 3:1 2:2;3:3 2:1;3:4 2:4;3:1 2:3;3:2
A1(C) A2(B) A3(D) A4(A) 19 A1(B) A2(C) A3(A) 20 A1(B) A2(A) A3(D) A4(C) 21 A1(B) A2(D)	1 1 1 0 0 0 0 0 0	$ \begin{array}{c} -1 \\ -1 \\ -1 \end{array} $ $ \begin{array}{c} 1 \\ 1 \\ 1 \\ 1 \\ 0 \\ 0 \end{array} $	1 1 1 1 1 1 0 0 0 0	$ \begin{array}{r} -6 \\ -91 \\ -1 \end{array} $ $ \begin{array}{r} -9 \\ -769 \\ 1 \end{array} $ $ \begin{array}{r} 4 \\ -1 \\ -36 \\ -41 \end{array} $		$ \begin{vmatrix} 0 & 0 & 0 \\ 0 & 0 & 0 \end{vmatrix} $ $ \begin{vmatrix} 0 & 0 & 0 & 0 \\ $	$ \begin{array}{c} 4 \\ 4 \\ 2 \\ 4 \end{array} $ $= 19$ $3 \\ 1 \\ 3 \\ 2^2 \cdot 1 \\ 6 \\ 6 \\ 2 \\ 2 \end{array}$ $= 3 \cdot 7$ $8 \\ 4$	- + + + + - - - - 7 (4 2 1 1 1 isogen 3 1 1 (1 isogen 8, 2 4, 1 8, 6 4, 3 (1 isogen 4, 2 2, 4	y class) 4 2 1 1 y class) 3 1 1 ny class) 0,2 0,1 0,6 0,3 ny class) 4,2 2,4	3 1 1 3,2 3,1 1,2 1,1	$I_4 \\ I_2 \\ I_1 \\ I_1 \\ I_1$ I_1 I_1 $IV^*, I_2 \\ IV, I_1 \\ IV^*, I_6 \\ IV, I_3$ $I_4, I_2 \\ I_2, I_4$	$2:2 \\ 2:1,3,4 \\ 2:2 \\ 2:2$ $2:3$ $3:1$ $3:1$ 20 $2:2;3:3 \\ 2:1;3:4 \\ 2:4;3:1 \\ 2:3;3:2$ 21 21
A1(C) A2(B) A3(D) A4(A) 19 A1(B) A2(C) A3(A) 20 A1(B) A2(A) A3(D) A4(C) A1(B) A2(C) A3(C)	1 1 1 0 0 0 0 0 0	$ \begin{array}{c} -1 \\ -1 \\ -1 \end{array} $ $ \begin{array}{c} 1 \\ 1 \\ 1 \\ 1 \\ 0 \\ 0 \\ 0 \end{array} $	1 1 1 1 1 1 0 0 0 0 0 0	$ \begin{array}{r} -6 \\ -91 \\ -1 \end{array} $ $ \begin{array}{r} -9 \\ -769 \\ 1 \end{array} $ $ \begin{array}{r} 4 \\ -1 \\ -36 \\ -41 \end{array} $ $ \begin{array}{r} -4 \\ -49 \\ -39 \end{array} $	$ \begin{array}{r} -14 \\ -4 \\ -310 \\ 0 \end{array} $ $ \begin{array}{r} N = 3 \\ -15 \\ -8470 \\ 0 \end{array} $ $ \begin{array}{r} N = 20 \\ 4 \\ 0 \\ -140 \\ -116 \end{array} $ $ \begin{array}{r} N = 2 \\ -140 \\ -116 \\ 90 \end{array} $	$ \begin{vmatrix} 0 & 0 & 0 \\ 0 & 0 & 0 \end{vmatrix} $ $ \begin{vmatrix} 0 & 0 & 0 & 0 \\ $	$ \begin{array}{c} 4 \\ 4 \\ 2 \\ 4 \end{array} $ $ = 19 \\ 3 \\ 1 \\ 3 $ $ 2^2 \cdot 3 \\ 6 \\ 6 \\ 2 \\ 2 $ $ = 3 \cdot 7 \\ 8 \\ 4 \\ 8 $	- + + + + - - - - - - + - + + + + +	4 2 1 1 1 isogen 3 1 1 (1 isogen 8, 2 4, 1 8, 6 4, 3 (1 isogen 4, 2 2, 4 8, 1	y class) 4 2 1 1 y class) 3 1 1 ny class) 0,2 0,1 0,6 0,3 ny class) 4,2 2,4 8,1	3 1 1 3,2 3,1 1,2 1,1	I_{4} I_{2} I_{1} I_{2} I_{4} I_{2} I_{2} I_{4} I_{8} I_{1}	$2:2 \\ 2:1,3,4 \\ 2:2 \\ 2:2$ $2:3$ $3:1$ $3:1$ 20 $2:2;3:3 \\ 2:1;3:4 \\ 2:4;3:1 \\ 2:3;3:2$ 21 21 $2:2,3,4 \\ 2:1,5,6 \\ 2:1$
A1(C) A2(B) A3(D) A4(A) 19 A1(B) A2(C) A3(A) 20 A1(B) A2(A) A3(D) A4(C) A1(B) A2(D) A3(C) A3(C) A4(A)	1 1 1 0 0 0 0 0 0	$ \begin{array}{c} -1 \\ -1 \\ -1 \end{array} $ $ \begin{array}{c} 1 \\ 1 \\ 1 \\ 1 \\ 0 \\ 0 \\ 0 \\ 0 \end{array} $	1 1 1 1 1 1 0 0 0 0 0 0	$ \begin{array}{r} -6 \\ -91 \\ -1 \end{array} $ $ \begin{array}{r} -9 \\ -769 \\ 1 \end{array} $ $ \begin{array}{r} 4 \\ -1 \\ -36 \\ -41 \end{array} $ $ \begin{array}{r} -4 \\ -49 \\ -39 \\ 1 \end{array} $	$ \begin{array}{r} -14 \\ -4 \\ -310 \\ 0 \end{array} $ $ \begin{array}{r} N = 3 \\ -15 \\ -8470 \\ 0 \end{array} $ $ \begin{array}{r} N = 20 \\ 4 \\ 0 \\ -140 \\ -116 \end{array} $ $ \begin{array}{r} N = 2 \\ 0 \\ -136 \\ 90 \\ 0 \end{array} $	$ \begin{bmatrix} 0 \\ 0 \\ 0 \end{bmatrix} = \begin{bmatrix} 0 \\ 0 \\ 0 \end{bmatrix} = \begin{bmatrix} 0 \\ 0 \\ 0 \end{bmatrix} = \begin{bmatrix} 0 \\ 0 \\ 0 \end{bmatrix} $	$ \begin{array}{c} 4 \\ 4 \\ 2 \\ 4 \end{array} $ $= 19$ $3 \\ 1 \\ 3 \\ 2^2 \cdot 1 \\ 6 \\ 6 \\ 2 \\ 2 $ $= 3 \cdot 7 \\ 8 \\ 4 \\ 8 \\ 4 $	- + + + + - - - - - - + + + + + + +	4 2 1 1 1 isogen 3 1 1 (1 isogen 8, 2 4, 1 8, 6 4, 3 (1 isogen 4, 2 2, 4 8, 1 2, 1	y class) 4 2 1 1 y class) 3 1 1 ny class) 0, 2 0, 1 0, 6 0, 3 ny class) 4, 2 2, 4 8, 1 2, 1	3 1 1 3,1 1,2 1,1 4,2 2,2 8,1 2,1	$I_4 \\ I_2 \\ I_1 \\ I_1$ I_1 I_2 I_1 I_2 I_2 I_4 I_2 I_2 I_4 I_2 I_2 I_4 I_2 I_2 I_4 I_2 I_1 I_2 I_1	$2:2 \\ 2:1,3,4 \\ 2:2 \\ 2:2$ $2:2$ $2:3$ $3:1 \\ 3:1$ 20 $2:2;3:3 \\ 2:1;3:4 \\ 2:4;3:1 \\ 2:3;3:2$ 21 $2:2,3,4 \\ 2:1,5,6 \\ 2:1 \\ 2:1$
A1(C) A2(B) A3(D) A4(A) 19 A1(B) A2(C) A3(A) 20 A1(B) A2(A) A3(D) A4(C) A1(B) A2(C) A3(C)	1 1 1 0 0 0 0 0 0	$ \begin{array}{c} -1 \\ -1 \\ -1 \end{array} $ $ \begin{array}{c} 1 \\ 1 \\ 1 \\ 1 \\ 0 \\ 0 \\ 0 \end{array} $	1 1 1 1 1 1 0 0 0 0 0 0	$ \begin{array}{r} -6 \\ -91 \\ -1 \end{array} $ $ \begin{array}{r} -9 \\ -769 \\ 1 \end{array} $ $ \begin{array}{r} 4 \\ -1 \\ -36 \\ -41 \end{array} $ $ \begin{array}{r} -4 \\ -49 \\ -39 \end{array} $	$ \begin{array}{r} -14 \\ -4 \\ -310 \\ 0 \end{array} $ $ \begin{array}{r} N = 3 \\ -15 \\ -8470 \\ 0 \end{array} $ $ \begin{array}{r} N = 20 \\ 4 \\ 0 \\ -140 \\ -116 \end{array} $ $ \begin{array}{r} N = 2 \\ -140 \\ -116 \\ 90 \end{array} $	$ \begin{vmatrix} 0 & 0 & 0 \\ 0 & 0 & 0 \end{vmatrix} $ $ \begin{vmatrix} 0 & 0 & 0 & 0 \\ $	$ \begin{array}{c} 4 \\ 4 \\ 2 \\ 4 \end{array} $ $ = 19 \\ 3 \\ 1 \\ 3 $ $ 2^2 \cdot 3 \\ 6 \\ 6 \\ 2 \\ 2 $ $ = 3 \cdot 7 \\ 8 \\ 4 \\ 8 $	- + + + + - - - - - - + - + + + + +	4 2 1 1 1 isogen 3 1 1 (1 isogen 8, 2 4, 1 8, 6 4, 3 (1 isogen 4, 2 2, 4 8, 1	y class) 4 2 1 1 y class) 3 1 1 ny class) 0,2 0,1 0,6 0,3 ny class) 4,2 2,4 8,1	3 1 1 3,2 3,1 1,2 1,1	I_{4} I_{2} I_{1} I_{2} I_{4} I_{2} I_{2} I_{4} I_{8} I_{1}	$2:2 \\ 2:1,3,4 \\ 2:2 \\ 2:2$ $2:2$ $2:2$ $2:2$ $2:2$ $2:3:3 \\ 2:1;3:4 \\ 2:4;3:1 \\ 2:3;3:2$ 21 21 $2:2,3,4 \\ 2:1,5,6 \\ 2:1$

	a_1 a_2 a_3	a_4	$a_6 r $	T	$s \operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies	;
24			N = 24	= 2	$3 \cdot 3$ (1 is	sogeny cla	ass)		:	24
A1(B)	0 - 1 0	-4	4 0	8	+ 8,2	0,2	4, 2	I_{1}^{*},I_{2}	2:2,3,4	
A2(C)	0 - 1 0	-24	-36 0	4	+ 10,4	0, 4	2, 2	III^*,I_4	2:1,5,6	
A3(D)	0 - 1 0	-64	220 0	4	+ 10, 1	0, 1	2, 1	III^*,I_1	2 :1	
A4(A)	0 - 1 0	1	0 0	4	-4,1	0, 1	2, 1	III,I_1	2:1	
A5(F)	0 - 1 0		-2772 0	2	+ 11,2	0,2	1, 2	II^*,I_2	2 :2	
A6(E)	0 - 1 0	16	-180 0	2	- 11,8	0,8	1,2	II^*,I_8	2 :2	
26			N = 26 =	= 2 ·	13 (2 iso	ogeny clas	sses)			26
A1(B)	1 0 1	-5	$-8 \mid 0 \mid$	3	- 3,3	3,3	1,3	I_3,I_3	3 : 2, 3	
A2(C)	1 0 1	-460	-3830 0	1	-9,1	9, 1	1, 1	I_9,I_1	3 :1	
A3(A)	1 0 1	0	0 0	3	-1,1	1, 1	1, 1	I_1,I_1	3:1	
B1(D)	1 - 1 1	-3	3 0	7	-7,1	[7, 1]	[7,1]	I_7,I_1	7 :2	
B2(E)	1 - 1 1	-213	-1257 0	1	-1,7	1,7	1, 1	I_1,I_7	7 :1	
27			N=2	7 =	3^3 (1 iso	geny clas	s)			$\frac{}{27}$
A1(B)	0 0 1	0	$-7 \mid 0 \mid$	3	- 9	0	3	IV*	3:2,3	
A2(D)	0 0 1		-1708 0	1	- 11	0	1	II^*	3 :1	
A3(A)	0 0 1	0	0 0	3	- 3	0	1	II	3:1,4	
A4(C)	0 0 1	-30	63 0	3	- 5	0	1	IV	3 :3	
30			N = 30 =	= 2 ·	$3 \cdot 5$ (1 i	isogeny cl	ass)		•	30
A1(A)	1 0 1	1	2 0	6	-4,3,1	4, 3, 1	2, 3, 1	I_4, I_3, I_1	2 :2; 3 :3	
A2(B)	1 0 1	-19	$26 \mid 0 \mid$	12	+ 2, 6, 2	2, 6, 2	2, 6, 2	I_2,I_6,I_2	2:1,4,5;3	: 6
A3(C)	1 0 1	-14	-64 0	2	-12, 1, 3	12, 1, 3	2, 1, 1	I_{12},I_1,I_3		
A4(D)	1 0 1	-69	-194 0	6	+1,12,1	1, 12, 1	1, 12, 1	· · · · · ·		
A5(E)	1 0 1		1862 0	6	+ 1, 3, 4	1, 3, 4	1, 3, 2	I_1,I_3,I_4	2 :2; 3 :8	
A6(F)		-334	-2368 0	4	+6,2,6	6, 2, 6	2, 2, 2	I_6,I_2,I_6	2:3,7,8;3	: 2
A7(G)			-150368 0	2	+3,4,3	3,4,3	1, 4, 1	I_3,I_4,I_3	2:6;3:4	
A8(H)	1 0 1	-454	-544 0	2	+3,1,12	3, 1, 12	1, 1, 2	I_3,I_1,I_{12}	2:6; 3:5	
32			N = 3	2 =	2^5 (1 iso	geny clas	s)		•	32
A1(B)	0 0 0	4	$0 \mid 0 \mid$	4	- 12	0	4	I_3^*	2:2	
A2(A)	0 0 0	-1	0 0	4	+ 6	0	2	III	2:1,3,4	
A3(C)	0 0 0	-11	-14 0	2	+ 9	0	1	I*	2 :2	
A4(D)	0 0 0	-11	14 0	4	+ 9	0	2	I_0^*	2 :2	
33			N = 33	= 3	$\cdot 11 (1 \text{ is}$	sogeny cla	ass)			<u>33</u>
A1(B)	1 1 0	-11	0 0	4	+ 6,2	6, 2	2, 2	I_6,I_2	2:2,3,4	
A2(A)	1 1 0	-6	-9 0	2	+ 3, 1	3, 1	1, 1	I_3,I_1	2 :1	
A3(D)	1 1 0		621 0	4	+ 3,4	3,4	1,4	I_3,I_4	2 :1	
A4(C)	1 1 0	44	$55 \mid 0 \mid$	2	-12,1	12, 1	2,1	I_{12} , I_1	2 :1	
34			N = 34	= 2	$\cdot 17$ (1 is	sogeny cla	ass)			34
A1(A)	1 0 0	-3	1 0	6	+ 6,1	6,1	6, 1	I_6,I_1	2 :2; 3 :3	
A2(B)	1 0 0	-43	$105 \mid 0 \mid$	6	+ 3, 2	3, 2	3, 2	I_3,I_2	2:1;3:4	
A3(C)	1 0 0		-411 0	2	+ 2,3	2,3	2, 1	I_2,I_3	2:4;3:1	
A4(D)	1 0 0	-113	-329 0	2	+ 1,6	1,6	1, 2	I_1,I_6	2:3;3:2	

	a_1	$\frac{a}{a}$	a ₃	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
	1		-				' '			(3)	P		
35	I				N =	1		7	, ,	eny class)	T	T	$\frac{35}{}$
A1(B)	0	1	1	9	1	0	3	_	3,3	3, 3	1,3	I_3,I_3	3:2,3
A2(C) A3(A)	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	1 1	1 1	$-131 \\ -1$	$-650 \\ 0$	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$\frac{1}{3}$	_	$9, 1 \\ 1, 1$	9,1	1,1	I_9,I_1	3:1 3:1
Ao(A)	U	1	1	-1	0	U	3		1, 1	1,1	1,1	I_1,I_1	3 . 1
36					N = 3	86 =	$=2^2$.	3^2	(1 isog	geny class)			36
A1(A)	0	0	0	0	1	0	6	_	4, 3	0,0	3, 2	IV,III	2 :2; 3 :3
A2(B)	0	0	0	-15	22	0	6	+	8,3	0,0	3, 2	IV*,III	2:1;3:4
A3(C)	0	0	0	125	-27	0	$\begin{array}{c} 2 \\ 2 \end{array}$	_	4,9	0,0	1, 2	IV,III*	2:4;3:1
A4(D)	0	0	0	-135	-594	0	Z	+	8,9	0,0	1,2	IV*,III*	2:3;3:2
37					N =	37 :	= 37	(:	2 isogeny	y classes)			37
A1(A)	0	0	1	-1	0	1	1	+	1	1	1	I_1	
B1(C)	0	1	1	-23	-50	0	3	+	3	3	3	I_3	3:2,3
B2(D)	0	1	1	-1873	-31833	0	1	+	1	1	1	I_1	3 :1
B3(B)	0	1	1	-3	1	0	3	+	1	1	1	I_1	3 :1
38					N = 38	8 =	$2 \cdot 1$	9	(2 isoge:	ny classes)		38
A1(D)	1	0	1	9	90	0	3	_	9,3	9,3	1,3	I_9,I_3	3 :2,3
A2(E)	1	0	1	-86	-2456	0	1	_	27, 1	27, 1	1, 1	I_{27} , I_1	3 :1
A3(C)	1	0	1	-16	22	0	3	_	3, 1	3, 1	1,1	I_3,I_1	3 :1
B1(A)	1	1	1	0	1	0	5	[-	5, 1	5,1	5,1	I_5,I_1	5 :2
B2(B)	1	1	1	-70	-279	0	1	_	1,5	1,5	1,1	I_1,I_5	5 :1
39					N = 3	39 =	= 3 · 1	13	(1 isoge	eny class)			39
A1(B)	1	1	0	-4	-5	0	4	+	2,2	2,2	2,2	I_2,I_2	2 :2,3,4
A2(C)	1	1	0	-69	-252	0	2	+	4,1	4, 1	2, 1	I_4,I_1	2 :1
A3(D)	1	1	0	-19	22	0	4	+	1, 4	1,4	1, 4	I_1,I_4	2 :1
A4(A)	1	1	0	1	0	0	2	_	1, 1	1,1	1,1	I_1,I_1	2 :1
40					N = 4	40 =	$= 2^3 -$	- 5	(1 isoge	eny class)			40
A1(B)	0	0	0	-7	-6	0	4	+	8,2	0, 2	2, 2	I_1^*, I_2	2:2,3,4
A2(D)	0	0	0	-107	-426	0	2	+	10, 1	0, 1	2, 1	III^*,I_1	2 :1
A3(A)	0	0	0	-2	1	0	4	+	4, 1	0, 1	2, 1	III,I_1	2 :1
A4(C)	0	0	0	13	-34	0	4	_	10, 4	0,4	2,4	III^*,I_4	2 :1
42					N = 4	2 =	$2 \cdot 3$. 7	(1 isog	geny class))		42
A1(A)	1	1	1	-4	5	0	8	_	8, 2, 1	8, 2, 1	8, 2, 1	I_{8},I_{2},I_{1}	2 :2
A2(B)	1	1	1	-84	261	0	8	+	4, 4, 2	4, 4, 2	4, 2, 2	I_4,I_4,I_2	2:1,3,4
A3(C)	1	1	1	-104	101	0	4	+	2, 8, 4	2, 8, 4	2, 2, 2	I_2,I_8,I_4	2:2,5,6
A4(D)	1	1 1		-1344	18405	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$\begin{pmatrix} 4 \\ 2 \end{pmatrix}$	+	2, 2, 1	$\begin{bmatrix} 2, 2, 1 \\ 1, 4, 8 \end{bmatrix}$	$\begin{bmatrix} 2, 2, 1 \\ 1, 2, 2 \end{bmatrix}$	I_2,I_2,I_1	2:2 2:3
A5(F) A6(E)	1 1	1	$1 \\ 1$	-914 - 386	-10915 1277	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$\frac{2}{2}$		1, 4, 8 $1, 16, 2$	1, 4, 8 $1, 16, 2$	$\begin{bmatrix} 1, 2, 2 \\ 1, 2, 2 \end{bmatrix}$	$\begin{bmatrix} I_1,I_4,I_8 \\ I_1,I_{16},I_2 \end{bmatrix}$	2:3 2:3
110(11)	1		1	500	1411				1,10,2	1,10,2	-, -, -	±1,±16,±2	- · · ·
43					N =	43	= 43	3	(1 isoger	ny class)			43
A1(A)	0	1	1	0	0	1	1	_	1	1	1	I_1	
•													

	a_1	a_2	a_3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
44					N = 44	= 2	$2^2 \cdot 11$	1	(1 isoge	ny class)			44
A1(A)	0	1	0	3	-1	0	3	_	8,1	0,1	3, 1	IV^*,I_1	3 :2
A2(B)	0	1	0	-77	-289	0	1	_	8,3	0,3	1,1	IV^*,I_3	3 :1
45					N = 45	=	$3^2 \cdot 5$	((1 isoger	ny class)			45
A1(A)		-1	0	0	-5	0	2	_	7, 1	1, 1	2, 1	$\mathrm{I}_{1}^{st},\!\mathrm{I}_{1}$	2 :2
A2(B)		-1	0	-45	-104	0	4	+	8, 2	2,2	4, 2	I_2^*, I_2	2:1,3,4
A3(D)		-1	0	-720	-7259	0	2	+	7,1	1,1	4, 1	I_1^*, I_1	2:2 2:2 5 6
A4(C) A5(E)		-1 -1	$0 \\ 0$	$-90 \\ -1215$	175 16600	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$\frac{4}{4}$	+ +	10, 4 $14, 2$	4,4 $8,2$	4, 2 $4, 2$	I_4^*, I_4	$egin{array}{ c c c c c c c c c c c c c c c c c c c$
A6(F)		$-1 \\ -1$	0	-1215 315	1066	0	$\frac{4}{2}$	_	8,8	$\frac{6,2}{2,8}$	$\frac{4}{2}, \frac{2}{2}$	$egin{array}{c} { m I}_8^*, { m I}_2 \ { m I}_2^*, { m I}_8 \end{array}$	2:4,7,8 2:4
A7(H)		-1			1048135	0	$\frac{2}{2}$	+	10, 1	$\frac{2}{4}, 1$	2, 2 $2, 1$	${\rm I}_{4}^{12,18}, {\rm I}_{1}$	2:5
A8(G)		-1	0	-990	22765	0	2	_	22, 1	16, 1	4, 1	I_{16}^{*},I_{1}	2:5
` '										,	,	107 -	
46					N = 46	1		1	(1 isoger	,		Τ	46
A1(A)			0	-10	-12	0	2	-	10, 1	10, 1	2, 1	I_{10},I_1	2 :2
A2(B)	1	-1	0	-170	-812	0	2	+	5,2	5, 2	1,2	I_5,I_2	2 :1
48					N = 48		$2^4 \cdot 3$	((1 isoger	ny class)		T	48
A1(B)	0	1	0	-4	-4	0	4	+	8,2	0,2	2,2	I_0^*, I_2	2:2,3,4
A2(D)	0	1	0	-64	-220	0	2	+	10, 1	0, 1	2, 1	I_2^*, I_1	2 :1
A3(C)	0	1	0	-24	36	0	8	+	10, 4	0,4	4,4	I_2^*, I_4	2:1,5,6
A4(A)	0	1	0	1	0	0	2	_	4,1	0,1	1, 1	II,I_1	2 :1
A5(F) A6(E)	$\begin{array}{c} 0 \\ 0 \end{array}$	1 1	$0 \\ 0$	-384 16	2772 180	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	4 8	+	11, 2 $11, 8$	$0, 2 \\ 0, 8$	2, 2 $4, 8$	$egin{array}{c} { m I}_3^*, { m I}_2 \ { m I}_3^*, { m I}_8 \end{array}$	$\begin{array}{ c c c c c c } 2 : 3 \\ 2 : 3 \end{array}$
110(L)	U			10	100	U	U		11,0	0,0	4,0	13,18	2.0
49					N = 4			(1	isogeny	<u> </u>		T	49
A1(A)			0	-2	-1	0	2	_	3	0	2	III	2 :2; 7 :3
A2(B)		-1	0	-37	-78	0	2	+	3	0	2	III	2 :1; 7 :4
A3(C)		-1	0	-107	552	0	2	<u> </u>	9	0	2	III*	2 :4; 7 :1
A4(D)	1	-1	0	-1822	30393	0	2	+	9	0	2	III*	2:3;7:2
<u>50</u>					N = 50	= 2	$\cdot 5^2$	(2	2 isogeny	classes)		ı	50
A1(E)	1	0	1	-1	-2	0	3	-	1, 4	1,0	1,3	I_1 ,IV	3:2;5:3
A2(F)	1	0	1	-126	-552	0	1	_	3, 4	3,0	1, 1	I_3 ,IV	3:1;5:4
A3(G)	1	0	1	-76	298	0	3	_	5,8	5,0	1,3	I_5 , IV^*	3:4;5:1
A4(H)	1	0	1	549	-2202 	0	1	— 	15,8	15,0	1,1	I ₁₅ ,IV*	3 :3; 5 :2
B1(A)	1	1	1	-3	1	0	5	_	5, 2	5,0	5, 1	I_5 ,II	3 :2; 5 :3
B2(B)	1	1	1	22	-9	0	5	_	15, 2	15,0	15, 1	I_{15} ,II	[3:1;5:4]
B3(C)	1	1	1	-13	-219	0	1	_	1,10	1,0	1,1	I_1,II^*	3:4;5:1
B4(D)	1	1	1	-3138	-68969	0	1	_	3, 10	3,0	3, 1	I_3,II^*	3:3;5:2
51					N = 51			. ((1 isoger	<u>, , , , , , , , , , , , , , , , , , , </u>		T .	51
A1(A)	0	1	1	1	-1	0	3	_	3, 1	3,1	3, 1	I_3,I_1	3 :2
A2(B)	0	1	1	-59	-196	0	1	_	1,3	1,3	1,1	I_1,I_3	3 :1
52					N = 52		$2^2 \cdot 13$	3	(1 isoge	ny class)		Γ	52
A1(B)	0	0	0	1	-10		2	_	8, 2	0, 2	1, 2	IV^*,I_2	2 :2
A2(A)	0	0	0	-4	-3	0	2	+	4, 1	0,1	1, 1	IV,I_1	2 :1

114					IADLE	1. 1	111111	110	COICVE	5 53A-02A			
	a_1	a_2	a_3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
53					N = 5	3 =	= 53	(1	isogeny	class)			53
A1(A)	1	-1	1	0	0	1	1	_	1	1	1	I_1	
54					N = 54 = 100	= 2	$\cdot 3^3$	(2	isogeny	classes)			54
A1(E)	1	-1	0	12	8	0	3	_	3,9	3,0	1,3	I_3 , IV^*	3 :2,3
A2(F)		-1	0	-123	-667	0	1	_	9,11	9,0	1, 1	I_9,II^*	3 : 1
A3(D)	1	-1	0	_3	3	0	3		1,3	1,0	1,1	I_1,II	3 :1
B1(A)		-1	1	1	-1	0	3	_	3, 3	3,0	3, 1	I_3 ,II	3:2,3
B2(C)		-1	1	-29	-53	0	1 9	_	1,9	1,0	1, 1	I_1,IV^*	3:1
B3(B)	1	<u>-1</u>	1	-14	29	0	9	_	9,5	9,0	9,3	I_9 ,IV	3 :1
<u>55</u>	ı				N = 55	= ;	$5 \cdot 11$	(1 isogen	y class)			55
A1(B)		-1	0	-4	3	0	4	+	2, 2	2,2	2, 2	I_2,I_2	2:2,3,4
A2(D)		-1	$0 \\ 0$	-29	-52	$\begin{array}{c} 0 \\ 0 \end{array}$	$\frac{2}{4}$	+	1,4	1,4	1,2	I_1,I_4	$\begin{bmatrix} 2 : 1 \\ 2 : 1 \end{bmatrix}$
A3(C) A4(A)		$-1 \\ -1$	0	$-59 \\ 1$	190 0	0	$\frac{4}{2}$	+	4, 1 $1, 1$	$\begin{array}{c c} 4,1 \\ 1,1 \end{array}$	4,1 $1,1$	$egin{array}{c} \mathrm{I}_4, \mathrm{I}_1 \ \mathrm{I}_1, \mathrm{I}_1 \end{array}$	2:1 2:1
. , ,	_									· ·		-1,-1	
56	l _				N = 56			(2		classes)		1	56
A1(C)	0	0	0	1	2	0	4	_	8,1	0,1	4,1	I_1^*, I_1	$\begin{bmatrix} 2 : 2 \\ 2 : 1 & 2 \end{bmatrix}$
A2(D) A3(E)	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	0	$0 \\ 0$	$-19 \\ -59$	$ \begin{array}{r} 30 \\ -138 \end{array} $	$0 \\ 0$	$\frac{4}{2}$	++	10, 2 $11, 4$	$0, 2 \\ 0, 4$	$2, 2 \\ 1, 2$	III^*,I_2 II^*,I_4	$egin{array}{ c c c c c c c c c c c c c c c c c c c$
A4(F)	0	0	0	-299	1990	0	$\frac{2}{2}$	+	11, 1	0, 1	1, 2 $1, 1$	II^*,I_1	2:2 2:2
B1(A)	0	-1	0	0	-4	0	2	<u> </u>	10, 1	$\begin{bmatrix} 0, 1 \end{bmatrix}$	$\frac{1}{2}, \frac{1}{1}$	$ III^*, I_1 $	2 : 2
B2(B)		-1	0	-40	-84	0	2	+	11, 2	0, 2	1, 2	$\mathrm{II}^*, \mathrm{I}_2$	2 :1
57					$N = 57 = 10^{-1}$	= 3	. 19	(3	isogeny	classes)			57
A1(E)	0	-1	1	-2	2	1	1	_	$\frac{2}{2,1}$	2,1	2, 1	I_2,I_1	
B1(B)	1 1		 1	 -7	5	0	4	<u> </u>	$\frac{1}{2}, \frac{1}{2}$	$\begin{bmatrix} 2,2 \end{bmatrix}$	2,2	I_2,I_2	[2 : 2, 3, 4]
B2(A)	1	0	1	-2	-1	0	$\overline{2}$	+	1, 1	1, 1	1, 1	I_1,I_1	2 :1
B3(C)	1	0	1	-102	385	0	4	+	4, 1	4, 1	4, 1	I_4,I_1	2 : 1
B4(D)	1	0	1	8	29	0	2	— 	1,4	1,4	1,2	I_1,I_4	2 :1
C1(F)	0	1	1	20	-32	0	5	_	10, 1	10, 1	10, 1	I_{10},I_1	5 :2
C2(G)	0	1	1	-4390 ·	-113432	0	1	_	2,5	2,5	2, 1	I_2,I_5	5 :1
58					N = 58	= 2	. 29	(2	isogeny	classes)			58
A1(A)	1	-1	0	-1	1	1	1		2,1	$\begin{bmatrix} 2,1 \\ \end{bmatrix}$	2,1	I_2,I_1	
B1(B)	1	1	1	5	9	0	5	_	10, 1	10, 1	10, 1	I_{10} , I_1	5 :2
B2(C)	1	1	1	-455	-3951	0	1	_	2,5	2,5	2, 1	I_2,I_5	5 : 1
61					N = 6	1 =	61	(1	isogeny	class)			61
A1(A)	1	0	0	-2	1	1	1	_	1	1	1	I_1	
62					N = 62	= :	$2 \cdot 31$	(1 isogen	y class)			62
A1(A)	1	-1	1	-1	1	0	4	<u> </u>	4,1	4,1	4, 1	I_4,I_1	2 :2
A2(B)		-1	1	-21	41	0	4	+	2, 2	2,2	2, 2	I_2,I_2	2:1,3,4
A3(C)		-1	1	-31	5 2207	0	2	+	1,4	1,4	1,2	I_1,I_4	2 :2
A4(D)	1	-1	1	-331	2397	0	2	+	1, 1	1, 1	1, 1	I_1,I_1	2 :2

	a_1	a_2	a_3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
63					N = 63	=	3^2 ·	7	(1 isoge	eny class)			63
A1(A)		-1	0	9	0	0	2	_	8, 1	2, 1	2, 1	I_2^*, I_1	2 :2
A2(B)		-1	0	-36	27	0	4	+	10, 2	4, 2	4, 2	I_4^*, I_2	2:1,3,4
A3(C)		$-1_{_{1}}$	0	-351	-2430	0	$\frac{2}{4}$	+	14,1	8, 1	4, 1	I_8^*, I_1	2:2 2:2 5 6
A4(D) A5(F)		$-1 \\ -1$	0	$-441 \\ -7056$	3672 229905	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$\frac{4}{4}$	+++++++++++++++++++++++++++++++++++++++	$8, 4 \\ 7, 2$	2, 4 $1, 2$	$4, 2 \\ 4, 2$	$egin{array}{c} { m I}_2^*, { m I}_4 \ { m I}_1^*, { m I}_2 \end{array}$	$egin{array}{c} {f 2}:2,5,6 \ {f 2}:4 \end{array}$
A6(E)		-1		-306	5859	0	2	_	7, 2 $7, 8$	1, 2 $1, 8$	2,2	$egin{array}{c} \mathbf{I}_1^1, \mathbf{I}_2 \ \mathbf{I}_1^*, \mathbf{I}_8 \end{array}$	2:4 2:4
, ,								<u> </u>		,	,	1, 0	
64					N = 6	64 =	= 2 ⁶	(1 isogen	y class)		·	64
A1(B)	0		0	-4	0	0	4	+	12	0	4	I_2^*	2:2,3,4
A2(C)	0	0	0	-44	-112	0	2	+	15	0	2	I*	2 :1
A3(D) A4(A)	$0 \\ 0$	$0 \\ 0$	0	$-44 \\ 1$	112 0	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$\frac{4}{2}$	+	$\frac{15}{6}$	$0 \\ 0$	4 1	$egin{array}{c} \mathrm{I}_5^* \ \mathrm{II} \end{array}$	$egin{array}{c} {f 2}:1 \\ {f 2}:1 \end{array}$
$\Lambda^4(\Lambda)$	U		-	1	0	U				U	1	11	2 . 1
65					N = 65	=	$5 \cdot 1$	3	(1 isoge	eny class)			65
A1(A)	1	0	0	-1	0	1	2	+	1,1	1,1	1,1	I_1,I_1	2 :2
A2(B)	1	0	0	4	1	1	2	_	2,2	2,2	2, 2	I_2,I_2	2 :1
66				1	V = 66 =	2 ·	$3 \cdot 1$.1	(3 isoge	eny classe	(\mathbf{s})		66
A1(A)	1	0	1	-6	4	0	6	+	2, 3, 1	2, 3, 1	2, 3, 1	I_2, I_3, I_1	2 :2; 3 :3
A2(B)	1	0	1	4	20	0	6	_	1, 6, 2	1, 6, 2	1, 6, 2	I_1, I_6, I_2	2:1;3:4
A3(C)	1	0	1	-81	-284	0	2	+	6, 1, 3	6, 1, 3	2, 1, 1	I_6,I_1,I_3	2:4;3:1
A4(D)	1	0	1	-41 	-556	0	2	<u> </u>	3, 2, 6	3, 2, 6	1, 2, 2	I_3,I_2,I_6	2 :3; 3 :2
B1(E)	1	1	1	-2	-1				4, 1, 1	4, 1, 1	4, 1, 1	I_4,I_1,I_1	2 :2
B2(F)	1		1	-22	-49		4		2, 2, 2	2, 2, 2	2, 2, 2	I_2,I_2,I_2	2:1,3,4
B3(H)	1	1	1		-2689		$\frac{2}{2}$			1, 1, 1	1, 1, 1	I_1,I_1,I_1	2 :2
B4(G)	1	1		-12	-81 	'		· – –	1,4,4	1,4,4	1,2,2	I_1,I_4,I_4	2 :2
C1(I)	1		0	-45	81		10			10, 5, 1			2 :2; 5 :3
C2(J)	1		0	115		0	10		5, 10, 2	, ,		I_5, I_{10}, I_2	·
C3(L) C4(K)	1 1			-10065	-389499 -390309	0	$\frac{2}{2}$		2, 1, 5 $1, 2, 10$	2, 1, 5 $1, 2, 10$	2, 1, 5	$egin{array}{c} I_2, I_1, I_5 \ I_1, I_2, I_{10} \ \end{array}$	$egin{array}{c cccc} {f 2}:4;{f 5}:1 \ {f 2}:3;{f 5}:2 \end{array}$
C4(K)	1	0	0	-10000		U		_	1, 2, 10	1, 2, 10	1, 2, 10	11,12,110	2.3,3.2
67					N = 6	57 =	= 67	(1 isogen	y class)			67
A1(A)	0	1	1	-12	-21		1	-	1	1	1	I_1	
							1	<u> </u>			<u> </u>	I	<u>ı</u>
69					N = 69			3	(1 isoge	eny class)		Г	69
A1(A)	1		1	-1	-1		2	_	2,1	2, 1	2, 1	I_2,I_1	2 :2
A2(B)	1	0	1	-16	-25	U	2	+	1,2	1, 2	1, 2	I_1,I_2	2 :1
70					N = 70	= '	2 · 5 ·	7	(1 isog	eny class))		70
A1(A)	1	-1	1	2	$\frac{17 - 10}{-3}$		4	1	4, 2, 1	4, 2, 1	4, 2, 1	I_4,I_2,I_1	2 :2
A1(A) A2(B)		$-1 \\ -1$		-18		0	$\frac{4}{4}$			$\frac{4, 2, 1}{2, 4, 2}$	$\frac{4}{2}, \frac{2}{2}, \frac{1}{2}$	I_{2},I_{4},I_{2}	$\begin{bmatrix} 2 : 2 \\ 2 : 1, 3, 4 \end{bmatrix}$
A3(D)		-1		-268		0	2		1, 2, 4	1, 2, 4	1, 2, 2	I_{1},I_{2},I_{4}	2:1,5,4 2:2
A4(C)		-1		-88	317	0				1, 2, 1 $1, 8, 1$	1, 2, 2 $1, 2, 1$	$I_1,I_2,I_4 \\ I_1,I_8,I_1$	2:2
						<u> </u>		<u> </u>	, ,	, ,	, ,	_, _, .	

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A1(A)

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							Imi		1/A)	1 (1)		IZ - 1 - 1 - 1 - 1	T
	a_1	a_2	a_3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
72	1				N = 72 =	= 2 ⁵	$3 \cdot 3^2$	(1 isoger	ny class)	Ī		72
A1(A)	0	0	0	6	-7	0	4	_	4,7	0, 1	2,4	III,I_1^*	2 :2
A2(B)	0	0	0	-39	-70	0	4	+	8,8	0, 2	2,4	I_1^*, I_2^*	2:1,3,4
A3(D)	0	$0 \\ 0$	$0 \\ 0$	-579	-5362 1190	0	$\frac{2}{4}$	+	10,7	0,1	2,2	III^*,I_1^*	2:2
A4(C) A5(F)	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	0	0	-219 -3459	78302	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$\frac{4}{2}$	+++++++++++++++++++++++++++++++++++++++	10, 10 $11, 8$	$0, 4 \\ 0, 2$	$2, 4 \\ 1, 2$	III^*,I_4^* II^*,I_2^*	2:2,5,6 $2:4$
A6(E)	0	0	0	-3499 141	4718	0	$\frac{2}{2}$	_	11, 0 $11, 14$	$0, 2 \\ 0, 8$	1, 2 $1, 4$	II^*,I_8^*	2:4 2:4
()										,		, 6	
73					N = 73	=	73	(1	isogeny	class)	T		73
A1(B)		-1		4	-3	0	2	_	2	2	2	${ m I}_2$	2 :2
A2(A)	1	-1	0	-1	0	0	2	+	1	1	1	I_1	2 :1
7 5					N = 75 =	3	5^{2}	(3	isogeny	classes)			75
A1(A)	0	-1	1	-8	-7	0	1	<u> </u>	1,4	1,0	1,1	I_1 ,IV	5 : 2
A2(B)		-1	1	42	443	0	1	_	5, 8	5,0	1, 1	I_5 , IV^*	5 :1
B1(E)	1	0	1	-1	23	0	2	_	1,7	1,1	1,2	I_1,I_1^*	2 :2
B2(F)	1	0	1	-126	523	0	4	+	2,8	2, 2	2,4	$\mathrm{I}_2,\!\mathrm{I}_2^*$	2:1,3,4
B3(G)	1	0	1	-251	-727	0	4	+	4, 10	4, 4	4, 4	$\mathrm{I}_4,\!\mathrm{I}_4^*$	2:2,5,6
B4(H)	1	0	1	-2001	34273	0	2	+	1,7	1, 1	1, 2	I_1,I_1^*	2 :2
B5(I)	1	0	1	-3376	-75727	0	4	+	8,8	8, 2	8,4	I_8,I_2^*	2:3,7,8
B6(J)	1	0	1	874	-5227	0	2	_	2, 14	2,8	2,4	I_{2},I_{8}^{*}	2 :3
B7(L) B8(K)	1 1	$0 \\ 0$	1	-54001 -2751	-4834477 -104477	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$\frac{2}{4}$	+	$4, 7 \\ 16, 7$	$4, 1 \\ 16, 1$	$ \begin{array}{c c} 4,4\\ 16,4 \end{array} $	$\begin{array}{c c} I_4, I_1^* \\ I_{16}, I_1^* \end{array}$	2:5 2:5
C1(C)	1 -	- - - 1	- - - 1	2	4	0	5	¦	$-\frac{10}{5}, \frac{1}{2}$	$\begin{bmatrix} -5, 0 \\ 5, 0 \end{bmatrix}$	$\begin{bmatrix} 5, 1 \\ 5, 1 \end{bmatrix}$	$egin{array}{cccccccccccccccccccccccccccccccccccc$	$oxed{f 5:2}$
C1(C)	0	1	1	-208	-1256	0	1		1, 10	1,0	1, 1	I_1,II^*	5:2 $5:1$
- ()									, -	, -	,	1)	
76					N = 76 =	= 2 ²	$2 \cdot 19$	(1 isoger	ny class)			76
A1(A)	0	-1	0	-21	-31	0	1	_	8,1	0, 1	1,1	IV^*,I_1	
77					N = 77 =	7 .	11	(3	isogeny	classes)			77
A1(F)	0	0	1	2	0	1	1	_	2, 1	2, 1	2, 1	I_2,I_1	
B1(D)	0	1	1	-49	600	0	3		6, 3	6,3	6, 1	I_6,I_3	3:2,3
B2(E)	0	1	1	441	-15815	0	1	_	2,9	2,9	2, 1	I_2,I_9	3 : 1
B3(C)	0	1	1	-89	295	0	3	_	2,1	2,1	2, 1	I_2,I_1	3 :1
C1(A)	1		0	4	11	0	2	-	3, 2	3, 2	1,2	I_3,I_2	2 :2
C2(B)	1	1	0	-51	110	0	2	+	6, 1	6, 1	2, 1	I_6,I_1	2 :1
78					N = 78 =	$2 \cdot$	$3 \cdot 13$	3	(1 isoge	nv class)			78
A1(A)	1	1	0	-19	685	0	2	1	$\frac{(1.5585)}{16,5,1}$	16, 5, 1	2, 1, 1	I_{16}, I_5, I_1	2 :2
A2(B)	1	1	0	-1299	17325	0	4		8, 10, 2	8, 10, 2	[2, 2, 2]	I_{8},I_{10},I_{2}	2:1,3,4
A3(C)	1	1	0	-2339	-15747	0	2		4, 20, 1	4, 20, 1	[2, 2, 1]	I_4, I_{20}, I_1	2:2
A4(D)	1	1		-20739	1140957	0	4		4, 5, 4	4, 5, 4	2, 1, 4		2 :2
											1	1	

N=79=79

0 1

(1 isogeny class)

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	a a	<i>a</i>				T		$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$		Kodaira	Isogonios
	a_1 a_2	a_3	a_4	a_6	r	1	3	οια(Δ)	$\operatorname{ord}_{-}(J)$	c_p	Rodana	Isogenies
80	T			N = 80) =	$2^4 \cdot 8$	5	(2 isoger	ny classes)		80
A1(F)	0 0	0	-7	6	0	4	+	8, 2	0, 2	2,2	I_0^*, I_2	2:2,3,4
A2(E) A3(H)	$\begin{bmatrix} 0 & 0 \\ 0 & 0 \end{bmatrix}$	$0 \\ 0$	$-2 \\ -107$	-1 426	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$\begin{array}{ c c }\hline 2\\ 4 \end{array}$	+++++++++++++++++++++++++++++++++++++++	$4, 1 \\ 10, 1$	$0, 1 \\ 0, 1$	$\begin{bmatrix} 1,1\\4,1 \end{bmatrix}$	$egin{array}{c} ext{II}, ext{I}_1 \ ext{I}_2^*, ext{I}_1 \end{array}$	$egin{array}{c} {f 2} : 1 \\ {f 2} : 1 \end{array}$
A4(G)	$\begin{bmatrix} 0 & 0 \\ 0 & 0 \end{bmatrix}$	0	-107 13	$\frac{420}{34}$	0	4	_	10, 1 $10, 4$	0,1 $0,4$	2, 4	${\rm I}_{2}^{1}, {\rm I}_{1}$ ${\rm I}_{2}^{*}, {\rm I}_{4}$	2 : 1 $2 : 1$
B1(B)	$\begin{bmatrix} 1 & 1 & 1 & 1 \\ 0 & -1 & 1 \end{bmatrix}$	0	₄	 -4	0	2	<u> </u>	8,2	$\begin{bmatrix} 0, 2 \end{bmatrix}$	$\begin{bmatrix} -\frac{7}{2} & -\frac{7}{2} \\ 1, 2 \end{bmatrix}$	$\left \begin{array}{cccccccccccccccccccccccccccccccccccc$	2 :2; 3 :3
B2(A)	0 - 1	0	-1	0	0	2	+	4, 1	0, 2 $0, 1$	1,1	II,I_1	2:1;3:4
B3(D)	0 - 1	0	-36	140	0	2	_	8, 6	0,6	1, 2	I_0^*, I_6	2:4;3:1
B4(C)	0 -1	0	-41	116	0	2	+	4,3	0,3	1, 1	II,I_3	2:3;3:2
82				N = 8	2 =	= 2 · △	41	(1 isoge	eny class)			82
A1(A)	1 0	1	-2	0	1	2	+	2, 1	2,1	2, 1	I_2,I_1	2 :2
A2(B)	1 0	1	-12	-16	1	2	+	1, 2	1,2	1, 2	I_1,I_2	2 :1
83				N =	83	= 83	3	(1 isoger	ny class)			83
A1(A)	1 1	1	1	0	1	1	_	1	1	1	I_1	
84				N = 84 :	= 2	$2^2 \cdot 3$. 7	(2 isog	eny classe	es)		84
A1(C)	0 1	0	7	0	0	6	_	4, 3, 2	0, 3, 2	3, 3, 2	IV,I_3,I_2	2 :2; 3 :3
A2(D)	0 1	0	-28	-28	0	6	+	8, 6, 1	0, 6, 1	3, 6, 1	IV^*,I_6,I_1	2:1;3:4
A3(E)	0 1	0	-113	-516	0	2	_	4, 1, 6	0, 1, 6	1, 1, 6	IV,I_1,I_6	2:4;3:1
A4(F)	0 1			-30700 	0	2	+ 	8,2,3	0, 2, 3	1,2,3	$ $ IV^*, I_2, I_3	2 :3; 3 :2
B1(A)	0 - 1	0	$-1 \\ -36$	-2	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$\begin{array}{c c} 2 \\ 2 \end{array}$		4, 1, 2	0, 1, 2	1, 1, 2	, -, -	2 :2
B2(B)	0 -1	0	-30	-72	U		+	8, 2, 1	0, 2, 1	1, 2, 1	IV^*,I_2,I_1	2 :1
85	Г			N = 8	5 =	= 5 · 1	17	(1 isoge	eny class)	ı		85
A1(A)	1 1	0	-8	-13	0	2	+	2,1	2, 1	2, 1	I_2,I_1	2 :2
A2(B)	1 1	0	-3	-22	0	2	_	4,2	4,2	2,2	I_4,I_2	2 :1
88				N = 88	8 =	2^3 ·	11	(1 isog	geny class)	1		88
A1(A)	0 0	0	-4	4	1	1	_	8,1	0,1	4, 1	$\mathrm{I}_{1}^{st},\!\mathrm{I}_{1}$	
89				N = 8	39 =	= 89	(2	2 isogeny	y classes)			89
A1(C)	1 1	1	-1	0	1	1	_	1	1	1	I_1	
B1(A)	1 1	0	4	5	0	2	Ī —	2	2	2	I_2	2 :2
B2(B)	1 1	0	-1	0	0	2	+	1	1	1	I_1	2 : 1
90			ي .	N = 90 = 0	= 2	3^2	. 5	(3 isog	geny classe	es)		90
A1(M)	1 -1	0	6	0	0	6	_	2, 3, 3	2,0,3	2, 2, 3	I_2 , III , I_3	2 :2; 3 :3
A2(N)	1 - 1	0	-24	18	0	6	+	1, 3, 6	1, 0, 6	1, 2, 6	I_1 , III , I_6	2:1;3:4
A3(O)	1 - 1	0	-69	-235	0	2	_	6, 9, 1	6,0,1	[2, 2, 1]	I_6,III^*,I_1	2:4;3:1
A4(P)	1 -1			-14707	0	2	+ 	3, 9, 2	3,0,2	1, 2, 2	<u> </u>	2 :3; 3 :2
B1(A)		1	-8	11	0	6	-	6, 3, 1	6,0,1	6, 2, 1	I_6 ,III, I_1	2 :2; 3 :3
B2(B) B3(C)	$\begin{array}{c c} 1 & -1 \\ 1 & -1 \end{array}$	1 1	$-128 \\ 52$	587 -53	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$\frac{6}{2}$	+	3, 3, 2 2, 9, 3	3, 0, 2 2, 0, 3	$\begin{bmatrix} 3, 2, 2 \\ 2, 2, 1 \end{bmatrix}$	I_3 ,III, I_2 I_2 ,III*, I_3	$egin{array}{c} {f 2}:1;{f 3}:4 \ {f 2}:4;{f 3}:1 \end{array}$
B4(D)	1 - 1		-218	-269	0	$\frac{2}{2}$	+	1, 9, 6	1,0,6	$\begin{bmatrix} 2, 2, 1 \\ 1, 2, 2 \end{bmatrix}$	I_{1},III^{*},I_{6}	2:4,3:1 $2:3;3:2$
\ /	l						1	, ,	. , ,	, ,	_ , , , ,	,

				Limi		1/4)	1 (1)		T. 1 .	
	$a_1 \ a_2 \ a_3$	a_4	$a_6 \mid r$	$\cdot T $	s C	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
90			N = 90	0=2	$\cdot 3^2$.5 (continue	l)		90
C1(E)	1 - 1 1		-61			4, 9, 1	4, 3, 1	4, 4, 1	I_4, I_3^*, I_1	2 :2; 3 :3
C2(F)	1 - 1 1		-709 0			2, 12, 2	2, 6, 2	[2, 4, 2]	I_2,I_6^*,I_2	2 :1,4,5; 3 :6
C3(G)	1 - 1 1		1721 0			12,7,3	12, 1, 3	12, 4, 3	I_{12},I_1^*,I_3	2 :6; 3 :1
C4(I) C5(H)	$ \begin{array}{c cccc} 1 & -1 & 1 \\ 1 & -1 & 1 \end{array} $		-50281 0 5231 0			1, 9, 4 $1, 18, 1$	1, 3, 4 $1, 12, 1$	$\begin{bmatrix} 1, 2, 4 \\ 1, 4, 1 \end{bmatrix}$	$\begin{bmatrix} I_1, I_3^*, I_4 \\ I_1, I_{12}^*, I_1 \end{bmatrix}$	$egin{array}{c} {f 2}:2;{f 3}:7 \ {f 2}:2;{f 3}:8 \end{array}$
C6(J)	1-1 1 $1-1$ 1		63929			6, 8, 6	6, 2, 6	$\begin{bmatrix} 1, 4, 1 \\ 6, 4, 6 \end{bmatrix}$	I_{6}, I_{2}^{*}, I_{6}	$\begin{bmatrix} {f 2} : 2, {f 3} : 3 \\ {f 2} : 3, 7, 8; {f 3} : 2 \end{bmatrix}$
C7(L)	1 - 1 1		14681			3, 7, 12	3, 1, 12	3, 2, 12	I_3, I_1^*, I_{12}	
C8(K)	1 - 1 1		4059929			3, 10, 3	3, 4, 3	3, 4, 3	_	2 :6; 3 :5
91			N = 91 =	= 7 · 1	13	(2 isog	geny clas	ses)		91
A1(A)	0 0 1	1	0 1	1	_	1,1	1,1	1,1	I_1,I_1	
B1(B)	0 1 1	-7	5 1	3	-	1,1	1,1	1,1	I_1,I_1	3 :2
B2(C)	0 1 1		$42 \mid 1$		_	3, 3	3, 3	3,3	I_3,I_3	3:1,3
B3(D)	0 1 1	-117	-1245 1	. 1	_	9,1	9, 1	9,1	I_9,I_1	3 :2
92			N = 92 =	$2^2 \cdot 1$	23	(2 iso	geny clas	sses)		92
A1(A)	0 1 0	2	1 0	3	_	4,1	0,1	3, 1	IV,I_1	3 :2
A2(B)	0 1 0	-18	-43 0	1	_	4, 3	0,3	1, 1	IV,I_3	3 :1
B1(C)	0 0 0	-1	1 1	1		4,1	0,1	3,1	$_{ m IV,I_1}$	
94			N = 94	_ 2	17	(1 igg	ogeny cla	aa)		94
A1(A)	1-1 1	0	$\begin{array}{c c} 1 & -34 \\ \hline & -1 & 0 \end{array}$	1		`	2,1	2,1	тт	2:2
A2(B)	1-1 1 $1-1$ 1		$-9 \mid 0$		+	$2, 1 \\ 1, 2$	1, 2	1, 2	$egin{array}{c} \mathrm{I}_2,\!\mathrm{I}_1\ \mathrm{I}_1,\!\mathrm{I}_2 \end{array}$	2:1
` '						<u> </u>	<u> </u>	<u> </u>		
96			N = 96 =	$=2^5$ ·	3	(2 isog	geny class	ses)		96
A1(E)	0 1 0	-2	0 0	4	+	6, 2	0, 2	2, 2	III,I_2	2:2,3,4
A2(F)	0 1 0		-33 0		+	12, 1	0, 1	2, 1	$\mathrm{I}_3^*,\!\mathrm{I}_1$	2 :1
A3(H)	$\begin{bmatrix} 0 & 1 & 0 \\ 0 & 1 & 0 \end{bmatrix}$		60 0		+	9, 1	0, 1	1, 1	I_0^*, I_1	2 :1
A4(G)	0 1 0		8 0	. '	-	9,4	0,4	$\begin{bmatrix} 2,4 \\ \end{bmatrix}$	I_0^*, I_4	2 :1
B1(A)	0 - 1 0		0 0		+	6, 2	0,2	2,2	III,I_2	2:2,3,4
B2(D) B3(B)	0 - 1 0		-60 0		+	9,1	0, 1	2,1	I_0^*, I_1	2 :1
B4(C)	$ \begin{array}{c cccc} 0 & -1 & 0 \\ 0 & -1 & 0 \end{array} $		$\begin{array}{c c} 33 & 0 \\ -8 & 0 \end{array}$		+	12, 1 9, 4	$0, 1 \\ 0, 4$	4, 1 $1, 2$	$I_3^*, I_1 \\ I_0^*, I_4$	2:1 2:1
D4(C)	0 1 0			/		5, 4	0,4	1,2	10,14	2.1
98			N = 98	$= 2 \cdot$	7^2	(1 isc	geny cla	ss)		98
A1(B)	1 1 0		-111 0		_	2,7	2, 1	2,2	I_2,I_1^*	2 :2; 3 :3
A2(A)	$\begin{bmatrix} 1 & 1 & 0 \\ 1 & 1 & 0 \end{bmatrix}$		-4717 0		+	1,8	1,2	1,4	I_1,I_2^*	2 :1; 3 :4
A3(D)	$\begin{bmatrix} 1 & 1 & 0 \\ 1 & 1 & 0 \end{bmatrix}$		2192 0 22184 0		_	6,9	6, 3	2,2	I_{6},I_{3}^{*}	2:4;3:1,5
A4(C) A5(F)	$\begin{bmatrix} 1 & 1 & 0 \\ 1 & 1 & 0 \end{bmatrix}$		291341		+	3, 12 $18, 7$	3, 6 $18, 1$	$\begin{array}{c c} 1,4\\2,2\end{array}$	-	$egin{array}{c} {f 2}:3;{f 3}:2,6 \ {f 2}:6;{f 3}:3 \end{array}$
A6(E)			18781197		+	9,8	9, 2	1, 4	I_{18},I_{1} I_{9},I_{2}^{*}	$egin{array}{c} {f 2} : {f 0}, {f 3} : {f 3} \\ {f 2} : {f 5}; {f 3} : {f 4} \end{array}$
99			N = 99 =	32.	11	(A igo	geny clas	geg)	<u>. </u>	99
A1(A)	1-1 1	-2	$\frac{10 - 99 - 10}{0}$		+	$\frac{(4 \text{ iso})}{3,1}$	0,1	2,1	III,I_1	2 :2
A1(A) $A2(B)$	1-1 1 $1-1$ 1		$\begin{array}{c c} & 0 & 1 \\ 30 & 1 & 1 \end{array}$		+	$3, 1 \\ 3, 2$	$0, 1 \\ 0, 2$	$2, 1 \\ 2, 2$	III,I_1 III,I_2	2:2 2:1
112(1)		11	50 1		'	J, <u>-</u>		, _	,-2	- • •

					TADLE I		2211	-1-0	, 001012	10 00 D			119
	a_1	a_2	a_3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
99					N = 9	9 =	$=3^{2}$. 11	(cont	tinued)			99
B1(H) B2(I) B3(K) B4(J)	1 · 1 ·	$ \begin{array}{r} -1 \\ -1 \\ -1 \\ -1 \\ \end{array} $	1 1	-59 -104 -1319 391	$ \begin{array}{r} 186 \\ -102 \\ -18084 \\ -1092 \end{array} $	0 0 0 0	4 4 2 2	+ + + -	9, 1 12, 2 9, 4 18, 1	3, 1 6, 2 3, 4 12, 1	4, 1 4, 2 2, 2 4, 1	I_3^*, I_1 I_6^*, I_2 I_3^*, I_4 I_{12}^*, I_1	2:2 2:1,3,4 2:2 2:2
C1(F) C2(G)		$ \begin{array}{c} -1 \\ -1 \\ \end{array} $		$-15 \\ -150$	8 -667	0	$\begin{bmatrix} 2 \\ 2 \end{bmatrix}$	++	9, 1 9, 2	$\begin{bmatrix} 0,1\\0,2 \end{bmatrix}$	$\begin{bmatrix} 2,1\\2,2 \end{bmatrix}$	$\begin{array}{ c c c c c }\hline III^*,I_1\\ III^*,I_2\\ \hline\end{array}$	2 : 2 2 : 1
D1(C) D2(D) D3(E)	0 0 0	0	1 1 1	$ \begin{array}{r} -3 \\ -93 \\ -70383 \end{array} $	-5 625 7187035	0 0 0	1 1 1	 - -	6, 1 $6, 5$ $6, 1$	$egin{array}{c} 0,1 \\ 0,5 \\ 0,1 \end{array}$	$egin{array}{c} 1,1 \ 1,1 \ 1,1 \ \end{array}$	$\begin{bmatrix} I_0^*, I_1 \\ I_0^*, I_5 \\ I_0^*, I_1 \end{bmatrix}$	$egin{array}{c} {f 5}:2 \ {f 5}:1,3 \ {f 5}:2 \end{array}$
100					N = 100	= :	$2^2 \cdot 5$	$\hat{\mathbf{p}}^2$	(1 isog	geny class))		100
A1(A) A2(B) A3(C) A4(D)	0 -		$0 \\ 0$	-33 92 -1033 -908	$ \begin{array}{r} 62 \\ 312 \\ -12438 \\ -15688 \end{array} $	0 0 0 0	2 2 2 2	+ - + -	4,7 8,8 4,9 8,12	0, 1 $0, 2$ $0, 3$ $0, 6$	1, 2 1, 4 3, 2 3, 4	IV,I ₁ * IV*,I ₂ * IV,I ₃ * IV*,I ₆ *	2:2;3:3 2:1;3:4 2:4;3:1 2:3;3:2
101					N = 10	1 =	= 101		(1 isoge:	ny class)			101
A1(A)	0	1	1	-1	-1	1	1	+	1	1	1	I_1	
102				Ι	V = 102 =	2 ·	$3 \cdot 1$	7	(3 isog	eny classe	es)		102
A1(E) A2(F)	1 1		0	-2 8	0 10	1 1	2 2		$2, 2, 1 \\ 1, 4, 2$	$2, 2, 1 \\ 1, 4, 2$	$2, 2, 1 \\ 1, 2, 2$		2:2 2:1
B1(G) B2(H) B3(J) B4(I) B5(L) B6(K)	1 1 1 1 1	$0 \\ 0 \\ 0$		-34 -114 -1734 226 -27744 -1644	$ \begin{array}{r} 68 \\ -396 \\ -27936 \\ -2232 \\ -1781010 \\ -30942 \end{array} $	0 0 0	$\begin{bmatrix} 8 \\ 8 \\ 4 \\ 4 \\ 2 \\ 2 \end{bmatrix}$	+ + - +		$\begin{bmatrix} 8,4,1\\4,8,2\\2,4,4\\2,16,1\\1,2,2\\1,2,8 \end{bmatrix}$	$\begin{bmatrix} 8,4,1\\4,8,2\\2,4,4\\2,16,1\\1,2,2\\1,2,8 \end{bmatrix}$	$ \begin{vmatrix} I_8,I_4,I_1\\I_4,I_8,I_2\\I_2,I_4,I_4\\I_2,I_{16},I_1\\I_1,I_2,I_2\\I_1,I_2,I_8 \end{vmatrix} $	2:2 2:1,3,4 2:2,5,6 2:2 2:3 2:3
C1(A) C2(B) C3(C) C4(D)	1 1 1 1 1	0 0 0	1 1 1 1	-256 -216 -751 1809	$ \begin{array}{r} 1550 \\ 2062 \\ -6046 \\ -37790 \end{array} $	0 0 0	$\begin{bmatrix} 6 \\ 6 \\ 2 \\ 2 \end{bmatrix}$	+ + +	6, 6, 1 3, 12, 2 18, 2, 3 9, 4, 6	$ \begin{array}{ c c c } \hline 1,2,0\\ 6,6,1\\ 3,12,2\\ 18,2,3\\ 9,4,6\\ \end{array} $	$ \begin{array}{c} 1,2,6\\ 2,6,1\\ 1,12,2\\ 2,2,1\\ 1,4,2 \end{array} $	I_6, I_6, I_1	$\begin{array}{ c c c c } \hline \textbf{2}:2;\textbf{3}:3 \\ \hline \textbf{2}:1;\textbf{3}:4 \\ \hline \textbf{2}:4;\textbf{3}:1 \\ \hline \textbf{2}:3;\textbf{3}:2 \\ \hline \end{array}$
104					N = 104	= :	$2^3 \cdot 1$.3	(1 isog	geny class))		104
A1(A)	0	1	0	-16	-32	0	1	_	11,1	0, 1	1,1	II^*,I_1	
105	T				N = 105	= :	3 · 5 ·	7	(1 isog	geny class)	ı	105
A1(A) A2(B) A3(D) A4(C)	1 1 1 1	0	1 1 1 1	$ \begin{array}{r} -3 \\ -8 \\ -113 \\ 17 \end{array} $	$ \begin{array}{r} 1 \\ -7 \\ -469 \\ -37 \end{array} $		2 4 2 4		$1, 1, 1 \\ 2, 2, 2 \\ 1, 4, 1 \\ 4, 1, 4$	$\begin{array}{c} 1, 1, 1 \\ 2, 2, 2 \\ 1, 4, 1 \\ 4, 1, 4 \end{array}$	$1, 1, 1 \\ 2, 2, 2 \\ 1, 4, 1 \\ 4, 1, 4$	$ \begin{bmatrix} I_1, I_1, I_1 \\ I_2, I_2, I_2 \\ I_1, I_4, I_1 \\ I_4, I_1, I_4 \end{bmatrix} $	2:2 2:1,3,4 2:2 2:2
106					N = 106 =	= 2	2 · 53		(4 isoger	ny classes)		106
A1(B) A2(C)	1 1		0 0	1 -9	1 -29	0 0	3	_ _	3,1	3, 1 1, 3	3, 1 $1, 1$	$\begin{matrix} I_3,I_1\\I_1,I_3\end{matrix}$	3:2 3:1
B1(A)	1	1	0	-7	5	1	1	[–	4,1	4,1	2,1	I_4,I_1	

120					TABLE 1	: E	الملطن	,110	J CURVI	£S 106C-11	148			
	a_1	a_2	a_3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isoge	nies
106					N = 1	106	$\delta = 2$. 5	3 (cor	ntinued)				106
C1(E) C2(F)	1 1		0	-283 -24603	-2351 -1487407		3 1	_ _	24, 1 8, 3	24, 1 8, 3	$24, 1 \\ 8, 1$	$I_{24},I_1 I_8,I_3$	3 :2 3 :1	
D1(D)	1	1	0	-27	-67	0	1		5,1	5,1	1,1	I_5,I_1		
108					N = 108	=	2^2 ·	3^3	(1 iso	geny class	s)			108
A1(A) A2(B)	0 0		0	0	$4 \\ -108$	0	3 1	_	8, 3 8, 9	0, 0 0, 0	3, 1 1, 1	IV*,II IV*,IV*	3 :2 3 :1	
109	•				N = 10	9 =	= 109	9	(1 isoge	eny class)				109
A1(A)	1	-1	0	-8	-7	0	1	_	1	1	1	I_1		
110				Ì	N = 110 =	= 2	. 5 .	11	(3 isos	geny class	ses)			110
A1(C) A2(D)	1 1		1 1	10 -5940	-45 -178685				5, 5, 1 1 1 5	, ,	5, 5, 1 $1, 1, 5$	$I_5, I_5, I_1 \\ I_1, I_1, I_5$	5 :2 5 :1	
B1(A)	<u> </u>	0	0	 -1	1	0	3	' —	3, 1, 1	3, 1, 1	[3, 1, 1]	I_3,I_1,I_1	3 :2	
B2(B) C1(E)	1 1	$\frac{0}{0}$	0	9 		<u>'</u>	'	. – –		!	1,1,1		$3:1 \\ \hline 3:2$	
C1(E) C2(F)	1		1 1	$-89 \\ 296$	$316 \\ 1702$				21, 3, 1	7, 1, 3 $21, 3, 1$		$I_7, I_1, I_3 $ I_{21}, I_3, I_1	3:2 $3:1$	
$\frac{}{112}$	•				N = 112	_	$2^4 \cdot 7$	7	(3 isoge	eny classe	s)			$\overline{112}$
A1(K)	0	1	0	0		1	2		10, 1		<u> </u>	I_2^*,I_1	2 :2	
A2(L)	0		0	-40 	84	<u>'</u>	2	+	11,2	0,2	4,2		2 :1	
B1(A) B2(B)	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$		$0 \\ 0$	$\begin{array}{c} 1 \\ -19 \end{array}$	$-2 \\ -30$		$\begin{array}{ c c }\hline 2\\ 4 \end{array}$	- +	8, 1 $10, 2$	$0, 1 \\ 0, 2$	$2, 1 \\ 4, 2$	$egin{array}{c} { m I}_0^*, { m I}_1 \ { m I}_2^*, { m I}_2 \end{array}$	2:2 2:1,3	4
B3(D)	0		0	-299	-1990	l		+	10, 2 $11, 1$	$0, 2 \\ 0, 1$	4, 1	I_3^*, I_1	2:1,0 2:2	, -
B4(C)	0	0	0	-59	138	0	4	+	11,4	0,4	2,4	I_3^*, I_4	2 :2	
C1(E)			0	-8	-16		2	-	14, 1	2, 1	4, 1	I_6^*, I_1	2:2;3	
C2(F)			0	-168	-784		$\frac{2}{2}$	+	13, 2	1,2	2,2	I_5^*, I_2	2:1;3	
C3(G) C4(H)		-1 -1	0	$72 \\ -568$	$368 \\ 4464$		$\frac{2}{2}$	 	18, 3 $15, 6$	6, 3 3, 6	$\begin{array}{c c} 4,1 \\ 2,2 \end{array}$	I_{10}^*,I_3 I_7^*,I_6	$egin{array}{c} {f 2}:4;{f 3} \ {f 2}:3;{f 3} \end{array}$	
C5(I)		-1		-2728	55920		$\frac{2}{2}$	_	30, 1	18, 1	4, 1	I_{22}^{*},I_{1}	2:6;3	· · ·
C6(J)				-43688	3529328		2	+	21, 2	9, 2	2,2	I_{13}^{*}, I_{2}	2:5;3	
113					N = 11	3 =	= 11;	3	(1 isoge	eny class)				113
A1(B) A2(A)	1 1		1 1	$\begin{array}{c} 3 \\ -2 \end{array}$	-4 -2		2 2	_ +	2 1	2 1	2 1	$egin{array}{c} I_2 \ I_1 \end{array}$	2:2 2:1	
A2(A)	1	T	1	-2	-2	U			1	1	1	11	4.1	
114					N = 114 =	1	1			geny class	<u> </u>	I	I	114
A1(A) A2(B)	1 1		0	$-8 \\ 32$	0 8	$0 \\ 0$	6	+	6, 3, 1 3, 6, 2	6, 3, 1 3, 6, 2	$\begin{bmatrix} 6, 3, 1 \\ 3, 6, 2 \end{bmatrix}$	I_6,I_3,I_1	2 : 2; 3 2 : 1; 3	
A3(C)	$\begin{array}{c c} 1 \\ 1 \end{array}$	0	0	-428	-3444		$\frac{6}{2}$		3, 0, 2 2, 1, 3	$\begin{bmatrix} 3, 6, 2 \\ 2, 1, 3 \end{bmatrix}$	$\begin{bmatrix} 3, 0, 2 \\ 2, 1, 3 \end{bmatrix}$	$\begin{bmatrix} I_3,I_6,I_2 \\ I_2,I_1,I_3 \end{bmatrix}$	2:1; 3 2:4; 3	
A4(D)	1	0	0	-418	-3610		$\frac{2}{2}$		1, 2, 6	1, 2, 6	1, 2, 6		2:3;3	
B1(E)	<u> </u>	1	0	-95	-399	0	$\frac{1}{2}$			[2, 5, 1]	[2, 1, 1]		2:2	
B2(F)	1	1	0	-85	-473	0	2		1, 10, 2				2 : 1	

					TABLE I:								
	a_1	a_2	a_3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
114					N = 114	=	$2 \cdot 3$. 19	9 (cor	ntinued)			114
C1(G)	1	1	1	-352	-2431	0	4	+	20, 3, 1	20, 3, 1	20, 1, 1	I_{20}, I_{3}, I_{1}	2 :2
C2(H)	1	1	1	-5472	-158079	0	4		10, 6, 2	10, 6, 2	10, 2, 2	I_{10},I_{6},I_{2}	2:1,3,4
C3(J)	1	1			-10007679	0	2		5, 3, 1	5, 3, 1	5, 1, 1	I_5,I_3,I_1	2 :2
C4(I)	1	1	1	-5312	-167551	0	2	_	5, 12, 4	5, 12, 4	5, 2, 2	I_5, I_{12}, I_4	2 :2
115					N = 115	= 5	$5 \cdot 23$	}	(1 isoge	ny class)			115
A1(A)	0	0	1	7	-11	0	1	_	5, 1	5, 1	1, 1	$ m I_5, m I_1$	
116					N = 116 =	2^{2}	. 29	. (´3 isogeı	ny classes)		116
A1(E)	0	0	0	-4831	-129242	0	1	<u> </u>	8,1	0, 1	3,1	IV^*,I_1	
B1(A)	0	1	0	 -4	4	!	3	¦	8,1	$\begin{bmatrix} 1 & 1 & 1 & 1 & 1 \\ 0 & 1 & 1 & 1 \end{bmatrix}$	3,1	$ V^*, I_1 $	3 :2
B2(B)	0		0	36	-76		1	_	8, 3	0, 3	1,1	IV^*,I_3	3 :1
C1(D)	0	 -1	0	-4	24	0	2	i i —	8, 2	0, 2	1, 2	$ IV^*, I_2 $	2 :2
C2(C)		-1		- 9	14	0	2	+	4,1	0, 1	1,1	IV,I_1	2 :1
117					N = 117 =	- 3	$\frac{2}{1}$	3	(1 isoge	eny class)			117
A1(A)	1	-1	1	4	$\frac{17 - 117 - 6}{6}$	1	4		$\frac{(1.656)}{7,1}$	1,1	4, 1	$\mathrm{I}_{1}^{st},\!\mathrm{I}_{1}$	2:2
A2(B)		-1		-41	96	1	4	+	8, 2	2,2	4, 1	I_2^{*}, I_2	2 : 2 $ 2: 1, 3, 4 $
A3(D)		-1		-176	-768	1	2	+	7,4	1, 4	2, 4	I_1^*, I_4	2 :2
A4(C)	1	-1	1	-626	6180	1	2	+	10, 1	4, 1	4, 1	$\mathrm{I}_{4}^{st},\!\mathrm{I}_{1}$	2 :2
								-					
118					N = 118 =	= 2	. 59	(4	4 isogen	y classes))		118
118 A1(A)	1	1	0	1		= 2 1	· 59	(4	4 isogen 2,1	y classes)	2,1	I_2,I_1	118
	<u>-</u>			$ \begin{array}{c} 1 \\ -25 \end{array} $	1	1	1 5		2,1	ř – – – – – – – – – – – – – – – – – – –	2,1	<u> </u>	118 5:2
A1(A)	<u>-</u>	1			1 39	1	1 5		2,1	2,1	2,1	<u> </u>	
A1(A) B1(B)	1 1 1	1	1 1	-25	39 -2481	1 0 0	1 5 1	 - -	2,1	$ \begin{array}{ c c c c } \hline 2,1\\ 10,1\\ 2,5\\ \hline \end{array} $	$ \begin{array}{c c} 2,1 \\ \hline 10,1 \\ 2,1 \\ \hline \end{array} $	$egin{array}{c} I_{10}, I_1 \ I_2, I_5 \ \end{array}$	5 :2
A1(A) B1(B) B2(C)	1 1 1	1 1 1	1 1	-25 115	$ \begin{array}{r} 1\\ 39\\ -2481 \end{array} $	1 0 0	1 5 1 1	- - - -	2, 1 10, 1 2, 5	$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	$ \begin{array}{c c} 2,1 \\ 10,1 \\ 2,1 \\ \end{array} $	$egin{array}{c} I_{10}, I_1 \ I_2, I_5 \ \end{array}$	5 :2
A1(A) B1(B) B2(C) C1(D) D1(E)	1 1 1	1 1 1	1 1 1	$ \begin{array}{r} -25 \\ \hline 115 \\ \hline -4 \\ \hline 56 \end{array} $	$ \begin{array}{r} 39 \\ -2481 \\ \hline -5 \\ -192 \end{array} $	$\begin{bmatrix} 1 \\ 0 \\ 0 \\ \end{bmatrix}$	1 5 1 1		2, 1 10, 1 2, 5 1, 1 19, 1	2,1 10,1 2,5 1,1 19,1	2,1 10,1 2,1 1,1 1,1	$\begin{bmatrix} I_{10}, I_1 \\ I_2, I_5 \\ I_1, I_1 \end{bmatrix}$	5:2 5:1
A1(A) B1(B) B2(C) C1(D) D1(E) 120	1 1 1	1 1 1 1	1 1 1 0	-25 115 -4 56	$ \begin{array}{r} 1 \\ 39 \\ -2481 \\ -5 \\ -192 \\ N = 120 = 1 \end{array} $	$ \begin{vmatrix} 1 \\ 0 \\ 0 \end{vmatrix} $ $ \begin{vmatrix} 0 \\ 0 \end{vmatrix} $	1 5 1 1		2, 1 10, 1 2, 5 1, 1 19, 1 (2 isoge	2,1 10,1 2,5 1,1 19,1	2,1 10,1 2,1 1,1 1,1 s)	$I_{10},I_1 \\ I_2,I_5 \\ I_1,I_1 \\ I_{19},I_1$	120
A1(A) B1(B) B2(C) C1(D) D1(E)	1 1 1 1	1 1 - 1 1 1	1 1 1	$ \begin{array}{r} -25 \\ \hline 115 \\ \hline -4 \\ \hline 56 \end{array} $	$ \begin{array}{r} 39 \\ -2481 \\ \hline -5 \\ -192 \end{array} $	$\begin{bmatrix} 1 \\ 0 \\ 0 \\ 0 \\ \end{bmatrix}$	$ \begin{array}{c c} 1 \\ 5 \\ 1 \\ \hline 1 \\ \hline 1 \end{array} $		2, 1 10, 1 2, 5 1, 1 19, 1 (2 isoge 4, 2, 1	2,1 10,1 2,5 1,1 19,1	2,1 10,1 2,1 1,1 1,1	$\begin{array}{c c} I_{10},I_1 \\ I_2,I_5 \\ \hline I_1,I_1 \\ I_{19},I_1 \\ \hline III,I_2,I_1 \\ \end{array}$	5:2 5:1
A1(A) B1(B) B2(C) C1(D) D1(E) 120 A1(E) A2(F) A3(H)	1 1 1 1	1 1 -1 -1 1 1 1 1	1 1 1 0 0 0 0		$ \begin{array}{r} $	$ \begin{bmatrix} 1 \\ 0 \\ 0 \end{bmatrix} \begin{bmatrix} 0 \\ 0 \\ \end{bmatrix} [\end{bmatrix} [D]$	$ \begin{array}{c c} 1 \\ 5 \\ 1 \\ \hline 1 \\ \hline 4 \\ 8 \\ 4 \end{array} $	-	2, 1 10, 1 2, 5 1, 1 19, 1 (2 isoge 4, 2, 1 8, 4, 2 10, 2, 4	$ \begin{array}{ c c c } \hline 2,1 \\ \hline & 10,1 \\ 2,5 \\ \hline & 1,1 \\ \hline & 19,1 \\ \hline & 0,2,1 \\ 0,4,2 \\ 0,2,4 \\ \hline \end{array} $	$ \begin{array}{c c} 2,1 \\ \hline 10,1 \\ 2,1 \\ \hline 1,1 \\ \hline 1,1 \end{array} $ s) $ \begin{array}{c c} 2,2,1 \\ 4,4,2 \\ 2,2,4 \end{array} $	$\begin{array}{c c} I_{10},I_1 \\ I_2,I_5 \\ \hline I_1,I_1 \\ \hline I_{19},I_1 \\ \hline III,I_2,I_1 \\ I_1^*,I_4,I_2 \\ III^*,I_2,I_4 \end{array}$	$ \begin{array}{ c c c } \hline 5:2 \\ 5:1 \\ \hline 2:2 \\ 2:1,3,4 \\ 2:2,5,6 \\ \hline \end{array} $
A1(A) B1(B) B2(C) C1(D) D1(E) 120 A1(E) A2(F) A3(H) A4(G)	1 1 1 1 1 0 0 0 0	1 1 1 1 1 1 1 1 1	1 1 1 -1 0 0 0 0 0	$ \begin{array}{r} -25 \\ 115 \\ -4 \\ \hline -56 \\ \hline -15 \\ -20 \\ -200 \\ 80 \\ \end{array} $	$ \begin{array}{r} 39 \\ -2481 \\ -5 \\ -192 \\ \hline N = 120 = 18 \\ 0 \\ -1152 \\ 80 \\ \end{array} $	$ \begin{bmatrix} 1 \\ 0 \\ 0 \end{bmatrix} \begin{bmatrix} 0 \\ 0 \\ 0 \\ 0 \end{bmatrix} \begin{bmatrix} 0 \\ 0 \\ 0 \\ 0 \end{bmatrix} \begin{bmatrix} 0 \\ 0 \\ 0 \\ 0 \end{bmatrix} \begin{bmatrix} 0 \\ 0 \\ 0 \\ 0 \end{bmatrix} \begin{bmatrix} 0 \\ 0 \\ 0 \\ \end{bmatrix} \begin{bmatrix} 0$	$ \begin{array}{c c} 1 \\ 5 \\ 1 \\ -1 \\ 1 \end{array} $ $ \begin{array}{c} 3 \cdot \xi \\ 4 \\ 8 \\ 4 \\ 4 \end{array} $	- 	2, 1 10, 1 2, 5 1, 1 19, 1 (2 isoge 4, 2, 1 8, 4, 2 10, 2, 4 10, 8, 1	2,1 10,1 2,5 1,1 19,1 eny classe 0,2,1 0,4,2 0,2,4 0,8,1	$ \begin{array}{c c} 2,1 \\ \hline 10,1 \\ 2,1 \\ \hline 1,1 \\ \hline 1,1 \end{array} $ s) $ \begin{array}{c c} 2,2,1 \\ 4,4,2 \\ 2,2,4 \\ 2,8,1 \end{array} $	$\begin{array}{c c} I_{10},I_1\\ I_2,I_5\\ \hline\\ I_1,I_1\\ \hline\\ I_{19},I_1\\ \hline\\ III,I_2,I_1\\ I_1^*,I_4,I_2\\ III^*,I_2,I_4\\ III^*,I_8,I_1\\ \end{array}$	$\begin{array}{ c c c } & 5 : 2 \\ & 5 : 1 \\ \hline & & \\ & 2 : 2 \\ & 2 : 1, 3, 4 \\ & 2 : 2, 5, 6 \\ & 2 : 2 \end{array}$
A1(A) B1(B) B2(C) C1(D) D1(E) 120 A1(E) A2(F) A3(H) A4(G) A5(J)	1 1 1 1 1 0 0 0 0 0	1 1 -1 -1 1 1 1 1 1 1	1 1 1 0 0 0 0 0 0 0		$ \begin{array}{r} $	$ \begin{array}{c c} 1 & 0 \\ 0 & 0 \end{array} $ $ \begin{array}{c c} 0 & 0 \\ 0 & 0 \\ 0 & 0 \end{array} $	$ \begin{array}{c c} 1 \\ 5 \\ 1 \\ 1 \end{array} $ $ \begin{array}{c c} 1 \\ 4 \\ 8 \\ 4 \\ 4 \\ 2 \end{array} $	5 + + + + + + + + + + + + + + + + + + +	2, 1 10, 1 2, 5 1, 1 19, 1 (2 isoge 4, 2, 1 8, 4, 2 10, 2, 4 10, 8, 1 11, 1, 2	2,1 10,1 2,5 1,1 19,1 eny classe 0,2,1 0,4,2 0,2,4 0,8,1 0,1,2	$ \begin{array}{ c c } \hline 2,1\\ \hline 10,1\\ 2,1\\ \hline 1,1\\ \hline 1,1\\ \end{array} $ s) $ \begin{array}{ c c } \hline 2,2,1\\ 4,4,2\\ 2,2,4\\ 2,8,1\\ 1,1,2\\ \end{array} $	$\begin{array}{c c} I_{10},I_1\\ I_2,I_5\\ \hline\\ I_1,I_1\\ \hline\\ I_{19},I_1\\ \hline\\ III,I_2,I_1\\ I_1^*,I_4,I_2\\ III^*,I_2,I_4\\ III^*,I_8,I_1\\ II^*,I_1,I_2\\ \end{array}$	$\begin{array}{ c c c } \hline \textbf{5} : 2 \\ \hline \textbf{5} : 1 \\ \hline \\ \hline & \\ \hline & \\ \hline & \\ \textbf{2} : 2 \\ \hline & \\ \textbf{2} : 1, 3, 4 \\ \hline & \\ \textbf{2} : 2, 5, 6 \\ \hline & \\ \textbf{2} : 2 \\ \hline & \\ \textbf{2} : 3 \\ \hline \end{array}$
A1(A) B1(B) B2(C) C1(D) D1(E) 120 A1(E) A2(F) A3(H) A4(G) A5(J) A6(I)	1 1 1 1 1 0 0 0 0 0 0	1 1 -1 1 1 1 1 1 1 1	1 1 1 -1 0 0 0 0 0 0 0 0	$ \begin{array}{r} -25 \\ 115 \\ -4 \\ \hline -15 \\ -20 \\ -200 \\ 80 \\ -3200 \\ -80 \\ \end{array} $	$ \begin{array}{r} 39 \\ -2481 \\ -5 \\ -192 \\ \end{array} $ $ \begin{array}{r} N = 120 = 18 \\ 0 \\ -1152 \\ 80 \\ -70752 \\ -2400 \\ \end{array} $	$ \begin{bmatrix} 1 \\ 0 \\ 0 \end{bmatrix} $ $ \begin{bmatrix} 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \end{bmatrix} $	$ \begin{array}{c c} 1 \\ 5 \\ 1 \\ 1 \end{array} $ $ \begin{array}{c c} 1 \\ 4 \\ 8 \\ 4 \\ 4 \\ 2 \\ 2 \end{array} $	5 + + + - + +	2, 1 10, 1 2, 5 1, 1 19, 1 (2 isoge 4, 2, 1 8, 4, 2 10, 2, 4 10, 8, 1 11, 1, 2 11, 1, 8	2,1 10,1 2,5 1,1 19,1 eny classe 0,2,1 0,4,2 0,2,4 0,8,1 0,1,2 0,1,8	$ \begin{array}{ c c } \hline 2,1\\ \hline 10,1\\ 2,1\\ \hline 1,1\\ \hline 1,1\\ \end{array} $ s) $ \begin{array}{ c c } 2,2,1\\ 4,4,2\\ 2,2,4\\ 2,8,1\\ 1,1,2\\ 1,1,8\\ \hline \end{array} $	$\begin{array}{c c} I_{10},I_1\\ I_2,I_5\\ \hline\\ I_1,I_1\\ \hline\\ I_{19},I_1\\ \hline\\ III,I_2,I_1\\ I_1^*,I_4,I_2\\ III^*,I_2,I_4\\ III^*,I_8,I_1\\ II^*,I_1,I_2\\ II^*,I_1,I_8\\ \end{array}$	$\begin{array}{c c} 5:2\\ 5:1\\ \hline \\ 2:2\\ 2:1,3,4\\ 2:2,5,6\\ 2:2\\ 2:3\\ 2:3\\ \end{array}$
A1(A) B1(B) B2(C) C1(D) D1(E) 120 A1(E) A2(F) A3(H) A4(G) A5(J) A6(I) B1(A)	1 1 1 1 1 0 0 0 0 0 0	1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 0 0 0 0 0 0 0 0	$ \begin{array}{r} -25 \\ 115 \\ -4 \\ \hline -15 \\ -20 \\ -200 \\ \hline 80 \\ -3200 \\ -80 \\ 4 \end{array} $	$ \begin{array}{r} 39 \\ -2481 \\ -5 \\ -192 \\ \hline N = 120 = 18 \\ 0 \\ -1152 \\ 80 \\ -70752 \\ -2400 \\ \hline 0 \end{array} $	$ \begin{array}{c c} 1 \\ 0 \\ 0 \\ 0 \end{array} $ $ \begin{array}{c c} 2^3 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \end{array} $	$\begin{bmatrix} 1 \\ 5 \\ 1 \\ 1 \\ 1 \end{bmatrix}$ $\begin{bmatrix} 1 \\ 4 \\ 8 \\ 4 \\ 4 \\ 2 \\ 2 \\ 2 \end{bmatrix}$	5 + + + - +	2, 1 10, 1 2, 5 1, 1 19, 1 (2 isoge 4, 2, 1 8, 4, 2 10, 2, 4 10, 8, 1 11, 1, 2 11, 1, 8 8, 1, 1	2,1 10,1 2,5 1,1 19,1 eny classe 0,2,1 0,4,2 0,2,4 0,8,1 0,1,2 0,1,8 0,1,1	2,1 10,1 2,1 1,1 1,1 s) 2,2,1 4,4,2 2,2,4 2,8,1 1,1,2 1,1,8 2,1,1	$\begin{array}{c c} I_{10},I_1\\ I_2,I_5\\ \hline\\ I_1,I_1\\ \hline\\ I_{19},I_1\\ \hline\\ III,I_2,I_1\\ I_1^*,I_4,I_2\\ III^*,I_2,I_4\\ III^*,I_8,I_1\\ II^*,I_1,I_2\\ II^*,I_1,I_8\\ \hline\\ I_1^*,I_1,I_1\\ \hline\\ I_1^*,I_1,I_1\\ \hline\\ I_1^*,I_1,I_1\\ \hline\\ \end{array}$	$\begin{array}{ c c c } \hline \textbf{5} : 2 \\ \hline \textbf{5} : 1 \\ \hline \\ \hline \\ \textbf{2} : 2 \\ \hline \textbf{2} : 1, 3, 4 \\ \hline \textbf{2} : 2, 5, 6 \\ \hline \textbf{2} : 2 \\ \hline \textbf{2} : 3 \\ \hline \textbf{2} : 3 \\ \hline \textbf{2} : 2 \\ \hline \end{array}$
A1(A) B1(B) B2(C) C1(D) D1(E) 120 A1(E) A2(F) A3(H) A4(G) A5(J) A6(I)	1 1 1 1 1 0 0 0 0 0 0	1 1 -1 -1 1 1 1 1 1 1 1 1 1	1 1 1 -1 0 0 0 0 0 0 0 0	$ \begin{array}{r} -25 \\ 115 \\ -4 \\ \hline -15 \\ -20 \\ -200 \\ 80 \\ -3200 \\ -80 \\ \end{array} $	$ \begin{array}{r} 39 \\ -2481 \\ -5 \\ -192 \\ \end{array} $ $ \begin{array}{r} N = 120 = 18 \\ 0 \\ -1152 \\ 80 \\ -70752 \\ -2400 \\ \end{array} $	$ \begin{array}{c c} 1 \\ 0 \\ 0 \\ 0 \end{array} $ $ \begin{array}{c c} 2^3 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \end{array} $	$ \begin{array}{c c} 1 \\ 5 \\ 1 \\ 1 \end{array} $ $ \begin{array}{c c} 1 \\ 4 \\ 8 \\ 4 \\ 4 \\ 2 \\ 2 \end{array} $	5 + + + - + - + + - + + - + + - + + + +	2, 1 10, 1 2, 5 1, 1 19, 1 (2 isoge 4, 2, 1 8, 4, 2 10, 2, 4 10, 8, 1 11, 1, 2 11, 1, 8	2,1 10,1 2,5 1,1 19,1 eny classe 0,2,1 0,4,2 0,2,4 0,8,1 0,1,2 0,1,8	$ \begin{array}{ c c c } \hline 2,1\\ \hline 10,1\\ 2,1\\ \hline 1,1\\ \hline 1,1\\ \hline 3,1\\ \hline 2,2,1\\ 4,4,2\\ 2,2,4\\ 2,8,1\\ 1,1,2\\ 1,1,8\\ \hline 2,1,1\\ 2,2,2\\ \hline \end{array} $	$\begin{array}{c c} I_{10},I_1\\ I_2,I_5\\ \hline\\ I_1,I_1\\ \hline\\ I_{19},I_1\\ \hline\\ I_{11},I_2,I_1\\ I_1^*,I_4,I_2\\ III^*,I_2,I_4\\ III^*,I_8,I_1\\ II^*,I_1,I_2\\ II^*,I_1,I_8\\ \hline\\ I_1^*,I_1,I_1\\ III^*,I_2,I_2\\ \hline\\ I_1^*,I_1,I_1\\ III^*,I_2,I_2\\ \hline\\ I_1^*,I_1,I_1\\ III^*,I_2,I_2\\ \hline\\ \end{array}$	$\begin{array}{c c} 5:2\\ 5:1\\ \hline \\ 2:2\\ 2:1,3,4\\ 2:2,5,6\\ 2:2\\ 2:3\\ 2:3\\ \end{array}$
A1(A) B1(B) B2(C) C1(D) D1(E) 120 A1(E) A2(F) A3(H) A4(G) A5(J) A6(I) B1(A) B2(B)	1 1 1 1 1 1 0 0 0 0 0 0 0	1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 	$ \begin{array}{r} -25 \\ 115 \\ -4 \\ \hline -15 \\ -20 \\ -200 \\ 80 \\ -3200 \\ -80 \\ \hline 4 \\ -16 \\ \end{array} $	$ \begin{array}{r} 39 \\ -2481 \\ -5 \\ -192 \\ \hline N = 120 = 18 \\ 0 \\ -1152 \\ 80 \\ -70752 \\ -2400 \\ \hline 0 \\ -16 \end{array} $	$ \begin{array}{c c} 1 \\ 0 \\ 0 \\ 0$	$ \begin{array}{c c} 1 \\ 5 \\ 1 \\ \hline 1 \\ \hline 1 \end{array} $ $ \begin{array}{c c} 4 \\ 8 \\ 4 \\ 2 \\ 2 \\ 4 \end{array} $	5 + + + - + + + + + + + + + + + + + + +	2, 1 10, 1 2, 5 1, 1 19, 1 (2 isoge 4, 2, 1 8, 4, 2 10, 2, 4 10, 8, 1 11, 1, 2 11, 1, 8 8, 1, 1 10, 2, 2	2,1 10,1 2,5 1,1 19,1 eny classe 0,2,1 0,4,2 0,2,4 0,8,1 0,1,2 0,1,8 0,1,1 0,2,2 0,4,1	2,1 10,1 2,1 1,1 1,1 s) 2,2,1 4,4,2 2,2,4 2,8,1 1,1,2 1,1,8 2,1,1	$\begin{array}{c c} I_{10},I_1\\ I_2,I_5\\ \hline\\ I_1,I_1\\ \hline\\ I_{19},I_1\\ \hline\\ III,I_2,I_1\\ I_1^*,I_4,I_2\\ III^*,I_2,I_4\\ III^*,I_8,I_1\\ II^*,I_1,I_2\\ II^*,I_1,I_8\\ \hline\\ I_1^*,I_1,I_1\\ \hline\\ I_1^*,I_1,I_1\\ \hline\\ I_1^*,I_1,I_1\\ \hline\\ \end{array}$	$\begin{array}{c c} 5:2 \\ 5:1 \\ \hline \\ 2:2 \\ 2:1,3,4 \\ 2:2,5,6 \\ 2:2 \\ 2:3 \\ 2:3 \\ \hline \\ 2:2 \\ 2:1,3,4 \\ \end{array}$
A1(A) B1(B) B2(C) C1(D) D1(E) 120 A1(E) A2(F) A3(H) A4(G) A5(J) A6(I) B1(A) B2(B) B3(C) B4(D)	1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 1 1 1 1 1 1 1 1 1 1 1 1	0 0 0 0 0 0 0 0 0	$ \begin{array}{r} -25 \\ 115 \\ -4 \\ \hline -15 \\ -20 \\ -200 \\ 80 \\ -3200 \\ -80 \\ \hline 4 \\ -16 \\ -216 \\ \end{array} $	$ \begin{array}{r} 39 \\ -2481 \\ -5 \\ -192 \\ \end{array} $ $ \begin{array}{r} N = 120 = 18 \\ 0 \\ -1152 \\ 80 \\ -70752 \\ -2400 \\ \hline 0 \\ -16 \\ -1296 \\ 560 \\ \end{array} $	$ \begin{array}{c c} 1 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \end{array} $	$ \begin{array}{c c} 1 \\ 5 \\ 1 \\ 1 \end{array} $ $ \begin{array}{c c} 4 \\ 8 \\ 4 \\ 2 \\ 2 \\ 4 \\ 2 \end{array} $	5 + + + - + + + + +	2, 1 10, 1 2, 5 1, 1 19, 1 (2 isoge 4, 2, 1 8, 4, 2 10, 2, 4 10, 8, 1 11, 1, 2 11, 1, 8 8, 1, 1 10, 2, 2 11, 4, 1 11, 1, 4	2,1 10,1 2,5 1,1 19,1 eny classe 0,2,1 0,4,2 0,2,4 0,8,1 0,1,2 0,1,8 0,1,1 0,2,2 0,4,1 0,2,4	$ \begin{array}{ c c c } \hline 2,1\\ \hline 10,1\\ 2,1\\ \hline 1,1\\ \hline 1,1\\ \hline 3,1\\ \hline 4,4,2\\ 2,2,4\\ 2,8,1\\ 1,1,2\\ 1,1,8\\ \hline 2,1,1\\ 2,2,2\\ 1,4,1\\ \hline \end{array} $	$\begin{array}{c c} I_{10},I_1\\ I_2,I_5\\ \hline\\ I_1,I_1\\ \hline\\ I_{19},I_1\\ \hline\\ III,I_2,I_1\\ I_1^*,I_4,I_2\\ III^*,I_2,I_4\\ III^*,I_8,I_1\\ II^*,I_1,I_8\\ \hline\\ I_1^*,I_1,I_1\\ III^*,I_2,I_2\\ II^*,I_4,I_1\\ \hline\\ III^*,I_4,I_1\\ III^*,I_4,I_1\\ \hline\\ IIII^*,I_4,I_1\\ \hline\\ IIIII^*,I_4,I_1\\ \hline\\ IIII^*,I_4,I_1\\ \hline\\ IIII^*,I_4,I_1\\ \hline\\ IIII^*,I_4,I_1\\ \hline\\ IIII^*,I_4,I_1\\$	$\begin{array}{c c} 5:2\\ 5:1\\ \hline & 120\\ \hline & 2:2\\ 2:1,3,4\\ 2:2,5,6\\ 2:2\\ 2:3\\ 2:3\\ \hline & 2:2\\ 2:1,3,4\\ 2:2\\ 2:1,3,4\\ 2:2\\ 2:2:2\\ 2:1,3,4\\ 2:2\\ 2:2:2\\ 2:2:2\\ 2:3\\$
A1(A) B1(B) B2(C) C1(D) D1(E) 120 A1(E) A2(F) A3(H) A4(G) A5(J) A6(I) B1(A) B2(B) B3(C) B4(D) 121		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 -1 0 0 0 0 0 0 0 0 0 0 0 0	$ \begin{array}{r} -25 \\ 115 \\ -4 \\ \hline -56 \\ \end{array} $ $ \begin{array}{r} -15 \\ -20 \\ -200 \\ 80 \\ -3200 \\ -80 \\ \end{array} $ $ \begin{array}{r} 4 \\ -16 \\ -216 \\ -136 \\ \end{array} $	$ \begin{array}{c} $	$ \begin{array}{c c} 1 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	5 + + + - + + + + +	2, 1 10, 1 2, 5 1, 1 19, 1 (2 isoge 4, 2, 1 8, 4, 2 10, 2, 4 10, 8, 1 11, 1, 2 11, 1, 8 8, 1, 1 10, 2, 2 11, 4, 1 11, 1, 4	2,1 10,1 2,5 1,1 19,1 eny classe 0,2,1 0,4,2 0,2,4 0,8,1 0,1,2 0,1,8 0,1,1 0,2,2 0,4,1 0,1,4	$ \begin{array}{c c} 2,1 \\ \hline 10,1 \\ 2,1 \\ \hline 1,1 \\ \hline 1,1 \end{array} $ s) $ \begin{array}{c c} 2,2,1 \\ 4,4,2 \\ 2,2,4 \\ 2,8,1 \\ 1,1,2 \\ 1,1,8 \\ \hline 2,1,1 \\ 2,2,2 \\ 1,4,1 \\ 1,1,2 \end{array} $	$I_{10},I_1\\I_2,I_5\\I_1,I_1\\I_{19},I_1\\I_{19},I_1\\I_{11},I_4,I_2\\III^*,I_4,I_2\\III^*,I_8,I_1\\II^*,I_1,I_8\\I_1^*,I_1,I_8\\I_1^*,I_1,I_1\\III^*,I_2,I_2\\II^*,I_4,I_1\\III^*,I_2,I_2\\II^*,I_4,I_1\\III^*,I_1,I_4\\III^*,I_4\\III^*$	120 2:2 2:1,3,4 2:2,5,6 2:2 2:3 2:3 2:2 2:1,3,4 2:2 2:2
A1(A) B1(B) B2(C) C1(D) D1(E) 120 A1(E) A2(F) A3(H) A4(G) A5(J) A6(I) B1(A) B2(B) B3(C) B4(D)	1 1 1 1 0 0 0 0 0 0 0 0 0	1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 -1 0 0 0 0 0 0 0 0 0 0 0	$ \begin{array}{r} -25 \\ 115 \\ -4 \\ \hline -15 \\ -20 \\ -200 \\ 80 \\ -3200 \\ -80 \\ \hline 4 \\ -16 \\ -216 \\ \end{array} $	$ \begin{array}{r} 39 \\ -2481 \\ -5 \\ -192 \\ \end{array} $ $ \begin{array}{r} N = 120 = 18 \\ 0 \\ -1152 \\ 80 \\ -70752 \\ -2400 \\ \hline 0 \\ -16 \\ -1296 \\ 560 \\ \end{array} $	$ \begin{array}{c c} 1 \\ 0 \\ 0 \\ 0 \end{array} $ $ \begin{array}{c c} 0 \\ 0 \\ 0 \\ 0 \\ 0 \end{array} $	$\begin{bmatrix} 1 \\ 5 \\ 1 \\ 1 \\ 1 \end{bmatrix}$ $\begin{bmatrix} 3 \cdot 5 \\ 4 \\ 8 \\ 4 \\ 4 \\ 2 \\ 2 \\ 2 \end{bmatrix}$ $\begin{bmatrix} 2 \\ 4 \\ 2 \\ 2 \\ 1 \end{bmatrix}$	5 + + + - + + + + +	2, 1 10, 1 2, 5 1, 1 19, 1 (2 isoge 4, 2, 1 8, 4, 2 10, 2, 4 10, 8, 1 11, 1, 2 11, 1, 8 8, 1, 1 10, 2, 2 11, 4, 1 11, 1, 4	2,1 10,1 2,5 1,1 19,1 eny classe 0,2,1 0,4,2 0,2,4 0,8,1 0,1,2 0,1,8 0,1,1 0,2,2 0,4,1 0,2,4	$ \begin{array}{ c c c } \hline 2,1\\ \hline 10,1\\ 2,1\\ \hline 1,1\\ \hline 1,1\\ \hline 3,1\\ \hline 4,4,2\\ 2,2,4\\ 2,8,1\\ 1,1,2\\ 1,1,8\\ \hline 2,1,1\\ 2,2,2\\ 1,4,1\\ \hline \end{array} $	$\begin{array}{c c} I_{10},I_1\\ I_2,I_5\\ \hline\\ I_1,I_1\\ \hline\\ I_{19},I_1\\ \hline\\ III,I_2,I_1\\ I_1^*,I_4,I_2\\ III^*,I_2,I_4\\ III^*,I_8,I_1\\ II^*,I_1,I_8\\ \hline\\ I_1^*,I_1,I_1\\ III^*,I_2,I_2\\ II^*,I_4,I_1\\ \hline\\ III^*,I_4,I_1\\ III^*,I_4,I_1\\ \hline\\ IIII^*,I_4,I_1\\ \hline\\ IIIII^*,I_4,I_1\\ \hline\\ IIII^*,I_4,I_1\\ \hline\\ IIII^*,I_4,I_1\\ \hline\\ IIII^*,I_4,I_1\\ \hline\\ IIII^*,I_4,I_1\\$	$\begin{array}{c c} 5:2\\ 5:1\\ \hline & 120\\ \hline & 2:2\\ 2:1,3,4\\ 2:2,5,6\\ 2:2\\ 2:3\\ 2:3\\ \hline & 2:2\\ 2:1,3,4\\ 2:2\\ 2:1,3,4\\ 2:2\\ 2:2:2\\ 2:1,3,4\\ 2:2\\ 2:2:2\\ 2:2:2\\ 2:3\\$
A1(A) B1(B) B2(C) C1(D) D1(E) 120 A1(E) A2(F) A3(H) A4(G) A5(J) A6(I) B1(A) B2(B) B3(C) B4(D) 121 A1(H)		1 1 1 1 1 1 1 1 1 1 1 1 1	0 0 0 0 0 0 0 0 0 0 1 1	$ \begin{array}{r} -25 \\ 115 \\ -4 \\ \hline -4 \\ \hline -56 \\ \hline -15 \\ -20 \\ -200 \\ 80 \\ -3200 \\ -80 \\ \hline -4 \\ \hline -15 \\ -20 \\ -210 \\ -30 \\ \hline -30 \\ -30 \\ \hline -30 \\ -30 \\ \hline -30 \\ \hline -30 \\ \hline -30 \\ \hline -30 \\ -30 \\ \hline -30 \\ \hline -30 \\ \hline -30 \\ -30 \\ \hline -30 \\ -$	$ \begin{array}{r} 39 \\ -2481 \\ -5 \\ -192 \\ \hline N = 120 = 18 \\ 0 \\ -1152 \\ 80 \\ -70752 \\ -2400 \\ \hline 0 \\ -16 \\ -1296 \\ 560 \\ \hline N = 121 = -76 \end{array} $	$ \begin{array}{c c} 1 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0$	$\begin{bmatrix} 1 \\ 5 \\ 1 \\ 1 \\ 1 \end{bmatrix}$ $\begin{bmatrix} 3 \cdot 5 \\ 4 \\ 8 \\ 4 \\ 4 \\ 2 \\ 2 \\ 2 \end{bmatrix}$ $\begin{bmatrix} 2 \\ 4 \\ 2 \\ 2 \\ 1 \end{bmatrix}$	5 + + + + + + + + + + + + + + + + + + +	2, 1 10, 1 2, 5 1, 1 19, 1 (2 isoge 4, 2, 1 8, 4, 2 10, 2, 4 10, 8, 1 11, 1, 2 11, 1, 8 8, 1, 1 10, 2, 2 11, 4, 1 11, 1, 4 isogeny 2	2,1 10,1 2,5 1,1 19,1 eny classe 0,2,1 0,4,2 0,2,4 0,8,1 0,1,2 0,1,8 0,1,1 0,2,2 0,4,1 0,2,4	$ \begin{array}{c c} 2,1 \\ 10,1 \\ 2,1 \\ \hline 1,1 \\ 1,1 \end{array} $ s) $ \begin{array}{c c} 2,2,1 \\ 4,4,2 \\ 2,2,4 \\ 2,8,1 \\ 1,1,2 \\ 1,1,8 \\ \hline 2,1,1 \\ 2,2,2 \\ 1,4,1 \\ 1,1,2 \end{array} $	$\begin{array}{c c} I_{10},I_1\\ I_2,I_5\\ \hline\\ I_1,I_1\\ \hline\\ I_{19},I_1\\ \hline\\ I_{19},I_1\\ \hline\\ I_{11},I_{2},I_{1}\\ I_{11},I_{2},I_{2}\\ III^*,I_{2},I_{4}\\ III^*,I_{1},I_{2}\\ II^*,I_{1},I_{1}\\ III^*,I_{2},I_{2}\\ II^*,I_{1},I_{1}\\ III^*,I_{2},I_{2}\\ II^*,I_{4},I_{1}\\ III^*,I_{4},I_{1}\\ III^*,I_{4},I_{4}\\ \hline\\ II\\ \end{array}$	120 2:2 2:1,3,4 2:2,5,6 2:2 2:3 2:3 2:2 2:1,3,4 2:2 2:2 2:1,3,4 11:2

				22	ITEL		and(A)	and (i)		Vadaina	Igamonica
	a_1 a_2 a_3	a_4	a_6	r	T	s	$\frac{\operatorname{ord}(\Delta)}{}$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
121			N = 1	121	. = 1	11^{2}	(cont	tinued)			121
C1(F)	1 1 0	-2	-7		1	_	4	0	1	IV	11 :2
C2(G)	1 1 0	-3632	82757	0	1	_ 	8	0	1	IV*	11 :1
D1(A)	0 - 1 1		-221		1	_	7	1	2	I_1^*	5 :2
D2(B)	0 - 1 1		31239		1	_	11	5	2	I*	5:1,3
D3(C)	0 - 1 - 1	-946260 ·	354609639	U	1	_	7	1	2	I_1^*	5 :2
122			N = 122	=	$2 \cdot 6$	1	(1 isog	geny class	s)		122
A1(A)	1 0 1	2	0	1	1	_	4, 1	4,1	2,1	I_4,I_1	
123			N = 123 =	= 3	$3 \cdot 41$		(2 isoge	eny classe	es)		123
A1(A)	0 1 1	-10	10	1	5	_	·	5,1	5,1	I_5,I_1	5 :2
A2(B)	0 1 1	20	-890	1	1	_	1, 5		1,5	I_1,I_5	5 : 1
B1(C)	0-1 1	1	-1	1	1	-	1,1	1,1	1,1	I_1,I_1	
124			N = 124 =	= 2	$2 \cdot 3$	1	(2 isog	eny class	es)		124
A1(B)	0 1 0	-2		1	3	_	$\frac{(2.1808)}{4,1}$	0,1	3,1	IV,I_1	3 :2
A2(C)	$\begin{bmatrix} 0 & 1 & 0 \\ 0 & 1 & 0 \end{bmatrix}$		-11			_	4, 3	· ·	1, 3	IV,I_3	3 :1
B1(A)	$\begin{bmatrix} 0 & 0 & 0 \end{bmatrix}$	-17		-		' - - —	4,1	$\begin{bmatrix} - & 1 & 1 & 1 \\ 0 & 1 & 1 \end{bmatrix}$	$\begin{bmatrix} 1 & 1 & 1 \\ 1 & 1 \end{bmatrix}$	$ IV, I_1 $!
. ,								<u> </u>	,	, 1	100
<u>126</u>		Ì	N = 126 =	$2 \cdot$	3^2 ·	7	(2 isog	geny class	ses)		$\frac{126}{1}$
A1(A)	1 - 1 1	-5	-7		2		2, 6, 1	2, 0, 1	2, 2, 1		2 :2; 3 :3
A2(B)		-95	-331		2			1,0,2	1, 2, 2	-	2:1;3:4
A3(C) A4(D)	$\begin{vmatrix} 1 - 1 & 1 \\ 1 - 1 & 1 \end{vmatrix}$	$40 \\ -320$	155 1883		6 6		6, 6, 3 $3, 6, 6$	6,0,3 3,0,6	$\begin{bmatrix} 6, 2, 3 \\ 3, 2, 6 \end{bmatrix}$	$\begin{bmatrix} I_6, I_0^*, I_3 \\ I_3, I_0^*, I_6 \end{bmatrix}$	2 :4; 3 :1,5 2 :3; 3 :2,6
A5(E)	1 - 1 1 1 1 - 1 1	-320 -1535	23591		6		18, 6, 1	18, 0, 0		~	2 : 6; 3 : 2, 0 2 : 6; 3 : 3
A6(F)	1 - 1 1		1488935		6		9, 6, 2	9,0,2	9, 2, 2		2:5; 3:4
B1(G)	$\begin{vmatrix} 1 & -1 & 0 \\ 1 & -1 & 0 \end{vmatrix}$	-36	-176	-	2	' - -	8, 8, 1	$\begin{bmatrix} -2 & 2 & 2 & 2 & 2 & 2 & 2 & 2 & 2 & 2 $	2,2,1	$ I_8, I_2^*, I_1 $	2 :2
B2(H)	1 - 1 0	-756	-7808		4		4, 10, 2		2, 4, 2	_	2 :1,3,4
B3(J)	1 - 1 0	-12096	-509036	0	2		2, 8, 1	2, 2, 1	2, 4, 1	I_2, I_2^*, I_1	2 :2
B4(I)	1 - 1 0	-936	-3668	0	4	+	2, 14, 4	2, 8, 4	2, 4, 2	I_2,I_8^*,I_4	2:2,5,6
B5(L)	1 - 1 0	-8226	286474	0	2	+	1, 10, 8	1, 4, 8	1, 2, 2	I_1,I_4^*,I_8	2:4
B6(K)	1 - 1 0	3474	-31010	0	2	_	1, 22, 2	1, 16, 2	1, 4, 2	I_1, I_{16}^*, I_2	2 :4
128			N = 128	=	2^7	(-	4 isogen	y classes)		128
A1(C)	0 1 0	1	1		2	_	8	0	2	III	2 :2
A2(D)	0 1 0	_9	7	1	2	+	13	0	4	I_2^*	2 :1
B1(F)	0 1 0	3	-5		2	-	14	0	2	III*	2 :2
B2(E)	0 1 0	-2	-2	0	2	+	7	0	1	II	2 :1
C1(A)	0 - 1 0	1	-1		$\overline{2}$		8	0	2	III	2 :2
C2(B)	$0 - 1 \ 0$	_9 		0	2	+	13	0	2	I ₂	2 :1
D1(G)	0 - 1 0	3		0	2	_	14	0	2	III*	2 :2
D2(H)	0 - 1 0	-2	2	0	2	+	7	0	1	II	2 :1
129			N = 129 =	= 3	$3 \cdot 43$	}	(2 isoge	eny classe	es)		129

 $\overline{4,1}$

4, 1

2, 1

 I_4,I_1

-19

39 1

A1(E)

0 - 1 1

$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$														
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		a_1	a_2	a_3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	129					N =	12	29 = 3	$3 \cdot 4$	3 (con	ntinued)			129
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	B1(B)	1	0	1	-30	-29	0	4	+	6, 2	6, 2	6, 2	I_6,I_2	2:2,3,4
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	B2(A)	1	0	1	-25	-49	0	2	+		3,1			
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	B3(C)	1	0	1	-245	1433	0	4	+	12, 1	12, 1	12, 1	$\mathrm{I}_{12},\!\mathrm{I}_{1}$	2 :1
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	B4(D)	1	0	1	105	-191	0	2	_	3, 4	3,4	3, 2	I_3,I_4	2 :1
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	130				1	V = 130	= :	$2 \cdot 5 \cdot$	13	(3 isog	geny class	es)		130
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	A1(E)	1	0	1	-33	68	1	6	+	4, 3, 1	4, 3, 1	2, 3, 1	I_4, I_3, I_1	2 :2; 3 :3
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	A2(F)	1	0	1	-13	156	1	6	_	2, 6, 2	2, 6, 2	2, 6, 2	I_2, I_6, I_2	2:1;3:4
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	A3(G)	1	0	1	-208	-1122	1	2	+	12, 1, 3	12, 1, 3	2, 1, 3	I_{12},I_1,I_3	2:4;3:1
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	A4(H)	1	0	1	112	-4194	1	2	_	6, 2, 6	6, 2, 6	2, 2, 6	I_6, I_2, I_6	2:3;3:2
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	B1(A)	1	-1	1	-7	-1	0	4	i +	8, 1, 1	8, 1, 1	8, 1, 1	I_8,I_1,I_1	2 :2
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	\ /	1	-1	1	-87	-289	0	4						2:1,3,4
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	\ /	1	-1	1	-1387	-19529	0	2	+				_, _, _, _	, , ,
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	\ /	1	-1				0	4			· ' '			
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	C1(I)	 1	 1	 1		_9737	 0		' 		<u> </u>		¦	2 · 2
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	\ /									, ,		, ,	0, 0, -	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$. ,											, ,	17 107 2	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$									l	, ,	, , , , , , , , , , , , , , , , , , ,		-	131
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	A1(A)	0	-1	1	1	0	1	1	_	1	1	1	I_1	
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	132				Ν	V = 132	= 2	$2^2 \cdot 3$	· 11	(2 iso	geny class	ses)		132
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	A1(A)	0	1	0	3	0	0	2	_	4, 2, 1	0, 2, 1	1, 2, 1	IV,I_2,I_1	2 :2
$\begin{array}{ c c c c c c c c } \hline \textbf{135} & \textbf{N} = 135 = 3^3 \cdot 5 & (2 \text{ isogeny classes}) & \textbf{135} \\ \hline \textbf{A1}(A) & 0 & 0 & 1 & -3 & 4 & 1 & 1 & -5,2 & 0,2 & 3,2 & IV,I_2 & \\ \hline \textbf{B1}(B) & 0 & 0 & 1 & -27 & -115 & 0 & 1 & -11,2 & 0,2 & 1,2 & II^*,I_2 & \\ \hline \textbf{136} & \textbf{N} = 136 = 2^3 \cdot 17 & (2 \text{ isogeny classes}) & \textbf{136} \\ \hline \textbf{A1}(A) & 0 & 1 & 0 & -4 & 0 & 1 & 2 & +8,1 & 0,1 & 4,1 & I^*_1,I_1 & 2:2 & \\ \hline \textbf{A2}(B) & 0 & 1 & 0 & 16 & 16 & 1 & 2 & -10,2 & 0,2 & 2,2 & III^*,I_2 & 2:1 \\ \hline \textbf{B1}(C) & 0 & -1 & 0 & -8 & -4 & 0 & 2 & +10,1 & 0,1 & 2,1 & III^*,I_1 & 2:2 & \\ \hline \textbf{B2}(D) & 0 & -1 & 0 & -48 & 140 & 0 & 2 & +11,2 & 0,2 & 1,2 & III^*,I_2 & 2:1 \\ \hline \textbf{138} & \textbf{N} = 138 = 2 \cdot 3 \cdot 23 & (3 \text{ isogeny classes}) & \textbf{138} \\ \hline \textbf{A1}(E) & 1 & 1 & 0 & -1 & 1 & 1 & 2 & -2,2,1 & 2,2,1 & 2,2,1 & I_1,I_2,I_1 & 2:2 & \\ \hline \textbf{A2}(F) & 1 & 1 & 0 & -31 & 55 & 1 & 2 & +1,1,2 & 1,1,2 & 1,1,2 & I_1,I_2,I_2 & 2:1 \\ \hline \textbf{B1}(G) & 1 & 0 & 1 & -36 & 82 & 0 & 6 & -4,6,1 & 4,6,1 & 2,6,1 & I_4,I_6,I_1 & 2:2;3:3 & \\ \hline \textbf{B2}(H) & 1 & 0 & 1 & -576 & 5266 & 0 & 6 & +2,3,2 & 2,3,2 & 2,3,2 & I_2,I_3,I_2 & 2:1;3:4 & \\ \hline \textbf{B3}(I) & 1 & 0 & 1 & 189 & 190 & 0 & 2 & -12,2,3 & 12,2,3 & 2,2,1 & I_{12},I_2,I_3 & 2:4;3:1 \\ \hline \textbf{B4}(J) & 1 & 0 & 1 & -771 & 1342 & 0 & 2 & +6,1,6 & 6,1,6 & 2,1,2 & I_6,I_1,I_6 & 2:3;3:2 & \\ \hline \textbf{C1}(A) & 1 & 1 & 1 & 3 & 3 & 0 & 4 & -4,2,1 & 4,2,1 & 4,2,1 & I_4,I_2,I_1 & 2:2 & \\ \hline \textbf{C2}(B) & 1 & 1 & 1 & -107 & -457 & 0 & 2 & +1,2,4 & 1,2,4 & 1,2,2 & I_1,I_2,I_4 & 2:2 & \\ \hline \textbf{C2}(B) & 1 & 1 & 1 & -107 & -457 & 0 & 2 & +1,2,4 & 1,2,4 & 1,2,2 & I_1,I_2,I_4 & 2:2 & \\ \hline \textbf{135} & \textbf{135} &$	A2(B)	0	1	0	-12	-12	0	2	+	8, 1, 2	0, 1, 2	1, 1, 2	IV^*,I_1,I_2	2 :1
$\begin{array}{ c c c c c c c c } \hline \textbf{135} & \textbf{N} = 135 = 3^3 \cdot 5 & (2 \text{ isogeny classes}) & \textbf{135} \\ \hline \textbf{A1}(A) & 0 & 0 & 1 & -3 & 4 & 1 & 1 & -5,2 & 0,2 & 3,2 & IV,I_2 & \\ \hline \textbf{B1}(B) & 0 & 0 & 1 & -27 & -115 & 0 & 1 & -11,2 & 0,2 & 1,2 & II^*,I_2 & \\ \hline \textbf{136} & \textbf{N} = 136 = 2^3 \cdot 17 & (2 \text{ isogeny classes}) & \textbf{136} \\ \hline \textbf{A1}(A) & 0 & 1 & 0 & -4 & 0 & 1 & 2 & +8,1 & 0,1 & 4,1 & I^*_1,I_1 & 2:2 & \\ \hline \textbf{A2}(B) & 0 & 1 & 0 & 16 & 16 & 1 & 2 & -10,2 & 0,2 & 2,2 & III^*,I_2 & 2:1 \\ \hline \textbf{B1}(C) & 0 & -1 & 0 & -8 & -4 & 0 & 2 & +10,1 & 0,1 & 2,1 & III^*,I_1 & 2:2 & \\ \hline \textbf{B2}(D) & 0 & -1 & 0 & -48 & 140 & 0 & 2 & +11,2 & 0,2 & 1,2 & III^*,I_2 & 2:1 \\ \hline \textbf{138} & \textbf{N} = 138 = 2 \cdot 3 \cdot 23 & (3 \text{ isogeny classes}) & \textbf{138} \\ \hline \textbf{A1}(E) & 1 & 1 & 0 & -1 & 1 & 1 & 2 & -2,2,1 & 2,2,1 & 2,2,1 & I_1,I_2,I_1 & 2:2 & \\ \hline \textbf{A2}(F) & 1 & 1 & 0 & -31 & 55 & 1 & 2 & +1,1,2 & 1,1,2 & 1,1,2 & I_1,I_2,I_2 & 2:1 \\ \hline \textbf{B1}(G) & 1 & 0 & 1 & -36 & 82 & 0 & 6 & -4,6,1 & 4,6,1 & 2,6,1 & I_4,I_6,I_1 & 2:2;3:3 & \\ \hline \textbf{B2}(H) & 1 & 0 & 1 & -576 & 5266 & 0 & 6 & +2,3,2 & 2,3,2 & 2,3,2 & I_2,I_3,I_2 & 2:1;3:4 & \\ \hline \textbf{B3}(I) & 1 & 0 & 1 & 189 & 190 & 0 & 2 & -12,2,3 & 12,2,3 & 2,2,1 & I_{12},I_2,I_3 & 2:4;3:1 \\ \hline \textbf{B4}(J) & 1 & 0 & 1 & -771 & 1342 & 0 & 2 & +6,1,6 & 6,1,6 & 2,1,2 & I_6,I_1,I_6 & 2:3;3:2 & \\ \hline \textbf{C1}(A) & 1 & 1 & 1 & 3 & 3 & 0 & 4 & -4,2,1 & 4,2,1 & 4,2,1 & I_4,I_2,I_1 & 2:2 & \\ \hline \textbf{C2}(B) & 1 & 1 & 1 & -107 & -457 & 0 & 2 & +1,2,4 & 1,2,4 & 1,2,2 & I_1,I_2,I_4 & 2:2 & \\ \hline \textbf{C2}(B) & 1 & 1 & 1 & -107 & -457 & 0 & 2 & +1,2,4 & 1,2,4 & 1,2,2 & I_1,I_2,I_4 & 2:2 & \\ \hline \textbf{135} & \textbf{135} &$	B1(C)	0	 -1	0	-77	330	0	$\frac{1}{2}$	i	4. 10. 1	0.10.1	1.2.1	$IV.I_{10}.I_{1}$	2 :2
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	\ /									, ,	, ,	, ,		
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	135					N = 13	5 –	- 33 .	5	(2 isomo	ny elacco	z)		135
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$		0	0	1	-3		1		<u> </u>	, ,		′	IV Ia	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$							<u>'</u>	<u>'</u>	<u> </u>		<u> </u>		<u>'</u>	
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$		U	0	1	-21	-110	U	1		11, 2	0, 2	1, 2	11 ,12	
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$								1	1	, ,		· /	Г	
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	` /										· · · · · · · · · · · · · · · · · · ·	,		
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$!					<u>'</u>	!	<u>-</u>		!	<u></u>	'	!
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	` /									,		,	, –	
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	D2(D)	U	-1	U	-48	140	U		+	11, 2	0, 2	1, Z	11 ,12	2 :1
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	138				1	V = 138	= :	$2 \cdot 3 \cdot$	23	(3 isog	geny class	es)		138
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	\ /													
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	A2(F)	1	1	0	-31	55	<u> </u> 1	$\lfloor 2 \rfloor$	<u> </u> +	1, 1, 2	$\begin{bmatrix} 1,1,2 \\ \end{bmatrix}$	[1, 1, 2]	$ I_1,I_1,I_2 $	2 : 1
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$, ,	1					0						I_4, I_6, I_1	· ·
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		1		1			0							·
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$									-	, ,			I_{12},I_2,I_3	,
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	B4(J)	1	0	1	-771	1342	0	2	+	6, 1, 6	6, 1, 6	2, 1, 2	I_6, I_1, I_6	2:3;3:2
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	C1(A)	1	1	1	3	3	0	4	Ī —	4, 2, 1	[4, 2, 1]	[4, 2, 1]	I_4, I_2, I_1	2 :2
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	\ /	1	1	1	-17	11	0	4	+		1 1			2 :1,3,4
	` ′	1	1	1	-107	-457	0	2						
	C4(C)	1	1	1	-247	1391	0	2	+	1, 8, 1	1, 8, 1	1, 2, 1	I_1, I_8, I_1	2 :2

124					IADLE	, 1:	ELLLI	ГП	CCURVI	LS 139A-14	ЭA		
	a_1	a_2	a_3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
139					N = 1	139	= 13	39	(1 isoge	eny class)			139
A1(A)	1	1	0	-3	-4	0	1	_	1	1	1	I_1	
140				1	V = 140	= :	$2^2 \cdot 5$. 7	(2 iso	geny class	es)		140
A1(A)	0	1	0	-5	-25	0	3	_		0, 3, 1	1	IV^*,I_3,I_1	3 :2
A2(B)	0	1	0	-805	-9065		<u>'</u>			[0, 1, 3]		$ $ IV * ,I $_1$,I $_3$	3 :1
B1(C)	0	0	0	32	212	0	1	_	8, 1, 5	0, 1, 5	1, 1, 1	IV^*,I_1,I_5	
141	1				N = 14		3 · 4	17	(5 isoge	eny classe	s)	T	141
A1(E)	0		1	-12		1	1	+	7, 1	7,1	7,1	I_7,I_1	
B1(G) B2(F)	1 1	1 1	1 1	$-8 \\ -143$	$-16 \\ -718$	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$\frac{2}{2}$	 -	$6, 1 \\ 3, 2$	$6, 1 \\ 3, 2$	$\begin{bmatrix} 2,1\\1,2 \end{bmatrix}$	$\begin{matrix} \mathrm{I}_6,\!\mathrm{I}_1\\ \mathrm{I}_3,\!\mathrm{I}_2\end{matrix}$	2:2 2:1
C1(A)	1 1	0	0	 -2	3	0	- - - 4	<u>'</u> . 	 4, 1	$\begin{bmatrix} 1 & 3, 2 \\ 4, 1 \end{bmatrix}$	4,1	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2 :2
C2(B)	1	0	0	-47	120	0	4	+	2, 2	2, 2	2, 2	I_2,I_2	2:1,3,4
C3(C) C4(D)	1 1	$0 \\ 0$	$0 \\ 0$	$-62 \\ -752$	$\begin{array}{c} 33 \\ 7875 \end{array}$	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$\frac{2}{2}$	+++++++++++++++++++++++++++++++++++++++	1, 4 $1, 1$	1,4	$\begin{bmatrix} 1,2\\1&1 \end{bmatrix}$	I_1,I_4	2:2 2:2
D1(I)	<u> </u>	- - - 1		-752 	0	<u>'</u>	- - - 1	 	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{bmatrix} 1 & 1, 1 \\ - & - & - \\ 1, 1 \end{bmatrix}$	$\begin{array}{ c c c c } & 1,1 \\ \hline - & - & - \\ \hline & 1,1 \end{array}$	$\left \begin{array}{ccc} I_{1}, I_{1} \\ - & \\ I_{1}, I_{1} \end{array} \right $	2 .
E1(H)			 1	-26		0	<u> </u>		 1, 1	1,1	$\begin{bmatrix} 1, 1 \\ -1, 1 \end{bmatrix}$	$\left egin{array}{cccccccccccccccccccccccccccccccccccc$!
. ,	Ŭ								,		1 '	-1)-1	1.40
142	1	1	1	10	N = 14	1	1		, ,	eny classes		T T	142
A1(F) B1(E)	1 1	$-1 \\ -1 \\ 1$	0	-12	$ \begin{array}{r} 15 \\ -1 \end{array} $	<u>'</u>	1 1	+ 	9, 1	$\begin{array}{c c} 9,1 \\ 1 & 1 \end{array}$	9,1	$\left egin{array}{c} I_9, I_1 \ \end{array} ight $	
C1(A)	!	 -1	0	$ \begin{array}{c} -1 \\ -1 \\ -1 \end{array} $	-1 -3	<u>'</u>	$\begin{bmatrix} 1 \\ -2 \end{bmatrix}$	+ 	$\frac{1,1}{6,1}$	$\begin{bmatrix} 1 & 1 & 1 \\ -1 & -1 & -1 & -1 \\ -1 & 6 & 1 \end{bmatrix}$	$\begin{array}{c c} 1,1 \\ \hline 2,1 \end{array}$	$\left egin{array}{c} {\rm I}_1, { m I}_1 \ { m$	2 :2
C1(A)	_	$-1 \\ -1$		-41	-91			+	3, 2	3, 2	1, 2	I_{3},I_{2}	2:1
D1(C)	1	0	0	-8	8	0	3	+	3, 1	3,1	3,1	I_3,I_1	3 :2
D2(D)	1	0	0	-58	-170	0	1	+	1,3	1,3	1,1	I_1,I_3	3 :1
E1(G)	1	-1	0	-2626	52244	0	1	+	27, 1	27, 1	1,1	I_{27} , I_1	
143					N = 14	43 =	= 11 ·	13	(1 iso	geny class	s)		143
A1(A)	0	-1	1	-1	-2	1	1	_	1, 2	1,2	1, 2	I_1,I_2	
144					N = 144	1 =	$2^4 \cdot 3$	3^2	(2 isog	eny classe	es)		144
A1(A)	0	0	0	0	-1	0	2	_	4,3	0,0	1, 2	II,III	2 :2; 3 :3
A2(B)	0	0	0	-15	-22	0	2	+	8,3	0,0	1, 2	I_0^* ,III	2 :1; 3 :4
A3(C) A4(D)	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$0 \\ 0$	0	$0 \\ -135$	27 594	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$\frac{2}{2}$	+	$4, 9 \\ 8, 9$	$0,0 \\ 0,0$	$ \begin{array}{c c} 1,2\\ 1,2 \end{array} $	II,III^* I_0^*,III^*	$egin{array}{ c c c c c c c c c c c c c c c c c c c$
B1(E)	0	0	0	6	7	0	2	<u>. </u>	$\frac{1}{4}, \frac{7}{7}$	$\begin{bmatrix} 0, 0 \\ 0, 1 \end{bmatrix}$	1, 2	$ \stackrel{-0}{\text{II}}, \stackrel{-0}{\text{II}} $	2 :2
B2(F)	0	0	0	-39	70	0	4	+	8,8	0, 2	2, 4	I_0^*, I_2^*	2:1,3,4
B3(G)	$\begin{array}{c} 0 \\ 0 \end{array}$	$0 \\ 0$	0	$-219 \\ -579$	$-1190 \\ 5362$	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	4	+	10, 10	0,4	4,4	I_2^*, I_4^* I^* I^*	2:2,5,6 $2:2$
B4(H) B5(J)	0	0			-78302	0	$\frac{4}{2}$	+++++++++++++++++++++++++++++++++++++++	10, 7 $11, 8$	$ \begin{array}{c c} 0,1\\0,2 \end{array} $	$2, 4 \\ 4, 2$	$egin{array}{c} { m I}_2^*, { m I}_1^* \ { m I}_3^*, { m I}_2^* \end{array}$	2:2 2:3
B6(I)	0	0	0	141	-4718	0	2	<u> </u>	11,14	0,8	2,4	I_3^*, I_8^*	2 :3
145			_		N = 1	45 :	= 5 ·	29	(1 isog	geny class)		145
A1(A)	1	-1	1	-3	2	1	2	+	1,1	1,1	1,1	I_1,I_1	2 :2
A2(B)	1	-1	1	2	6	1	2	_	2, 2	2, 2	2, 2	I_2,I_2	2 :1

$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$					TABLE 1:		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	.1 1	10 0010	VLD 14171	100D		125
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $		a_1 a_2	a_3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	147				N = 147	=	$3 \cdot$	7^2	(3 isc	geny cla	sses)		147
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	` /								•	'			
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	` '								•			· -	· · ·
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	` /								•			-	
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	` ′											_	
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $								<u> </u>	•				
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	B1(I)	0 1	1	-114	473	0	1	-	1, 8	1, 0	1,1	I_1,IV^*	13 :2
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	B2(J)	0 1	1	-44704	-3655907	0	1	-	13, 8	13, 0	13, 1	I_{13} , IV^*	13 :1
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	C1(A)	0 - 1	1	-2	-1	0	1	- -	1, 2	1,0	[1, 1]	I_1,II	13 :2
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	` /	0 - 1	1	-912	10919	0	1	_	•			· ·	13 : 1
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	148				N = 148	=	2^2	. 3	7 (1 is	sogeny cl	lass)		148
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	A1(A)	0 - 1	0	-5	1	1	1	+	8, 1	0,1	3, 1	IV^*,I_1	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	()							<u> </u>	,	,	,	7 1	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	150				N = 150 =	: 2	· 3	· 5	2 (3 is	sogeny cl	asses)	T	150
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	A1(A)	1 0	0	-3				_	2, 1, 3	2, 1, 0	2, 1, 2	I_2,I_1,III	2:2;5:3
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	` ′								, ,				
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	` ′												
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	A4(D)	1 0	0	-828	9072	0	10	+	5, 10, 3	5, 10, 0	[5, 10, 2]	I_5,I_{10},III	2:3;5:2
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	B1(G)	1 1	0	-75	-375	0	2	<u>-</u>	2, 1, 9	[2, 1, 0]	[2, 1, 2]	$ I_2,I_1,III^* $	$ {f 2}:2;{f 5}:3$
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	` ′	1 1	0	-1325	-19125	0	2	+	1, 2, 9	1, 2, 0			
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	B3(E)	1 1	0	-700	34000	0	2	_	10, 5, 9	10, 5, 0	2, 1, 2	I_{10},I_5,III^*	2:4;5:1
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	B4(F)	1 1	0	-20700	1134000	0	2	+	5,10,9	5, 10, 0	1, 2, 2	I_5,I_{10},III^*	2:3;5:2
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	C1(I)	1 1	1	37	281	0	4	_	4, 3, 7	[4, 3, 1]	4, 1, 4	I_4, I_3, I_1^*	$[{f 2}:2;{f 3}:3]$
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	C2(J)	1 1	1	-463					, ,			_	
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $		1 1	1	-338									
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	C4(L)	1 1	1	-1713	-24219	0	2	+	1, 12, 7	1, 12, 1	1, 2, 4	I_1,I_{12},I_1^*	2:2;3:7
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	C5(M)	1 1	1	-7213	232781	0	2	+	1, 3, 10	1, 3, 4	1, 1, 4	I_1,I_3,I_4^*	2:2;3:8
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	C6(N)	1 1	1	-8338	-295969	0	4	+	6,2,12	6, 2, 6	6, 2, 4	I_6, I_2, I_6^*	2 :3,7,8; 3 :2
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	` '										3, 2, 4	I_3,I_4,I_3^*	,
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	C8(P)	1 1	1	-11338	-67969	0	2	+	3, 1, 18	3, 1, 12	3, 1, 4	I_3,I_1,I_{12}^*	2:6;3:5
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	152				N = 152 =	= :	2^3 .	19	(2 iso	ogeny cla	asses)		152
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	A1(A)	0 1	0	-1								I_1^*, I_1	
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	` !	0 1	0		:			 -	:		!	:	<u>-</u>
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	153				N = 153 =	= ;	3^2 ·	17	(4 iso	ogeny cla	asses)	I	153
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	A1(C)	0 0	1	-3	1			_			· ·	III,I_1	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		0 0	1	6				; 		:	:	:	$ {\bf 3}:2$
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	` /							-					
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	C1(E)	1 - 1	0	-6	-1	0	$\overline{2}$	+	6, 1	0,1	[2, 1]	I_0^*, I_1	2 :2
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$										· ·			
$ C4(G) $ 1 -1 0 -6 377 $ 0 $ 2 $ -$ 6,4 $ $ 0,4 $ $ 2,2 $ $ I_0^*,I_4 $ $ 2 : 2	` /								,				
			0					-					
		0 0	1		:			-				. – – – – –	<u>-</u>

	a_1 a_2	a_3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
154			ي .	N = 154 =	2 ·	7 · 1	11	(3 isog	eny class	es)		154
A1(C)	1 -1	0	-29	69	1	2	_	6, 1, 2	6, 1, 2	2, 1, 2	I_6,I_1,I_2	2 :2
A2(D)	1 –1	0	-469	4029	1	2	+	3, 2, 1	3, 2, 1	1, 2, 1	I_3,I_2,I_1	2 :1
B1(E)	1 -1	1	-4		0	4		12,1,2	12, 1, 2	12, 1, 2	I_{12},I_1,I_2	2 :2
B2(F)	1 - 1	1	-324	-2137	0	4		6, 2, 4	6, 2, 4	6, 2, 2	I_6,I_2,I_4	[2:1,3,4]
B3(G) B4(H)	$\begin{array}{c c} 1 & -1 \\ 1 & -1 \end{array}$	1 1	-5164 -604	-141529 2343	0	$\frac{2}{2}$	++	3, 4, 2 3, 1, 8	3, 4, 2 3, 1, 8	3, 2, 2 3, 1, 2	$I_3,I_4,I_2 I_3,I_1,I_8$	2:2 $2:2$
C1(A)			 -14	-28	:	$-\frac{2}{2}$	'	$\frac{3,1,0}{4,1,2}$	$\begin{bmatrix} 0, 1, 0 \\ -1, -1 \end{bmatrix}$	$\begin{bmatrix} 2, 1, 2 \\ 2, 1, 2 \end{bmatrix}$	$\begin{bmatrix} 13,I_1,I_8 \\ I_4,I_1,I_2 \end{bmatrix}$	$\begin{vmatrix} 2 \cdot 2 \\ 2 \cdot 2 \end{vmatrix}$
C1(A) $C2(B)$	1 1	0	-14 -234	-28 -1480	0	$\frac{2}{2}$		$\frac{4}{2}, \frac{1}{2}, \frac{2}{1}$	$\frac{4}{2}, \frac{1}{2}, \frac{2}{1}$	$\begin{bmatrix} 2,1,2\\2,2,1 \end{bmatrix}$	I_{2},I_{2},I_{1}	$\begin{bmatrix} 2 & \cdot & 2 \\ 2 & \cdot & 1 \end{bmatrix}$
155				N = 155	=	. 21			ny classes			155
A1(D)	0 -1	1	10	$\frac{N = 155}{6}$	= i	$\frac{5 \cdot 51}{5}$		$\frac{(5 \text{ isoge}}{5,1}$	$\frac{1}{5,1}$	5,1	I_5,I_1	5 :2
A2(E)	0 - 1	1	-840	-9114		1	_	1, 5	1,5	1,5	I_1,I_5	5 :1
B1(A)	1 1	1	 -1	-2	:		' _	-2,1	$\begin{bmatrix} - & - & - & - & - \\ 2 & 1 & \end{bmatrix}$	$\begin{bmatrix} 2, 1 \end{bmatrix}$	$\begin{bmatrix} I_2,I_1 \end{bmatrix}$	2:2
B2(B)	1 1		-26	-62		2	+	1, 2	1, 2	1,2	I_1,I_2	2 :1
C1(C)	0 - 1	1	-1	1	1	 1	-	1,1	1,1	1,1	$ar{f I}_1, ar{f I}_1$	·
156				V = 156 =	2^{2}	. 3 .	13	(2 isos	geny class	20S)	<u> </u>	156
A1(E)	0 -1	0	-5	$\frac{v - 100 - 6}{6}$	1	2	+	$\frac{(2.130)}{4,2,1}$	0, 2, 1	3, 2, 1	IV,I_2,I_1	2:2
A2(F)	0 - 1	0	-20	-24		$\frac{2}{2}$	+	8, 1, 2	$0, 2, 1 \\ 0, 1, 2$	3, 1, 2	$ V^*, I_1, I_2 $	
B1(A)	0 1	0	-13	-4	0		'	$\frac{1}{4}, 6, 1$	0, 6, 1	3, 6, 1	$ IV, I_6, I_1 $	2 :2; 3 :3
B2(B)	0 1	0	-148	644		6	+	8, 3, 2	0, 3, 2	3, 3, 2	IV^*, I_3, I_2	
B3(C)	0 1	0	-733		0	2	+	4, 2, 3	0, 2, 3	1, 2, 3	IV,I_2,I_3	2:4;3:1
B4(D)	0 1	0	-748	-7564	0	2	+	8, 1, 6	0, 1, 6	1, 1, 6	IV^*,I_1,I_6	2:3;3:2
158				N = 158	= 2	$2 \cdot 79$)	(5 isoge	ny classes	s)	-	158
A1(E)	1 –1	1		9	1	1	+	8,1	8,1	8,1	I_8,I_1	
B1(D)	1 1	0	-3	1	1	1	+	2, 1	2, 1	2, 1	I_2,I_1	
C1(H)	1 1	1	-420	3109	0	5	+	20, 1	20, 1	20, 1	I_{20},I_1	5 : 2
C2(I)	1 1	1	-23380	-1385691	0	1	+	4,5	4,5	4,1	I_4,I_5	5 :1
D1(B)	1 0	1	-82	-92		3	+	6, 3	6,3	2,3	I_6,I_3	3:2,3
D2(C)	$\begin{bmatrix} 1 & 0 \\ 1 & 0 \end{bmatrix}$	1	-5217		0	1	+	18,1	18,1	2, 1	I_{18},I_1	$\begin{bmatrix} 3 : 1 \\ 2 : 1 \end{bmatrix}$
D3(A)	$\frac{1}{1} \frac{1}{1} \frac{0}{1}$	1	-47 		:	3	+ 	2,1	2,1	$\begin{bmatrix} 2, 1 \\ -2, 1 \end{bmatrix}$	$\frac{1}{1}$ - $\frac{I_2,I_1}{1}$ - $\frac{I_2}{1}$ - $\frac{I_2}{1}$	3 : 1
E1(F) E2(G)	$\begin{array}{c c} 1 & 1 \\ 1 & 1 \end{array}$	1 1	$\begin{array}{c} 1 \\ -9 \end{array}$		$0 \\ 0$	$\frac{2}{2}$	 	$2, 1 \\ 1, 2$	2, 1 $1, 2$	2, 1 $1, 2$	$egin{array}{c} \mathrm{I}_2,\!\mathrm{I}_1 \ \mathrm{I}_1,\!\mathrm{I}_2 \end{array}$	2:2 2:1
` ′	1 1	1	<u>-9</u>					<u> </u>		<u> </u>	11,12	
160	0 1		-	N = 160			1	, ,	ny classes		TTT T	$\frac{160}{2}$
A1(D) A2(C)	$\begin{bmatrix} 0 & 1 \\ 0 & 1 \end{bmatrix}$	$0 \\ 0$	$-6 \\ -1$	4 15		$\frac{2}{2}$	+	$6, 1 \\ 12, 2$	$egin{array}{c} 0,1 \ 0,2 \end{array}$	2, 1 $4, 2$	$egin{array}{c} ext{III}, ext{I}_1 \ ext{I}_3^*, ext{I}_2 \end{array}$	2:2 2:1
B1(A)	$\begin{bmatrix} 0 & 1 \\ 0 & -1 \end{bmatrix}$	0	 -6	-4	:	- - - 2	 +	6,1	[0, 1]	$\begin{bmatrix} 1 & 1 & 2 & 2 \\ 2 & 1 & 1 \end{bmatrix}$	$\begin{bmatrix} 13,12\\ III,I_1 \end{bmatrix}$	2 : 2
B1(A)	0 - 1 $0 - 1$		-0 -1	-4 -15		$\frac{2}{2}$	_	12, 2	$0, 1 \\ 0, 2$	2,1 $2,2$	I_3^*, I_2	2:1
161	<u> </u>			N = 161		7.9	3		eny class)		<u> </u>	161
A1(B)	1 -1	1		$\frac{N = 101}{8}$		$\frac{7\cdot 2}{4}$	+	$\frac{(1 \text{ Isog})}{2,2}$	$\frac{2,2}{2}$	2,2	I_2,I_2	2:2,3,4
A1(B) $A2(A)$	1 - 1 $1 - 1$	1	$-9 \\ -4$		0	2	+	$\frac{2}{1}, \frac{2}{1}$	1, 1	1, 1	I_{1},I_{2} I_{1},I_{1}	$\begin{bmatrix} 2 & 2 & 3 & 4 \\ 2 & 1 & 1 \end{bmatrix}$
A3(C)	1 - 1	1	-124		0	$\overline{4}$	+	4, 1	4, 1	4, 1	I_4,I_1	2 :1
A4(D)	1 - 1	1	26	36	0	2	_	1, 4	1,4	1,2	$_{ m I_1,I_4}$	2 :1

	a_1 a_2	$\overline{a_3}$	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
162	T			N = 16	52 =	= 2 ·	3^4	(4 isog	eny classe	es)		162
A1(K) A2(L)	$\begin{array}{ c c c } 1 & -1 \\ 1 & -1 \end{array}$		$-6 \\ 39$	$ \begin{array}{r} 8 \\ -19 \end{array} $	1 1	3 1	— —	2, 6 6, 10	$ \begin{array}{c} 2,0 \\ 6,0 \end{array} $	2, 3 2, 3	$\begin{array}{ c c } & I_2,IV \\ & I_6,IV^* \end{array}$	3:2 3:1
B1(G)	1 -1		-5	5		3	-	3,4	3,0	3,1	I_3 ,II	3:2;7:3
B2(H)		1	25	1	0	1	_	1, 12	1,0	1,1	I_1,II^*	3:1;7:4
B3(I) B4(J)		1 1	-95 -9695	-697 -364985	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	3	_	$21, 4 \\ 7, 12$	$ \begin{array}{c} 21,0 \\ 7,0 \end{array} $	$21, 1 \\ 7, 1$	$egin{array}{c} I_{21}, II \ I_{7}, II^* \end{array}$	3 :4; 7 :1 3 :3; 7 :2
C1(A)	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		3	-1	'	3	! 	1,6	$\begin{bmatrix} 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 $	$\frac{1}{1}, \frac{1}{3}$	$ I_1, IV $	3 : 2; 7 : 3
C2(B)	1 - 1		-42	-100		1	_	3, 10	3,0	1, 0 $1, 1$	I_3,IV^*	3:1;7:4
$\overrightarrow{\text{C3(D)}}$	1 - 1	0	-1077	13877	0	3	_	7,6	7,0	1, 3	I_7 ,IV	3:4;7:1
C4(C)	1 - 1	0	-852	19664	0	1	_	21, 10	21, 0	1, 1	I_{21} , IV^*	3 :3; 7 :2
D1(E)	1 - 1	1	4	-1	0	3]	6, 4	6,0	[6, 1]	I_6 ,II	3 :2
D2(F)	1 -1	1	-56	-161	0	1	_	2,12	2,0	2, 1	I_2,II^*	3 : 1
163				N =	163	3 = 1	.63	(1 isog	geny class)		163
A1(A)	0 0	1	-2	1	1	1	_	1	1	1	I_1	
												<u> </u>
166				N = 1	66	= 2	. 83	(1 iso	geny class	s)		160
A1(A)	1 1	0	-6	4	1	1	_	4, 1	4, 1	2, 1	I_4,I_1	
		0			1	1	1	`	geny clas			168
A1(B)	0 1		-7 12	-10	0	2	+	4, 1, 1	0, 1, 1	2, 1, 1	III,I_1,I_1	2 :2
A1(B) A2(A)	0 1	0	-12	$-10 \\ 0$	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	2 4	++	4, 1, 1 $8, 2, 2$	$0, 1, 1 \\ 0, 2, 2$	2, 1, 1 $2, 2, 2$	I_1^*, I_2, I_2	$egin{array}{ c c c c c c c c c c c c c c c c c c c$
A1(B) A2(A) A3(C)	$\begin{bmatrix} 0 & 1 \\ 0 & 1 \end{bmatrix}$	$0 \\ 0$	$-12 \\ -152$	-10 0 672	$\begin{bmatrix} 0 \\ 0 \\ 0 \end{bmatrix}$	2 4 4	+ + +	$4, 1, 1 \\ 8, 2, 2 \\ 10, 4, 1$	$\begin{bmatrix} 0, 1, 1 \\ 0, 2, 2 \\ 0, 4, 1 \end{bmatrix}$	2, 1, 1 $2, 2, 2$ $2, 4, 1$	$I_1^*, I_2, I_2 \\ III^*, I_4, I_1$	$egin{array}{c} {f 2}:2 \ {f 2}:1,3,4 \ {f 2}:2 \end{array}$
A1(B) A2(A) A3(C) A4(D)	$\begin{bmatrix} 0 & 1 \\ 0 & 1 \\ 0 & 1 \end{bmatrix}$	0 0 0	$ \begin{array}{r} -12 \\ -152 \\ \hline 48 \\ \hline \end{array} $	$ \begin{array}{r} -10 \\ 0 \\ 672 \\ 48 \\ \end{array} $	$\begin{bmatrix} 0 \\ 0 \\ 0 \\ 0 \end{bmatrix}$	2 4 4 2	+ + +	4, 1, 1 8, 2, 2 10, 4, 1 10, 1, 4	$\begin{bmatrix} 0, 1, 1 \\ 0, 2, 2 \\ 0, 4, 1 \\ 0, 1, 4 \end{bmatrix}$	2, 1, 1 2, 2, 2 2, 4, 1 2, 1, 2	$ \begin{array}{c c} I_1^*, I_2, I_2 \\ III^*, I_4, I_1 \\ III^*, I_1, I_4 \end{array} $	2:2 2:1,3,4 2:2 2:2
A1(B) A2(A) A3(C) A4(D) B1(E)	$ \begin{array}{c cccc} 0 & 1 \\ 0 & 1 \\ 0 & 1 \\ \hline 0 & -1 \end{array} $	0 0 0 	$ \begin{array}{r} -12 \\ -152 \\ \hline 48 \\ \hline -7 \end{array} $	$ \begin{array}{r} -10 \\ 0 \\ 672 \\ 48 \\ \hline 52 \end{array} $	$\begin{bmatrix} 0 \\ 0 \\ 0 \\ 0 \end{bmatrix}$	2 4 4 2	++++	4, 1, 1 8, 2, 2 10, 4, 1 10, 1, 4 	$\begin{bmatrix} 0, 1, 1 \\ 0, 2, 2 \\ 0, 4, 1 \\ 0, 1, 4 \end{bmatrix}$	$\begin{array}{c} 2, 1, 1 \\ 2, 2, 2 \\ 2, 4, 1 \\ 2, 1, 2 \\ \hline 2, 1, 4 \end{array}$	$ \begin{vmatrix} I_1^*, I_2, I_2 \\ III^*, I_4, I_1 \\ III^*, I_1, I_4 \end{vmatrix} $ $ III, I_3, I_4 $	$ \begin{vmatrix} 2 : 2 \\ 2 : 1, 3, 4 \\ 2 : 2 \\ 2 : 2 \\ 2 : 2 \end{vmatrix} $
A1(B) A2(A) A3(C) A4(D) B1(E) B2(F)	$ \begin{array}{c cccc} 0 & 1 \\ 0 & 1 \\ 0 & 1 \\ \hline 0 & -1 \\ 0 & -1 \end{array} $	$0 \\ 0 \\ 0 \\ -\frac{0}{0} \\ 0$	$ \begin{array}{r} -12 \\ -152 \\ \hline 48 \\ \hline -7 \end{array} $	$ \begin{array}{r} -10 \\ 0 \\ 672 \\ 48 \\ \end{array} $	$\begin{bmatrix} 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ \end{bmatrix}$	2 4 4 2	++++	4, 1, 1 8, 2, 2 10, 4, 1 10, 1, 4 	$\begin{bmatrix} 0, 1, 1 \\ 0, 2, 2 \\ 0, 4, 1 \\ 0, 1, 4 \end{bmatrix}$	2, 1, 1 2, 2, 2 2, 4, 1 2, 1, 2	$ \begin{array}{c c} I_1^*, I_2, I_2 \\ III^*, I_4, I_1 \\ III^*, I_1, I_4 \end{array} $	2:2 2:1,3,4 2:2 2:2
A1(B) A2(A) A3(C) A4(D) B1(E) B2(F) B3(G)	$ \begin{array}{c cccc} 0 & 1 \\ 0 & 1 \\ 0 & 1 \\ \hline 0 & -1 \\ 0 & -1 \\ 0 & -1 \end{array} $	0 0 0 0 0 0	$ \begin{array}{r} -12 \\ -152 \\ \hline 48 \\ \hline -7 \\ -252 \end{array} $	$ \begin{array}{r} -10 \\ 0 \\ 672 \\ 48 \\ \hline 52 \\ 1620 \end{array} $	0 0 0 0 0	$\begin{bmatrix} 2\\4\\4\\2 \end{bmatrix}$	+ + + + +	4, 1, 1 8, 2, 2 10, 4, 1 10, 1, 4 4, 3, 4 8, 6, 2	$\begin{bmatrix} 0, 1, 1 \\ 0, 2, 2 \\ 0, 4, 1 \\ 0, 1, 4 \end{bmatrix}$ $\begin{bmatrix} 0, 3, 4 \\ 0, 6, 2 \end{bmatrix}$	$2,1,1 \\ 2,2,2 \\ 2,4,1 \\ 2,1,2 \\ \hline 2,1,4 \\ 2,2,2$	$ \begin{vmatrix} I_1^*, I_2, I_2 \\ III^*, I_4, I_1 \\ III^*, I_1, I_4 \end{vmatrix} $ $ \begin{vmatrix} III, I_3, I_4 \\ I_1^*, I_6, I_2 \end{vmatrix} $	$\begin{array}{ c c c } \textbf{2} : 2 \\ \textbf{2} : 1, 3, 4 \\ \textbf{2} : 2 \\ \textbf{2} : 2 \\ \hline \textbf{2} : 2 \\ \textbf{2} : 1, 3, 4 \\ \end{array}$
A1(B) A2(A) A3(C) A4(D) B1(E) B2(F) B3(G) B4(H)	$ \begin{array}{c cccc} 0 & 1 \\ 0 & 1 \\ 0 & 1 \\ \hline 0 & -1 \\ 0 & -1 \\ 0 & -1 \end{array} $	0 0 0 0 0 0	$ \begin{array}{r} -12 \\ -152 \\ 48 \\ \hline -7 \\ -252 \\ -392 \end{array} $	$ \begin{array}{r} -10 \\ 0 \\ 672 \\ 48 \\ \hline 52 \\ 1620 \\ -228 \\ 99900 \end{array} $	$\begin{bmatrix} 0 \\ 0 \\ 0 \\ 0 \end{bmatrix}$	2 4 4 2 4 4 2 2	+ + + - - + +	4, 1, 1 8, 2, 2 10, 4, 1 10, 1, 4 4, 3, 4 8, 6, 2 10, 12, 1 10, 3, 1	$\begin{bmatrix} 0,1,1\\0,2,2\\0,4,1\\0,1,4 \end{bmatrix}$ $\begin{bmatrix} 0,3,4\\0,6,2\\0,12,1\\0,3,1 \end{bmatrix}$	$\begin{array}{c} 2,1,1\\ 2,2,2\\ 2,4,1\\ 2,1,2\\ \hline 2,1,4\\ 2,2,2\\ 2,2,1\\ 2,1,1\\ \end{array}$	$ \begin{vmatrix} I_1^*, I_2, I_2 \\ III^*, I_4, I_1 \\ III^*, I_1, I_4 \end{vmatrix} $ $ \begin{vmatrix} III, I_3, I_4 \\ I_1^*, I_6, I_2 \\ III^*, I_{12}, I_1 \end{vmatrix} $	2:2 2:1,3,4 2:2 2:2 2:1,3,4 2:2 2:2
A1(B) A2(A) A3(C) A4(D) B1(E) B2(F) B3(G) B4(H)	$ \begin{array}{c cccc} 0 & 1 \\ 0 & 1 \\ 0 & 1 \\ \hline 0 & -1 \\ 0 & -1 \\ 0 & -1 \end{array} $	0 0 0 0 0 0 0	$ \begin{array}{r} -12 \\ -152 \\ 48 \\ -7 \\ -252 \\ -392 \\ -4032 \end{array} $		0 0 0 0 0 0 0	$\begin{bmatrix} 2 \\ 4 \\ 4 \\ 2 \end{bmatrix}$	+ + + + + + +	4, 1, 1 8, 2, 2 10, 4, 1 10, 1, 4 4, 3, 4 8, 6, 2 10, 12, 1 10, 3, 1	0,1,1 0,2,2 0,4,1 0,1,4 0,3,4 0,6,2 0,12,1 0,3,1	2,1,1 2,2,2 2,4,1 2,1,2 2,1,4 2,2,2 2,2,1 2,1,1	$ \begin{array}{c} I_1^*, I_2, I_2 \\ III^*, I_4, I_1 \\ III^*, I_1, I_4 \\ \hline\\ III, I_3, I_4 \\ I_1^*, I_6, I_2 \\ III^*, I_{12}, I_1 \\ III^*, I_3, I_1 \\ \end{array} $	2:2 2:1,3,4 2:2 2:2 2:1,3,4 2:2 2:2
A1(B) A2(A) A3(C) A4(D) B1(E) B2(F) B3(G) B4(H)	$ \begin{array}{c cccc} 0 & 1 \\ 0 & 1 \\ 0 & 1 \\ \hline 0 & -1 \\ 0 & -1 \\ 0 & -1 \end{array} $	0 0 0 0 0 0 0 0	$ \begin{array}{r} -12 \\ -152 \\ 48 \\ -7 \\ -252 \\ -392 \\ -4032 \end{array} $	$ \begin{array}{r} -10 \\ 0 \\ 672 \\ 48 \\ \hline 52 \\ 1620 \\ -228 \\ 99900 \\ \end{array} $ $ \begin{array}{r} N = 170 \\ \hline 6 \end{array} $	$\begin{bmatrix} 0 \\ 0 \\ 0 \\ 0 \end{bmatrix}$ $\begin{bmatrix} 0 \\ 0 \\ 0 \end{bmatrix}$ $=$ $\begin{bmatrix} 1 \end{bmatrix}$	$ \begin{array}{c c} 2\\4\\4\\2\\2\\2\\2\\2\\5\end{array} $	+ + + + + + + + + + + + + + + + + + + +	4, 1, 1 8, 2, 2 10, 4, 1 10, 1, 4 4, 3, 4 8, 6, 2 10, 12, 1 10, 3, 1	0,1,1 0,2,2 0,4,1 0,1,4 0,3,4 0,6,2 0,12,1 0,3,1	2,1,1 2,2,2 2,4,1 2,1,2 2,1,4 2,2,2 2,2,1 2,1,1 ses) 2,2,1	$\begin{array}{c c} I_1^*,I_2,I_2\\ III^*,I_4,I_1\\ III^*,I_1,I_4\\ \hline\\ III,I_3,I_4\\ I_1^*,I_6,I_2\\ III^*,I_1,I_1\\ III^*,I_1,I_1\\ III^*,I_1,I_1\\ III^*,I_1,I_1\\ \end{array}$	2:2 2:1,3,4 2:2 2:2 2:1,3,4 2:2 2:2
A1(B) A2(A) A3(C) A4(D) B1(E) B2(F) B3(G) B4(H) A1(A) A2(B)	$ \begin{array}{c cccc} 0 & 1 \\ 0 & 1 \\ 0 & 1 \\ \hline 0 & -1 \\ 0 & -1 \\ 0 & -1 \\ \hline 1 & 0 \\ 1 & 0 \\ \hline \end{array} $	0 0 0 0 0 0 0 0	$ \begin{array}{r} -12 \\ -152 \\ 48 \\ -7 \\ -252 \\ -392 \\ -4032 \end{array} $	$ \begin{array}{r} -10 \\ 0 \\ 672 \\ 48 \\ \hline 52 \\ 1620 \\ -228 \\ 99900 \\ \hline N = 170 \\ \hline 6 \\ 38 \\ \hline -10 \\ \hline 10 \\ \hline 6 \\ 38 \\ \hline -10 \\ 7 \\ \hline 6 \\ 7 \\ $		$ \begin{array}{ c c c } 2 & 4 & 4 \\ 4 & 2 & 2 \\ \hline 2 \cdot 5 & 2 & 2 \end{array} $	+ + + + + + + + + + + + + + + + + + + +	4, 1, 1 8, 2, 2 10, 4, 1 10, 1, 4 4, 3, 4 8, 6, 2 10, 12, 1 10, 3, 1	$ \begin{vmatrix} 0,1,1\\0,2,2\\0,4,1\\0,1,4 \end{vmatrix} $ $ \begin{vmatrix} 0,3,4\\0,6,2\\0,12,1\\0,3,1 \end{vmatrix} $ $ \begin{vmatrix} 0,3,4\\0,6,2\\0,12,1\\0,3,1 \end{vmatrix} $ $ \begin{vmatrix} 0,4,2\\1\\2,4,2 \end{vmatrix} $	$\begin{array}{c} 2, 1, 1 \\ 2, 2, 2 \\ 2, 4, 1 \\ 2, 1, 2 \\ \hline \\ 2, 1, 4 \\ 2, 2, 2 \\ 2, 2, 1 \\ 2, 1, 1 \\ \hline \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\$	$\begin{array}{c c} I_1^*,I_2,I_2\\ III^*,I_4,I_1\\ III^*,I_1,I_4\\ \hline\\ III,I_3,I_4\\ I_1^*,I_6,I_2\\ III^*,I_1,I_2,I_1\\ III^*,I_3,I_1\\ \hline\\ III_1^*,I_3,I_1\\ \hline\\ III_2,I_4,I_2\\ \hline\\ I_2,I_4,I_2\\ \hline\\ \end{array}$	2:2 2:1,3,4 2:2 2:2 2:1,3,4 2:2 2:2 2:1
A1(B) A2(A) A3(C) A4(D) B1(E) B2(F) B3(G) B4(H) A1(A) A2(B) B1(H)	$ \begin{array}{c cccc} 0 & 1 \\ 0 & 1 \\ 0 & 1 \\ \hline 0 & -1 \\ 0 & -1 \\ 0 & -1 \\ \hline 1 & 0 \\ 1 & 0 \\ \hline 1 & 0 \end{array} $	0 0 0 0 0 0 0 0 0	$ \begin{array}{r} -12 \\ -152 \\ 48 \\ \hline -7 \\ -252 \\ -392 \\ -4032 \end{array} $ $ \begin{array}{r} -8 \\ 12 \\ \hline -2554 \end{array} $		$ \begin{array}{c c} 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \end{array} $ = $ \begin{array}{c c} 1 \\ 1 \\ 0 \\ \end{array} $	$ \begin{array}{c cccc} 2 & 4 & 4 & \\ 4 & 2 & \\ 2 & 2 & \\ \hline 2 & 2 & \\ \hline 6 & & \\ \end{array} $	+ + + + + + + + + + + + + + + + + + + +	4, 1, 1 8, 2, 2 10, 4, 1 10, 1, 4 4, 3, 4 8, 6, 2 10, 12, 1 10, 3, 1 7 (5 iso 4, 2, 1 2, 4, 2 8, 2, 3		$\begin{array}{c} 2,1,1\\ 2,2,2\\ 2,4,1\\ 2,1,2\\ \hline 2,1,4\\ 2,2,2\\ 2,2,1\\ 2,1,1\\ \hline \end{array}$ $\begin{array}{c} \text{ses} \\ \\ 2,2,1\\ 2,4,2\\ \hline \\ 2,2,3\\ \end{array}$	$ \begin{array}{c c} I_1^*,I_2,I_2\\ III^*,I_4,I_1\\ III^*,I_1,I_4\\ \hline\\ III,I_3,I_4\\ I_1^*,I_6,I_2\\ III^*,I_{12},I_1\\ III^*,I_3,I_1\\ \hline\\ III_2,I_4,I_2\\ \hline\\ I_8,I_2,I_3\\ \hline\\ \end{array} $	2:2 2:1,3,4 2:2 2:2 2:1,3,4 2:2 2:2 2:1
A1(B) A2(A) A3(C) A4(D) B1(E) B2(F) B3(G) B4(H) A1(A) A2(B) B1(H) B2(I)	$\begin{array}{c cccc} 0 & 1 & \\ 0 & 1 & \\ 0 & 1 & \\ \hline 0 & -1 & \\ 0 & -1 & \\ 0 & -1 & \\ \hline 0 & -1 & \\ \hline 1 & 0 & \\ \hline 1 & 0 & \\ 1 & 0 & \\ \end{array}$	0 0 0 0 0 0 0 0	$ \begin{array}{r} -12 \\ -152 \\ 48 \\ -7 \\ -252 \\ -392 \\ -4032 \end{array} $ $ \begin{array}{r} -8 \\ 12 \\ -2554 \\ -2474 \end{array} $		$ \begin{array}{c c} 0 \\ 0 \\ 0 \\ 0 \\ 0 \end{array} $ $ = \begin{array}{c c} 1 \\ 1 \\ 0 \\ 0 \end{array} $	$ \begin{array}{c cccc} 2 & 4 & 4 & 4 & 2 & 2 & 2 & 2 & 2 & 2 & $	+ + + + + + + + + + + + + + + + + + + +	4, 1, 1 8, 2, 2 10, 4, 1 10, 1, 4 4, 3, 4 8, 6, 2 10, 12, 1 10, 3, 1 7 (5 iso 4, 2, 1 2, 4, 2 8, 2, 3 4, 4, 6	0,1,1 0,2,2 0,4,1 0,1,4 0,6,2 0,12,1 0,3,1 egeny class 4,2,1 2,4,2 8,2,3 4,4,6	2,1,1 2,2,2 2,4,1 2,1,2 2,1,4 2,2,2 2,2,1 2,1,1 ses) 2,2,1 2,4,2 2,2,3 2,2,6	$\begin{array}{c} I_1^*,I_2,I_2\\ III^*,I_4,I_1\\ III^*,I_1,I_4\\ \\ III,I_3,I_4\\ I_1^*,I_6,I_2\\ III^*,I_1,I_1\\ III^*,I_3,I_1\\ \\ IIII^*,I_3,I_1\\ \\ III^*,I_3,I_1\\ \\ III^*,I_1,I_1\\ \\ III^*,I_1,$	2:2 2:1,3,4 2:2 2:2 2:1,3,4 2:2 2:2 2:1 2:2;3:3 2:1;3:4
A1(B) A2(A) A3(C) A4(D) B1(E) B2(F) B3(G) B4(H) A1(A) A2(B) B1(H) B2(I) B3(J)	$ \begin{array}{c cccc} 0 & 1 \\ 0 & 1 \\ 0 & 1 \end{array} $ $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	0 0 0 0 0 0 0 0	$ \begin{array}{r} -12 \\ -152 \\ 48 \\ -7 \\ -252 \\ -392 \\ -4032 \end{array} $ $ \begin{array}{r} -8 \\ 12 \\ -2554 \\ -2474 \\ -4169 \end{array} $	$ \begin{array}{r} -10 \\ 0 \\ 672 \\ 48 \\ \hline 52 \\ 1620 \\ -228 \\ 99900 \\ \end{array} $ $ \begin{array}{r} N = 170 \\ \hline 6 \\ 38 \\ \hline 49452 \\ 52716 \\ -20724 \\ \end{array} $	$ \begin{array}{c c} 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \end{array} $	$ \begin{array}{ c c c } 2 & 4 & 4 & 4 \\ 4 & 2 & 2 & \\ \hline 2 & 2 & \\ \hline 2 & 2 & \\ \hline 6 & 6 & \\ 2 & & \\ \end{array} $	+ + + - + + + + + + + + + + + + + + + +	4, 1, 1 8, 2, 2 10, 4, 1 10, 1, 4 4, 3, 4 8, 6, 2 10, 12, 1 10, 3, 1 7 (5 iso 4, 2, 1 2, 4, 2 8, 2, 3 4, 4, 6 24, 6, 1	0,1,1 0,2,2 0,4,1 0,1,4 0,6,2 0,12,1 0,3,1 egeny clas 4,2,1 2,4,2 8,2,3 4,4,6 24,6,1	2,1,1 2,2,2 2,4,1 2,1,2 2,1,4 2,2,2 2,2,1 2,1,1 ses) 2,2,1 2,4,2 2,2,3 2,2,6 2,2,1	$\begin{array}{c c} I_1^*,I_2,I_2\\ III^*,I_4,I_1\\ III^*,I_1,I_4\\ \hline\\ III,I_3,I_4\\ I_1^*,I_6,I_2\\ III^*,I_1,I_2,I_1\\ III^*,I_3,I_1\\ \hline\\ III_2,I_4,I_2\\ \hline\\ I_8,I_2,I_3\\ I_4,I_4,I_6\\ I_{24},I_6,I_1\\ \hline\end{array}$	2:2 2:1,3,4 2:2 2:2 2:1,3,4 2:2 2:2 2:1 2:1;3:4 2:4;3:1
A1(B) A2(A) A3(C) A4(D) B1(E) B2(F) B3(G) B4(H) A1(A) A2(B) B1(H) B2(I) B3(J) B4(K)	$ \begin{array}{c cccc} 0 & 1 \\ 0 & 1 \\ 0 & 1 \end{array} $ $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	0 0 0 0 0 0 0 0	$ \begin{array}{r} -12 \\ -152 \\ 48 \\ -7 \\ -252 \\ -392 \\ -4032 \end{array} $ $ \begin{array}{r} -8 \\ 12 \\ -2554 \\ -2474 \\ -4169 \\ 16311 \\ \end{array} $	$ \begin{array}{r} -10 \\ 0 \\ 672 \\ 48 \\ \hline 52 \\ 1620 \\ -228 \\ 99900 \\ \hline N = 170 \\ 6 \\ 38 \\ \hline 49452 \\ 52716 \\ -20724 \\ -159988 \\ \hline -159988 $	$ \begin{array}{c c} 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \end{array} $	$ \begin{array}{ c c c } 2 & 4 & 4 & 4 \\ 4 & 2 & 2 & \\ \hline 2 & 2 & \\ \hline 2 & 2 & \\ \hline 6 & 6 & 2 & \\ 2 & 2 & \\ \end{array} $	+ + + - + + + - - + - - - + - - - - - -	4, 1, 1 8, 2, 2 10, 4, 1 10, 1, 4 4, 3, 4 8, 6, 2 10, 12, 1 10, 3, 1 7 (5 iso 4, 2, 1 2, 4, 2 8, 2, 3 4, 4, 6 24, 6, 1 12, 12, 2		$\begin{array}{c} 2,1,1\\ 2,2,2\\ 2,4,1\\ 2,1,2\\ \hline 2,1,4\\ 2,2,2\\ 2,2,1\\ 2,1,1\\ \hline \end{array}$ $\begin{array}{c} \text{ses} \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\$	$\begin{array}{c c} I_1^*,I_2,I_2\\ III^*,I_4,I_1\\ III^*,I_1,I_4\\ \hline\\ III,I_3,I_4\\ I_1^*,I_6,I_2\\ III^*,I_{12},I_1\\ III^*,I_{3},I_1\\ \hline\\ I_2,I_4,I_2\\ \hline\\ I_8,I_2,I_3\\ I_4,I_4,I_6\\ I_{24},I_6,I_1\\ I_{12},I_{12},I_2\\ \hline\\ \end{array}$	2:2 2:1,3,4 2:2 2:2 2:1,3,4 2:2 2:2 2:1 2:2;3:3 2:1;3:4 2:4;3:1 2:3;3:2
A1(B) A2(A) A3(C) A4(D) B1(E) B2(F) B3(G) B4(H) A1(A) A2(B) B1(H) B2(I) B3(J) B4(K) C1(F)	$\begin{array}{ c c c c c } \hline 0 & 1 \\ 0 & 1 \\ \hline 0 & 1 \\ \hline 0 & -1 \\ \hline \end{array}$	0 0 0 0 0 0 0 0 1 1 1 1 1 1	$ \begin{array}{r} -12 \\ -152 \\ 48 \\ -7 \\ -252 \\ -392 \\ -4032 \end{array} $ $ \begin{array}{r} -8 \\ 12 \\ -2554 \\ -2474 \\ -4169 \\ 16311 \\ -399 \\ \end{array} $	$ \begin{array}{r} -10 \\ 0 \\ 672 \\ 48 \\ -28 \\ 99900 \end{array} $ $ \begin{array}{r} N = 170 \\ 6 \\ 38 \\ -20724 \\ -159988 \\ -919 \end{array} $	0 0 0 0 0 0 0 0 0 0	$ \begin{array}{c cccc} 2 & 4 & 4 & 4 & 2 & 2 & 2 & 2 & 2 & 2 & $	+ + + + + + + + + + + - + + - + - + - +	4, 1, 1 8, 2, 2 10, 4, 1 10, 1, 4 4, 3, 4 8, 6, 2 10, 12, 1 10, 3, 1 7 (5 iso 4, 2, 1 2, 4, 2 8, 2, 3 4, 4, 6 24, 6, 1 12, 12, 2 21, 3, 1	0,1,1 0,2,2 0,4,1 0,1,4 0,6,2 0,12,1 0,3,1 egeny clas 4,2,1 2,4,2 8,2,3 4,4,6 24,6,1 12,12,2	2,1,1 2,2,2 2,4,1 2,1,2 2,1,4 2,2,2 2,2,1 2,1,1 ses) 2,2,1 2,4,2 2,2,3 2,2,6 2,2,1 2,2,2 2,1,1,1	$ \begin{array}{c c} I_1^*,I_2,I_2\\ III^*,I_4,I_1\\ III^*,I_1,I_4\\ \hline\\ III,I_3,I_4\\ I_1^*,I_6,I_2\\ III^*,I_{12},I_1\\ III^*,I_3,I_1\\ \hline\\ I_2,I_4,I_2\\ \hline\\ I_8,I_2,I_3\\ I_4,I_4,I_6\\ I_{24},I_6,I_1\\ I_{12},I_{12},I_2\\ \hline\\ I_{21},I_3,I_1\\ \hline \end{array} $	2:2 $2:1,3,4$ $2:2$ $2:2$ $2:1,3,4$ $2:2$ $2:1,3,4$ $2:2$ $2:3:3$ $2:4;3:1$ $2:4;3:1$ $2:3;3:2$
A1(B) A2(A) A3(C) A4(D) B1(E) B2(F) B3(G) B4(H) A1(A) A2(B) B1(H) B2(I) B3(J) B4(K) C1(F) C2(G)	$ \begin{array}{c cccc} 0 & 1 \\ 0 & 1 \\ 0 & 1 \end{array} $ $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	0 0 0 0 0 0 0 0 1 1 1 1 1 1 1 0 0	$ \begin{array}{r} -12 \\ -152 \\ 48 \\ -7 \\ -252 \\ -392 \\ -4032 \end{array} $ $ \begin{array}{r} -8 \\ 12 \\ -2554 \\ -2474 \\ -4169 \\ 16311 \\ -399 \\ -6641 \\ -100 \\ -6641 \\ -100 \\ -$	$ \begin{array}{r} -10 \\ 0 \\ 672 \\ 48 \\ \hline 52 \\ 1620 \\ -228 \\ 99900 \end{array} $ $ \begin{array}{r} N = 170 \\ 6 \\ 38 \\ -249452 \\ 52716 \\ -20724 \\ -159988 \\ \hline -919 \\ -215575 \\ \hline $	$ \begin{array}{c c} 0 \\ 0 \\ 0 \\ 0 \end{array} $	$ \begin{array}{ c c c } 2 & 4 & 4 & 4 \\ 4 & 2 & 2 & \\ \hline 2 & 2 & \\ \hline 2 & 2 & \\ \hline 6 & 6 & 2 & \\ 2 & 2 & \\ \hline 3 & 1 & \\ \end{array} $	+ + + + + + + + + + + + + + + + + + +	4, 1, 1 8, 2, 2 10, 4, 1 10, 1, 4 4, 3, 4 8, 6, 2 10, 12, 1 10, 3, 1 7 (5 iso 4, 2, 1 2, 4, 2 8, 2, 3 4, 4, 6 24, 6, 1 12, 12, 2 21, 3, 1 7, 9, 3	0,1,1 0,2,2 0,4,1 0,1,4 0,6,2 0,12,1 0,3,1 egeny clas 4,2,1 2,4,2 8,2,3 4,4,6 24,6,1 12,12,2 21,3,1 7,9,3	2,1,1 2,2,2 2,4,1 2,1,2 2,1,4 2,2,2 2,2,1 2,1,1 ses) 2,2,1 2,4,2 2,2,3 2,2,6 2,2,1 2,2,2 21,1,1 7,1,1	$ \begin{array}{c c} I_1^*,I_2,I_2\\ III^*,I_4,I_1\\ III^*,I_1,I_4\\ \hline\\ III,I_3,I_4\\ I_1^*,I_6,I_2\\ III^*,I_{12},I_1\\ III^*,I_3,I_1\\ \hline\\ I_2,I_4,I_2\\ \hline\\ I_8,I_2,I_3\\ I_4,I_4,I_6\\ I_{24},I_6,I_1\\ I_{12},I_{12},I_2\\ \hline\\ I_{21},I_3,I_1\\ I_7,I_9,I_3\\ \hline\\ \end{array} $	$2:2 \\ 2:1,3,4 \\ 2:2 \\ 2:2 $ $2:2$ $2:1,3,4 \\ 2:2 \\ 2:1,3,4 \\ 2:2:3:3 \\ 2:3:3 \\ 2:4;3:1 \\ 2:3;3:2 \\ 3:1$
A1(B) A2(A) A3(C) A4(D) B1(E) B2(F) B3(G) B4(H) A1(A) A2(B) B1(H) B2(I) B3(J) B4(K) C1(F) C2(G) D1(D)	$\begin{array}{c cccc} 0 & 1 & 0 & 1 \\ 0 & 1 & 0 & 1 \\ \hline 0 & -1 & 0 & -1 \\ 0 & -1 & 0 & -1 \\ \hline 1 & 0 & 1 & 0 \\ 1 & 0 & 1 & 0 \\ 1 & 0 & 1 & 0 \\ \hline 1 & 0 & 1 & 0 \\ \hline 1 & 0 & 1 & 0 \\ \hline 1 & 0 & 1 & 0 \\ \hline 1 & 0 & 1 & 0 \\ \hline 1 & 0 & 1 & 0 \\ \hline 1 & 0 & 1 & 0 \\ \hline \end{array}$	0 0 0 0 0 0 0 0	$ \begin{array}{r} -12 \\ -152 \\ 48 \\ -7 \\ -252 \\ -392 \\ -4032 \end{array} $ $ \begin{array}{r} -8 \\ 12 \\ -2554 \\ -2474 \\ -4169 \\ 16311 \\ -399 \\ -6641 \\ -3 \end{array} $	$ \begin{array}{r} -10 \\ 0 \\ 672 \\ 48 \\ -228 \\ 99900 \end{array} $ $ \begin{array}{r} N = 170 \\ 6 \\ 38 \\ -49452 \\ 52716 \\ -20724 \\ -159988 \\ -919 \\ -215575 \\ -6 \end{array} $	$ \begin{array}{c c} 0 \\ 0 \\ 0 \\ 0 \end{array} $	$\begin{array}{ c c c }\hline 2\\ 4\\ 4\\ 2\\ \hline \\ 2\\ \hline \\ 2\\ \hline \\ 2\\ \hline \\ 3\\ 1\\ \hline \\ 3\\ \hline \\ 3\\ \hline \\ \end{array}$	+ + + + + + + + + + + - + + - + - + - +	4, 1, 1 8, 2, 2 10, 4, 1 10, 1, 4 4, 3, 4 8, 6, 2 10, 12, 1 10, 3, 1 7 (5 iso 4, 2, 1 2, 4, 2 8, 2, 3 4, 4, 6 24, 6, 1 12, 12, 2 21, 3, 1 7, 9, 3 3, 3, 1	0,1,1 0,2,2 0,4,1 0,1,4 0,6,2 0,12,1 0,3,1 egeny class 4,2,1 2,4,2 8,2,3 4,4,6 24,6,1 12,12,2 21,3,1 7,9,3 3,3,1	2,1,1 2,2,2 2,4,1 2,1,2 2,1,4 2,2,2 2,2,1 2,1,1 ses) 2,2,1 2,4,2 2,2,3 2,2,6 2,2,1 2,2,2 21,1,1 7,1,1 1,3,1	$ \begin{array}{c c} I_1^*,I_2,I_2\\ III^*,I_4,I_1\\ III^*,I_1,I_4\\ \hline\\ III,I_3,I_4\\ I_1^*,I_6,I_2\\ III^*,I_1,I_1\\ III^*,I_3,I_1\\ \hline\\ I_2,I_4,I_2\\ \hline\\ I_8,I_2,I_3\\ I_4,I_4,I_6\\ I_24,I_6,I_1\\ I_{12},I_{12},I_2\\ \hline\\ I_{21},I_3,I_1\\ I_7,I_9,I_3\\ \hline\\ I_3,I_3,I_1\\ \end{array} $	2:2 2:1,3,4 2:2 2:2 2:1,3,4 2:2 2:2 2:1 2:2;3:3 2:1;3:4 2:4;3:1 2:3;3:2 3:2 3:2
A1(B) A2(A) A3(C) A4(D) B1(E) B2(F) B3(G) B4(H) A1(A) A2(B) B1(H) B2(I) B3(J) B4(K) C1(F) C2(G) D1(D) D2(E) E1(C)	$ \begin{array}{c cccc} 0 & 1 \\ 0 & 1 \\ 0 & 1 \end{array} $ $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	0 0 0 0 0 0 0 0 0	$ \begin{array}{r} -12 \\ -152 \\ 48 \\ -7 \\ -252 \\ -392 \\ -4032 \end{array} $ $ \begin{array}{r} -8 \\ 12 \\ -2554 \\ -2474 \\ -4169 \\ 16311 \\ -399 \\ -6641 \\ -100 \\ -6641 \\ -100 \\ -$	$ \begin{array}{r} -10 \\ 0 \\ 672 \\ 48 \\ \hline 52 \\ 1620 \\ -228 \\ 99900 \end{array} $ $ \begin{array}{r} N = 170 \\ 6 \\ 38 \\ -249452 \\ 52716 \\ -20724 \\ -159988 \\ \hline -919 \\ -215575 \\ \hline $	$ \begin{array}{c c} 0 \\ 0 \\ 0 \\ 0 \end{array} $	$\begin{array}{ c c c }\hline 2\\ 4\\ 4\\ 2\\ \hline \\ 2\\ \hline \\ 2\\ \hline \\ 2\\ \hline \\ 3\\ 1\\ \hline \\ 3\\ 1\\ \hline \end{array}$	+ + + + + + + + + + + + + + + + + + +	4, 1, 1 8, 2, 2 10, 4, 1 10, 1, 4 4, 3, 4 8, 6, 2 10, 12, 1 10, 3, 1 7 (5 iso 4, 2, 1 2, 4, 2 8, 2, 3 4, 4, 6 24, 6, 1 12, 12, 2 21, 3, 1 7, 9, 3	0,1,1 0,2,2 0,4,1 0,1,4 0,6,2 0,12,1 0,3,1 egeny clas 4,2,1 2,4,2 8,2,3 4,4,6 24,6,1 12,12,2 21,3,1 7,9,3	2,1,1 2,2,2 2,4,1 2,1,2 2,1,4 2,2,2 2,2,1 2,1,1 ses) 2,2,1 2,4,2 2,2,3 2,2,6 2,2,1 2,2,2 21,1,1 7,1,1	$ \begin{array}{c c} I_1^*,I_2,I_2\\ III^*,I_4,I_1\\ III^*,I_1,I_4\\ \hline\\ III,I_3,I_4\\ I_1^*,I_6,I_2\\ III^*,I_{12},I_1\\ III^*,I_3,I_1\\ \hline\\ I_2,I_4,I_2\\ \hline\\ I_8,I_2,I_3\\ I_4,I_4,I_6\\ I_{24},I_6,I_1\\ I_{12},I_{12},I_2\\ \hline\\ I_{21},I_3,I_1\\ I_7,I_9,I_3\\ \hline\\ \end{array} $	2:2 2:1,3,4 2:2 2:2 2:1,3,4 2:2 2:2 2:2 2:1 2:3:3:4 2:4;3:1 2:3;3:2 3:1

128				TABLE 1:	ىرى	1711 1	.10	CORVES	171A-1700	<i></i>		
	$\begin{vmatrix} a_1 & a_2 \end{vmatrix}$	a_3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
171			Ĩ	N = 171 =	3^{2}	. 19		(4 isogen	y classes))		171
A1(D) A2(E)	$\begin{array}{c c} 1 & -1 \\ 1 & -1 \end{array}$	1 1	$-14 \\ -59$	$ \begin{array}{r} 20 \\ -142 \end{array} $		4	++	7,1	1,1	$\frac{4}{4}$, 1	$egin{array}{c} { m I}_1^*, { m I}_1 \ { m I}_2^*, { m I}_2 \end{array}$	$egin{array}{c} {f 2}:2 \ {f 2}:1,3,4 \end{array}$
A3(F)	1 - 1 $1 - 1$		-914	-142 -10402		$\frac{4}{2}$	+	8, 2 $10, 1$	2, 2 $4, 1$	4, 2 $4, 1$	I_{2}^{1},I_{2} I_{4}^{*},I_{1}	$\begin{bmatrix} 2 : 1, 3, 4 \\ 2 : 2 \end{bmatrix}$
A4(G)		1	76	-790		2	_	7, 4	1, 4	2, 2	I_1^{*}, I_4	2:2 2:2
B1(A)	0 0	1	6	0	1	1	i	6, 1	0,1	2,1	[3 :2
B2(B)	0 0	1	-84	315	1	3	_	6,3	0, 3	2,3	I_0^*, I_3	3 :1,3
B3(C)	0 0	1	-6924	221760	1	3	<u> </u>	6,1	0,1	[2, 1]	I_0^*, I_1	3 :2
C1(I)		1	177	1035		1	-	16, 1	10,1	2,1	I_{10}^*, I_1	5 :2
C2(J)	0 0		-39513	3023145			<u> </u>	8,5	$\begin{bmatrix} 2,5 \\ \end{bmatrix}$	2,1	I_2^*, I_5	5 :1
D1(H)	0 0	1	-21	-41	0	1	_	8,1	2, 1	2,1	I_2^*, I_1	
172				N = 172 =	= 2	$^2 \cdot 4$	3	(1 isoge	ny class)			172
A1(A)	0 1		-13	15		3	_	8, 1	0, 1	3, 1	IV^*,I_1	3 :2
A2(B)	0 1	0	67	79	1	1	_	8,3	0, 3	1,3	IV^*,I_3	3 : 1
174			Λ	V = 174 = 2	2 · ;	$3 \cdot 29$	1		ny classes	ŕ		174
A1(I)	1 0		-7705			3					I_{11}, I_{21}, I_1	
A2(J)	-	1		-31810330	<u>-</u> -	1	— 	33, 7, 3	33, 7, 3	:	I_{33}, I_{7}, I_{3}	3 : 1
B1(G) B2(H)	$\begin{array}{c c} 1 & 0 \\ 1 & 0 \end{array}$	$0 \\ 0$	$-1 \\ -6511$	137 -203353			_	7, 7, 1	7,7,1	7, 7, 1		7:2 7:1
C1(F)	-	- 1	-0511 -5	-203333 -7			— —	$\begin{array}{c} 1, 1, 7 \\ -7, -7, -7 \\ 1, 3, 1 \end{array}$	$\begin{bmatrix} 1,1,7\\ -1,3,1 \end{bmatrix}$	<u>'</u>	$\left \begin{array}{c} {\rm I}_{1}, { m I}_{1}, { m I}_{7} \\ { m I}_{1}, { m I}_{3}, { m I}_{1} \end{array} \right $	• · · ·
D1(A)	-	1	0	-2		'	¦	4, 1, 1	$\begin{bmatrix} 1 & 1 & 1 & 1 \\ 1 & 4 & 1 & 1 \end{bmatrix}$	$\begin{bmatrix} 2 & 2 & 2 & 2 \\ 2 & 1 & 1 \end{bmatrix}$	<u></u>	2 :2
D2(B)			-20				+		2, 2, 2		I_2,I_2,I_2	[2 : 1, 3, 4]
D3(C)	1 0		-310	-2122			+	1, 4, 1	1, 4, 1	1, 4, 1	I_1,I_4,I_1	2 :2
D4(D)	1 0	1	-50	86	0	$\frac{2}{2}$	+	1, 1, 4	1,1,4	[1, 1, 2]	I_1,I_1,I_4	2 :2
E1(E)	1 1	0	-56	-192	0	1	_	13, 1, 1	13, 1, 1	1, 1, 1	I_{13},I_1,I_1	
175				N = 175 =	5^2	$2 \cdot 7$	(3 isogen	y classes)			175
A1(B)	0 - 1		2	-2		1	_	3, 1	0, 1	2, 1	III,I_1	5 :2
A2(A)	-		-148	748			<u> </u>	3,5	0,5	2,5	$ $ III,I $_5$	5 :1
B1(C)			-33	93		1	_	7, 1	1,1	4,1	I_1^*, I_1	3 :2
B2(D) B3(E)	$\begin{array}{c c} 0 - 1 \\ 0 - 1 \end{array}$		217 - 3283	$-282 \\ -74657$		1 1	_ _	$9, 3 \\ 15, 1$	3, 3 9, 1	$\begin{array}{c c} 4,1 \\ 4,1 \end{array}$	$I_3^*, I_3 I_9^*, I_1$	3:1,3 3:2
C1(F)	$\begin{bmatrix} 0 & 1 \\ 0 & 1 \end{bmatrix}$		42	-131		'	! 	9,1	$\begin{bmatrix} 0, 1 \\ 0, 1 \end{bmatrix}$	$\begin{bmatrix} 1 & 1 & 1 \\ 2 & 1 & 1 \end{bmatrix}$		5 : 2
C2(G)	$\begin{bmatrix} 0 & 1 \\ 0 & 1 \end{bmatrix}$		-3708				_	9,5	$0, 1 \\ 0, 5$	2, 1 $2, 1$	III^*,I_5	5 : 1
176			Ī	N = 176 =	2^{4}	. 11		(3 isogen	y classes))		176
A1(C)	0 0	0	-4	-4	0	1	_	8,1	0,1	1,1	I_0^*, I_1	
B1(D)			-5	-13			<u> </u>	12,1	[0, 1]	1,1	Π^*, Π_1	5:2
B2(E)	$\begin{bmatrix} 0 & 1 \\ 0 & 1 \end{bmatrix}$		-165	1427		1	-	12, 5	0,5	1, 1	II^*,I_5	5 :1,3
B3(F)	-		-125125	16994227			<u> </u>	12,1	0,1	1,1	$\prod_{i=1}^{n} \prod_{j=1}^{n} \prod_{i=1}^{n} \prod_{j=1}^{n} \prod_{j=1}^{n} \prod_{j=1}^{n} \prod_{i=1}^{n} \prod_{j=1}^{n} \prod_{i=1}^{n} \prod_{j=1}^{n} \prod_{j$	$\begin{bmatrix} 5 : 2 \\ \vdots \\ \vdots \\ \vdots \\ \end{bmatrix}$
C1(A)			3		1	1 1	_	8, 1	0,1	$\begin{bmatrix} 2,1\\ 2&2 \end{bmatrix}$	I_0^*, I_1	3:2 2:1
C2(B)	0 - 1	U	-77	289	1	1	_	8,3	0, 3	2,3	I_0^*, I_3	3 :1

	a_1	a_2	a_3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
178					N = 178 :	= 2	2 · 89)	(2 isoge	ny classes	s)		178
A1(A) A2(B)	1 1	0	0	$6 \\ -554$	$-28 \\ -5068$	0	3 1	_	12,1 $4,3$	12, 1 4, 3	12, 1 4, 1	$I_{12}, I_1 \\ I_4, I_3$	3 :2 3 :1
B1(C)	<u> </u>	1	0	-44	80	0	$\begin{bmatrix} -2 \\ 2 \end{bmatrix}$	 +	14, 1	14,1	2, 1	$oxed{I_{14}, I_1}$	2 :2
B2(D)	1	1	0	-684	6608	0	2	+	7,2	7, 2	1,2	I_7,I_2	2 :1
179					N = 179)	(1 isoge	ny class)	1	ı	179
A1(A)	0	0	1	-1	-1	0	1	_	1	1	1	I_1	
180					N = 180 =	= 25	$2 \cdot 3^2$	• 5	(1 iso	ogeny clas	ss)		180
A1(A)	0		0	-12	-11		2		4, 6, 1	0, 0, 1	1, 2, 1	IV,I_0^*,I_1	2 :2; 3 :3
A2(B) A3(C)	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	0	$0 \\ 0$	$33 \\ -372$	$-74 \\ 2761$		$\frac{2}{6}$, ,	$0, 0, 2 \\ 0, 0, 3$	$\begin{vmatrix} 1, 2, 2 \\ 3, 2, 3 \end{vmatrix}$	$\begin{bmatrix} IV^*, I_0^*, I_2 \\ IV, I_0^*, I_3 \end{bmatrix}$	$egin{array}{ c c c c c c c c c c c c c c c c c c c$
A4(D)			0	-327	3454		6		8, 6, 6	0, 0, 6 $0, 0, 6$	3, 2, 6	$ V,I_0,I_3 = V,I_0,I_6 $	2:4,3:1 2:3;3:2
. ,	<u> </u>						- 1					, 0, 0	,
182	1	1	1	866	N = 182 = 6445		4		, ,	eny class		ттт	$\frac{182}{2:2}$
A1(E) A2(F)		$-1 \\ -1$		-4254	59693		4		20, 3, 2 $10, 6, 4$	20, 3, 2 $10, 6, 4$	$\begin{vmatrix} 20, 1, 2 \\ 10, 2, 2 \end{vmatrix}$	$I_{20},I_3,I_2 I_{10},I_6,I_4$	2:2 2:1,3,4
A3(G)					-2081875		2		5, 12, 2	5, 12, 2	5, 2, 2	I_5,I_{12},I_2	2:2
A4(H)	1	-1	1 -	-59134	5547693	0	2	+	5, 3, 8	5, 3, 8	5, 1, 2	I_5, I_3, I_8	2:2
B1(A)	1	0	0	7	-7		3		9, 1, 1	9, 1, 1	9, 1, 1	I_9,I_1,I_1	3 :2
B2(B)	1		0	-193	-1055		3		3, 3, 3	3, 3, 3	3, 3, 3	I_3,I_3,I_3	3:1,3
B3(C)	1 -			-15663 	-755809	:	1	<u>'</u> – –		1,1,1	1,1,1	$\begin{bmatrix} I_1,I_1,I_1 \\ I_2-I_2-I_2 \end{bmatrix}$	3 :2
C1(J)	1 -				120244					11, 7, 1	1,1,1	I_{11},I_{7},I_{1}	
D1(D)	1	-1	1 	3	-5	0		— 	1, 3, 1	1,3,1	1, 1, 1	I_1,I_3,I_1	
E1(I)	1	-1	0	-22	884	0	1	_	7, 1, 5	7, 1, 5	1, 1, 1	I_7,I_1,I_5	
184					N = 184 =	= 2	$3 \cdot 23$	3	(4 isoge	eny classe	es)		184
A1(C)	0	-1	0	0	1	1	1	_	4, 1	0,1	2, 1	III,I_1	
B1(B)	0	-1	0	-4	5	1	1		4,1	[0, 1]	2, 1	$ $ III, I_1	
C1(D)	0	0	0	5	6	0	$\frac{1}{2}$	 _	10, 1	0,1	2, 1	$ III^*, I_1 $	2 :2
C2(E)	0	0	0	-35	62	0	2	+	11, 2	0, 2	1, 2	$\mathrm{II}^*,\!\mathrm{I}_2$	2:1
D1(A)	0	0	0	-55	-157	0	1		4,1	0, 1	2,1	$\prod_{i=1}^{n} III, I_1$	
185					N = 185 :	= 5	$5 \cdot 37$,	(3 isoge	ny classes	s)		185
A1(D)	0	1	1	-156	700	1	1	+	4,1	4,1	2,1	I_4,I_1	
B1(A)	0	-1	1	-5	6	1	1	+	2,1	2, 1	2, 1	I_2,I_1	
C1(B)	 1	0	1	-4	-3	1	$\frac{1}{2}$	' +	1,1	1,1	1,1	$\begin{bmatrix} I_1,I_1 \end{bmatrix}$	2:2
C2(C)	1	0	1	1	-9	1	2	_	2, 2	2, 2	2,2	I_2,I_2	2 :1
186				Ì	V = 186 =	2	. 3 . 3	31	(3 isog	eny class	es)		186
A1(D)	1	1	0	-83	-369		1		, ,	1, 11, 1	1,1,1	I_1, I_{11}, I_1	
B1(B)	1	0	0	15	9	0	5	 —	5, 5, 1	5, 5, 1	5, 5, 1	I_5,I_5,I_1	5 :2
B2(C)	1	0	0	-1395	-20181	0	1		1, 1, 5	1, 1, 5	1, 1, 5	I_1,I_1,I_5	5 :1
C1(A)	1 1	0	1	-17	-28	0	1	_	7.1.1	7.1.1	1 1 1	I_7,I_1,I_1	

						I	Imi		1/4)	1 (1)		T. 1.	T
	a_1	a_2	a_3	a_4	a_6	r	T	s	$\overline{\operatorname{ord}(\Delta)}$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
187					N = 187	_	11 · 1	17	(2 isoge	eny classes	s)		187
A1(A)	0	1	1	11	30	0	3	-	3, 2	3, 2	3, 2	I_3,I_2	3 :2
A2(B)	0	1 	1		-905	0	1	ļ — -	1,6	1,6	1,2	I_1,I_6	3 :1
B1(C)	0	0	1	7	1	0	1	_	3,1	3,1	1,1	I_3,I_1	
189					N = 18	9 =	3^3 ·	7	(4 isoge	eny classes			189
A1(A)	0	0	1	-3	0	1	1	+	5,1	0,1	3,1	IV,I_1	
B1(C)	0	0	1	-24	45	1	3	Ī +	3, 1	0,1	$\overline{1,1}$	$ $ II,I $_1$	3 :2
B2(D)	0	0	1	-54	-88	1	3	+	9, 3	0, 3	3, 3	IV^*,I_3	3:1,3
B3(E)	0	0	1	-3834	-91375	1	1	+	11,1	0,1	$\begin{bmatrix} 1,1 \end{bmatrix}$	II^*,I_1	3 :2
C1(F)	0	0	1	-6	3	0	3	+	3, 3	0, 3	1,3	II,I_3	3:2,3
C2(G)	0	0	1	-216	-1222	0	1	+	9, 1	0, 1	1, 1	IV^*,I_1	3 : 1
C3(H)	0	0	1	-426	3384	0	3	<u> </u> +	5,1	$\begin{bmatrix} 0,1 \end{bmatrix}$	3,1	$ $ IV,I $_1$	3 :1
D1(B)	0	0	1	-27	-7	0	1	+	11, 1	0, 1	1,1	II^*,I_1	
190				I	V = 190	= 2	$2 \cdot 5 \cdot$	19	(3 isog	geny classe	es)		190
A1(D)	1	-1	1	-48	147	1	1	_	11, 2, 1	11, 2, 1	11, 2, 1	I_{11},I_{2},I_{1}	
B1(C)	1	1	0	2	2	1	1		1, 2, 1	[1, 2, 1]	[1, 2, 1]	I_1,I_2,I_1	Ī
C1(A)	1	0	0	-30	-100	0	3	Ī —	3, 6, 1	3, 6, 1	[3, 6, 1]	I_3, I_6, I_1	3 :2
C2(B)	1	0	0	-2780	-56650	0	1	_	1, 2, 3	1, 2, 3	1, 2, 3	I_1,I_2,I_3	3 :1
192					N = 19	2 =	$=2^6$.	3	(4 isoge	eny classes)		192
A1(Q)	0	-1	0	-4	-2	1	2	+	$\frac{(-1,0,0,0)}{6,1}$	0,1	1,1	II,I_1	2 :2
A2(R)	0	-1	0	-9	9	1	4	+	12, 2	0, 2	4, 2	I_2^*, I_2	2:1,3,4
A3(T)	0	-1	0	-129	609	1	4	+	15, 1	0, 1	4, 1	$\overline{\mathrm{I}_{5}^{st}},\!\mathrm{I}_{1}$	2 :2
A4(S)	0	-1	0	31	33	1	2	_	15, 4	0, 4	4, 2	I_5^*, I_4	2 :2
B1(A)	0	1	0	-4	2	0	2	+	6, 1	0,1	1,1	II,I_1	2 :2
B2(B)	0	1	0	-9	-9	0	4	+	12, 2	0, 2	4, 2	I_2^*, I_2	2:1,3,4
B3(D)	0	1	0	-129	-609	0	2	+	15, 1	0, 1	4, 1	I_5^*, I_1	2 :2
B4(C)	0	1	0	31	-33	0	4	<u> </u>	15, 4	0,4	$\begin{bmatrix} 4,4 \\ \end{bmatrix}$	I_{5}^{*}, I_{4}	2 :2
C1(K)	0	1	0	3	3	0	2	_	10, 1	0, 1	2,1	I_0^*, I_1	2 :2
C2(L)	0	1	0	-17	15	0	4	+	14, 2	0, 2	4, 2	I_4^*, I_2	2:1,3,4
C3(M) C4(N)	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	1 1	$0 \\ 0$	$-97 \\ -257$	-385 1503	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$\begin{vmatrix} 4\\2 \end{vmatrix}$	+++++++++++++++++++++++++++++++++++++++	16, 4 $16, 1$	0,4	4, 4 $2, 1$	I_6^*, I_4	$\begin{bmatrix} 2 : 2, 5, 6 \\ 2 : 2 \end{bmatrix}$
C4(N) C5(P)	0	1			-23713	0	$\frac{2}{2}$	+	10, 1 $17, 2$	$0, 1 \\ 0, 2$	4, 2	$egin{array}{c} { m I}_6^*, { m I}_1 \ { m I}_7^*, { m I}_2 \end{array}$	2 : 2 2 : 3
C6(O)	0	1	0	63	-1377	0	$\frac{2}{4}$	_	17, 2 $17, 8$	$0, 2 \\ 0, 8$	4, 2 $4, 8$	$I_7^{,12}, I_8$	2:3 2:3
	¦			3	-3	<u>-</u> -	<u>-</u>	<u> </u>		<u>'</u>		:	<u> </u>
D1(E) D2(F)		$-1 \\ -1$	$0 \\ 0$	-17	-3 -15	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$\begin{vmatrix} 2\\4 \end{vmatrix}$	+	10, 1 $14, 2$	$0, 1 \\ 0, 2$	$2, 1 \\ 4, 2$	$I_0^*, I_1 \\ I_4^*, I_2$	$egin{array}{ c c c c c c c c c c c c c c c c c c c$
D3(H)		$-1 \\ -1$	0	-257	-1503	0	$\frac{4}{2}$	+	14, 2 $16, 1$	$0, 2 \\ 0, 1$	4, 2 $4, 1$	$I_{6}^{14,12},I_{1}$	$\begin{bmatrix} 2 & 1, 3, 4 \\ 2 & 2 \end{bmatrix}$
D4(G)		-1	0	-97	385	0	$\frac{2}{4}$	+	16, 1 $16, 4$	0,1 $0,4$	4,1 $4,2$	I_6^{*,I_1} I_6^{*,I_4}	2:2,5,6
D5(J)		-1		-1537	23713	0	4	+	17, 2	$0, 1 \\ 0, 2$	4, 2	I_7^*, I_2	2:4
D6(I)		-1	0	63	1377	0	2	_	17,8	0,8	2, 2	I_7^*, I_8	2 :4
194					N = 19	94 =	= 2 ·	97	(1 isog	geny class)			194
A1(A)	1	-1	1	-3	-1	0	2	+	$\frac{(1.1508)}{2,1}$	2,1	2, 1	I_2,I_1	2 :2
A2(B)			1	-13	19	0	$\frac{2}{2}$	+	1, 2	1, 2	1, 2	I_1,I_2	2:1
-(-)						Ĺ		<u> </u>	٠, =	- , -	- , -	1,7-2	_

	$a_1 \ a_2 \ a_3$	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
195			N = 195 =	3 ·	$5 \cdot 1$.3	(4 isog	eny class	es)		195
A1(A) A2(B)		$ \begin{array}{ccc} 0 & -110 \\ 0 & -115 \end{array} $			4 8	+ +	4, 1, 1 $8, 2, 2$	$4, 1, 1 \\ 8, 2, 2$	$4, 1, 1 \\ 8, 2, 2$	$I_4, I_1, I_1 \\ I_8, I_2, I_2$	$egin{array}{c} {f 2}:2 \ {f 2}:1,3,4 \end{array}$
A3(D)		$0 - 115 \\ 0 - 520$			8	+	6, 2, 2 $4, 4, 4$	$\begin{bmatrix} 6, 2, 2 \\ 4, 4, 4 \end{bmatrix}$	$\begin{bmatrix} 6, 2, 2 \\ 4, 4, 4 \end{bmatrix}$	I_{8},I_{2},I_{2} I_{4},I_{4},I_{4}	2:1,5,4 $2:2,5,6$
A4(C)		0 0 210			$\frac{3}{4}$		16, 1, 1	16, 1, 1	16, 1, 1	I_{16}, I_1, I_1	2:2,5,6
A5(E)		0 - 8125			4	+	2, 8, 2	2, 8, 2	2, 8, 2	I_2,I_8,I_2	2:3,7,8
A6(F)	1 0	0 605			4	-	2, 2, 8	2, 2, 8	2, 2, 8	I_2, I_2, I_8	2 :3
A7(H)	1 0	0 - 130000	-18051943	0	2	+	1, 4, 1	1, 4, 1	1, 4, 1	I_1,I_4,I_1	2 :5
A8(G)	1 0	0 - 7930	-296725	0	2	-	1, 16, 1	1, 16, 1	1, 16, 1	I_1, I_{16}, I_1	2 :5
B1(I)	0 1	1 0		0	1	_	1, 1, 1	1,1,1	$\begin{bmatrix} 1, 1, 1 \end{bmatrix}$	$\boxed{ I_1, I_1, I_1}$	
C1(K)	0 1	1 - 66	-349	0	1	-	3, 7, 1	3, 7, 1	3, 1, 1	I_3, I_7, I_1	
D1(J)	0-1	1 - 190	1101	0	1		7, 1, 3	7, 1, 3	1,1,1	I_7,I_1,I_3	
196			N = 196 =	2^{2}	$2 \cdot 7^2$	2	(2 isoge	ny classe	s)		196
A1(A)	0 - 1	${0}$ -2	1	1	1	+	$\frac{1}{4,2}$	0,0	3,1	IV,II	3 :2
A2(B)	0 - 1				1	+	4, 2	0,0	1,1	IV,II	3 :1
B1(C)	0 1	0 -114	-127	0	3	+	4,8	0,0	3,3	IV,IV*	3 :2
B2(D)	0 1	0 - 6974	-226507	0	1	+	4,8	0,0	1,3	IV,IV*	3 : 1
197			N = 197	· =	197	,	(1 isoger	ny class)			197
A1(A)	0 0	1 -5	<u>4</u>	1	1	+	1	1	1	I_1	
						'		_		-	
198			N = 198 = 2					geny class		1	198
198 A1(I)	1-1			2 · ;						Ι	198 2:2
	1 -1 1 -1	0 - 18	3 4	$2 \cdot 3$	$\frac{3^2 \cdot 1}{2}$	11 +	(5 isog	geny class	ses) 2,4,1	I_4,I_1^*,I_1	1
A1(I)		$ \begin{array}{ccc} 0 & -18 \\ 0 & -198 \end{array} $	3 4 3 1120	2 · ;	$\frac{3^2 \cdot 1}{2}$	11 +	(5 isog 4,7,1	geny class $4, 1, 1$	ses) 2,4,1	I_4,I_1^*,I_1	2 :2
A1(I) A2(J)	1 - 1	$ \begin{array}{ccc} 0 & -18 \\ 0 & -198 \\ 0 & -3168 \end{array} $	3 4 3 1120 6 69430	2 · ; 1 1 1	$\frac{3^2 \cdot 1}{2}$	11 + +	(5 isog 4, 7, 1 2, 8, 2	geny class 4,1,1 2,2,2	ses) 2,4,1 2,4,2	I_4, I_1^*, I_1 I_2, I_2^*, I_2	2:2 2:1,3,4
A1(I) A2(J) A3(L)	$ \begin{array}{c c} 1 & -1 \\ 1 & -1 \end{array} $	$ \begin{array}{ccc} 0 & -18 \\ 0 & -198 \\ 0 & -3168 \\ 0 & -108 \end{array} $	3 4 3 1120 3 69430 3 2074	$\begin{bmatrix} 1 \\ 1 \\ 1 \\ 1 \end{bmatrix}$	$\begin{array}{c} 3^2 \cdot \\ 2 \\ 4 \\ 2 \end{array}$	11 + +	(5 isog 4, 7, 1 2, 8, 2 1, 7, 1 1, 10, 4	geny class 4,1,1 2,2,2 1,1,1 1,4,4	ses) 2, 4, 1 2, 4, 2 1, 2, 1 1, 4, 4	$\begin{matrix} I_4,I_1^*,I_1\\ I_2,I_2^*,I_2\\ I_1,I_1^*,I_1\\ I_1,I_4^*,I_4 \end{matrix}$	2:2 2:1,3,4 2:2 2:2
A1(I) A2(J) A3(L) A4(K)	$ \begin{array}{ c c c } & 1 & -1 \\ & 1 & -1 \\ & 1 & -1 \\ & & & \\ \end{array} $	$ \begin{array}{cccc} 0 & -18 \\ 0 & -198 \\ 0 & -3168 \\ 0 & -108 \\ 1 & -50 \end{array} $	3 4 3 1120 3 69430 3 2074 	$\begin{bmatrix} 2 \cdot \vdots \\ 1 \\ 1 \\ 1 \\ 1 \end{bmatrix}$	$3^{2} \cdot 2$ 4 2 2	11 + + + -	(5 isog 4,7,1 2,8,2 1,7,1	geny class 4, 1, 1 2, 2, 2 1, 1, 1	ses) $ \begin{array}{ c c c } \hline 2,4,1\\2,4,2\\1,2,1\\\end{array} $	$\begin{matrix} I_4,I_1^*,I_1\\ I_2,I_2^*,I_2\\ I_1,I_1^*,I_1\\ I_1,I_4^*,I_4\\ \hline & I_2,I_3^*,I_1 \end{matrix}$	$egin{array}{c} {f 2}:2 \ {f 2}:1,3,4 \ {f 2}:2 \end{array}$
A1(I) A2(J) A3(L) A4(K) B1(E)	$ \begin{array}{c c} 1 - 1 \\ 1 - 1 \\ 1 - 1 \end{array} $	$ \begin{array}{cccc} 0 & -18 \\ 0 & -198 \\ 0 & -3168 \\ 0 & -108 \\ \hline 1 & -50 \\ 1 & 40 \end{array} $	3 4 3 1120 3 69430 3 2074 0 -115 0 -547 7661	2 · ; 1 1 1 1 1 0 0 0	$\frac{3^2}{4}$	11 + + + + + + + + + + + + + + + + + +	(5 isog 4,7,1 2,8,2 1,7,1 1,10,4 2,9,1 1,12,2	geny class 4, 1, 1 2, 2, 2 1, 1, 1 1, 4, 4 2, 3, 1	ses) 2, 4, 1 2, 4, 2 1, 2, 1 1, 4, 4 2, 2, 1	$\begin{matrix} I_4,I_1^*,I_1\\ I_2,I_2^*,I_2\\ I_1,I_1^*,I_1\\ I_1,I_4^*,I_4 \end{matrix}$	
A1(I) A2(J) A3(L) A4(K) B1(E) B2(F)	$ \begin{array}{c c} 1 - 1 \\ 1 - 1 \\ 1 - 1 \end{array} $ $ \begin{array}{c c} 1 - 1 \\ 1 - 1 \\ 1 - 1 \end{array} $	$egin{array}{cccc} 0 & -18 \ 0 & -198 \ 0 & -3168 \ 0 & -108 \ 1 & -50 \ 1 & 40 \ 1 & -725 \ \end{array}$	3 4 3 1120 6 69430 8 2074 	2 · ; 1 1 1 1 1 0 0 0	$ \begin{array}{c} 3^2 \\ 4 \\ 2 \\ 2 \\ 2 \end{array} $	11 + + + - + - + -	(5 isog 4, 7, 1 2, 8, 2 1, 7, 1 1, 10, 4 2, 9, 1 1, 12, 2	geny class 4,1,1 2,2,2 1,1,1 1,4,4 2,3,1 1,6,2	ses) 2, 4, 1 2, 4, 2 1, 2, 1 1, 4, 4 2, 2, 1 1, 4, 2	$\begin{array}{c} I_4,I_1^*,I_1\\ I_2,I_2^*,I_2\\ I_1,I_1^*,I_1\\ I_1,I_4^*,I_4\\ \hline I_2,I_3^*,I_1\\ I_1,I_6^*,I_2 \end{array}$	
A1(I) A2(J) A3(L) A4(K) B1(E) B2(F) B3(G) B4(H)	$ \begin{vmatrix} 1 - 1 \\ 1 - 1 \\ 1 - 1 \end{vmatrix} $ $ \begin{vmatrix} 1 - 1 \\ 1 - 1 \\ 1 - 1 \end{vmatrix} $	$egin{array}{cccc} 0 & -18 \ 0 & -198 \ 0 & -3168 \ 0 & -108 \ 1 & -50 \ 1 & 40 \ 1 & -725 \ 1 & -365 \ \end{array}$	3 4 3 1120 6 69430 6 2074 	2 · : 1 1 1 1 1 0 0 0 0	$ \begin{array}{c} 3^2 \\ 2 \\ 4 \\ 2 \\ 2 \\ 2 \\ 6 \end{array} $	11 + + + - + - +	(5 isog 4,7,1 2,8,2 1,7,1 1,10,4 2,9,1 1,12,2 6,7,3 3,8,6	geny class $ \begin{array}{c c} 4, 1, 1 \\ 2, 2, 2 \\ 1, 1, 1 \\ 1, 4, 4 \\ \hline 2, 3, 1 \\ 1, 6, 2 \\ 6, 1, 3 \end{array} $	ses) 2, 4, 1 2, 4, 2 1, 2, 1 1, 4, 4 2, 2, 1 1, 4, 2 6, 2, 3 3, 4, 6	$\begin{bmatrix} I_4,I_1^*,I_1\\ I_2,I_2^*,I_2\\ I_1,I_1^*,I_1\\ I_1,I_4^*,I_4\\ \hline I_2,I_3^*,I_1\\ I_1,I_6^*,I_2\\ I_6,I_1^*,I_3\\ I_3,I_2^*,I_6\\ \hline \end{bmatrix}$	$\begin{array}{ c c c } \textbf{2} : 2 \\ \textbf{2} : 1, 3, 4 \\ \textbf{2} : 2 \\ \textbf{2} : 2 \\ \hline \textbf{2} : 2; \textbf{3} : 3 \\ \textbf{2} : 1; \textbf{3} : 4 \\ \textbf{2} : 4; \textbf{3} : 1 \\ \end{array}$
A1(I) A2(J) A3(L) A4(K) B1(E) B2(F) B3(G)	$ \begin{vmatrix} 1 - 1 \\ 1 - 1 \end{vmatrix} $ $ \begin{vmatrix} 1 - 1 \\ 1 - 1 \end{vmatrix} $ $ \begin{vmatrix} 1 - 1 \\ 1 - 1 \end{vmatrix} $ $ \begin{vmatrix} 1 - 1 \\ 1 - 1 \end{vmatrix} $	$ \begin{array}{cccc} 0 & -18 \\ 0 & -198 \\ 0 & -3168 \\ 0 & -108 \\ 1 & -50 \\ 1 & 40 \\ 1 & -725 \\ 1 & -365 \\ 1 & -65 \\ \end{array} $	3 4 3 1120 6 69430 8 2074 -115 -547 7661 15005 209	$ \begin{array}{c c} 2 \cdot ; \\ 1 \\ 1 \\ 1 \\ 0 \\ 0 \\ 0 \\ 0 \end{array} $	$ \begin{array}{c} 3^{2} \\ 2 \\ 4 \\ 2 \\ 2 \\ 6 \\ 6 \end{array} $	11 + + + - + - +	(5 isog 4, 7, 1 2, 8, 2 1, 7, 1 1, 10, 4 2, 9, 1 1, 12, 2 6, 7, 3 3, 8, 6 12, 3, 1	geny class $ \begin{array}{c c} 4, 1, 1 \\ 2, 2, 2 \\ 1, 1, 1 \\ 1, 4, 4 \end{array} $ $ \begin{array}{c c} 2, 3, 1 \\ 1, 6, 2 \\ 6, 1, 3 \\ 3, 2, 6 \end{array} $	ses) 2, 4, 1 2, 4, 2 1, 2, 1 1, 4, 4 2, 2, 1 1, 4, 2 6, 2, 3	$\begin{bmatrix} I_4,I_1^*,I_1\\ I_2,I_2^*,I_2\\ I_1,I_1^*,I_1\\ I_1,I_4^*,I_4\\ \hline I_2,I_3^*,I_1\\ I_1,I_6^*,I_2\\ I_6,I_1^*,I_3\\ I_3,I_2^*,I_6\\ \hline \end{bmatrix}$	$\begin{array}{ c c c } \textbf{2} : 2 \\ \textbf{2} : 1, 3, 4 \\ \textbf{2} : 2 \\ \textbf{2} : 2 \\ \hline \textbf{2} : 2; \textbf{3} : 3 \\ \textbf{2} : 1; \textbf{3} : 4 \\ \textbf{2} : 4; \textbf{3} : 1 \\ \textbf{2} : 3; \textbf{3} : 2 \\ \end{array}$
A1(I) A2(J) A3(L) A4(K) B1(E) B2(F) B3(G) B4(H) C1(M)	$ \begin{array}{c c} 1 - 1 \\ 1 - 1 \\ 1 - 1 \end{array} $ $ \begin{array}{c c} 1 - 1 \\ 1 - 1 \\ 1 - 1 \\ 1 - 1 \end{array} $	$egin{array}{cccc} 0 & -18 \ 0 & -198 \ 0 & -3168 \ 0 & -108 \ 1 & -50 \ 1 & 40 \ 1 & -725 \ 1 & -365 \ 1 & -65 \ 1 & -1025 \ \end{array}$	4 1120 6 69430 7 2074 1 -115 1 -547 1 7661 1 15005 1 209 1 12881 1 -8207	2 · ; 1 1 1 1 0 0 0 0 0 0 0 0 0	$ \begin{array}{c} 3^{2} \\ 2 \\ 4 \\ 2 \\ 2 \\ 2 \\ 6 \\ 6 \\ 6 \\ 6 \\ 2 \end{array} $	11 + + + - + - + + - + +	(5 isog 4, 7, 1 2, 8, 2 1, 7, 1 1, 10, 4 2, 9, 1 1, 12, 2 6, 7, 3 3, 8, 6 12, 3, 1	geny class 4,1,1 2,2,2 1,1,1 1,4,4 2,3,1 1,6,2 6,1,3 3,2,6 12,0,1	ses) 2, 4, 1 2, 4, 2 1, 2, 1 1, 4, 4 2, 2, 1 1, 4, 2 6, 2, 3 3, 4, 6 12, 2, 1	$\begin{bmatrix} I_4,I_1^*,I_1\\ I_2,I_2^*,I_2\\ I_1,I_1^*,I_1\\ I_1,I_4^*,I_4\\ \end{bmatrix}$ $\begin{bmatrix} I_2,I_3^*,I_1\\ I_1,I_6^*,I_2\\ I_6,I_1^*,I_3\\ I_3,I_2^*,I_6\\ \end{bmatrix}$ $\begin{bmatrix} I_{12},III,I_{1}\\ \end{bmatrix}$	
A1(I) A2(J) A3(L) A4(K) B1(E) B2(F) B3(G) B4(H) C1(M) C2(N)	$ \begin{array}{c c} 1 & -1 \\ 1 & -1 \\ 1 & -1 \end{array} $ $ \begin{array}{c c} 1 & -1 \\ 1 & -1 \\ 1 & -1 \\ 1 & -1 \\ 1 & -1 \end{array} $	$\begin{array}{cccc} 0 & -18 \\ 0 & -198 \\ 0 & -3168 \\ 0 & -108 \\ 1 & -50 \\ 1 & -725 \\ 1 & -365 \\ 1 & -1025 \\ 1 & -785 \\ \end{array}$	4 1120 6 69430 7 2074 1 -115 1 -547 1 7661 1 15005 1 2881 1 -8207	2 · ; 1 1 1 1 0 0 0 0 0 0 0 0 0	$ \begin{array}{c} 3^{2} \\ 2 \\ 4 \\ 2 \\ 2 \\ 2 \\ 6 \\ 6 \\ 6 \\ 6 \\ 2 \end{array} $	11 + + + - + - + + + + +	(5 isog 4,7,1 2,8,2 1,7,1 1,10,4 2,9,1 1,12,2 6,7,3 3,8,6 12,3,1 6,3,2	geny class 4,1,1 2,2,2 1,1,1 1,4,4 2,3,1 1,6,2 6,1,3 3,2,6 12,0,1 6,0,2	ses) 2, 4, 1 2, 4, 2 1, 2, 1 1, 4, 4 2, 2, 1 1, 4, 2 6, 2, 3 3, 4, 6 12, 2, 1 6, 2, 2	$ \begin{array}{c} I_4,I_1^*,I_1\\ I_2,I_2^*,I_2\\ I_1,I_1^*,I_1\\ I_1,I_4^*,I_4\\ \hline\\ I_2,I_3^*,I_1\\ I_1,I_6^*,I_2\\ I_6,I_1^*,I_3\\ I_3,I_2^*,I_6\\ \hline\\ I_{12},III,I_1\\ I_6,III,I_2\\ \end{array} $	
A1(I) A2(J) A3(L) A4(K) B1(E) B2(F) B3(G) B4(H) C1(M) C2(N) C3(O)	$ \begin{vmatrix} 1 - 1 \\ 1 - 1 \\ 1 - 1 \end{vmatrix} $ $ \begin{vmatrix} 1 - 1 \\ 1 - 1 \\ 1 - 1 \end{vmatrix} $ $ \begin{vmatrix} 1 - 1 \\ 1 - 1 \\ 1 - 1 \end{vmatrix} $ $ \begin{vmatrix} 1 - 1 \\ 1 - 1 \end{vmatrix} $	$egin{array}{cccc} 0 & -18 \ 0 & -198 \ 0 & -3168 \ 0 & -108 \ 1 & -50 \ 1 & 40 \ 1 & -725 \ 1 & -365 \ 1 & -1025 \ 1 & -785 \ 1 & -1325 \ \end{array}$	4 1120 69430 2074 -115 -547 7661 15005 209 12881 -8207 4969	$ \begin{array}{c c} 2 \cdot 3 \\ 1 \\ 1 \\ 1 \\ 1 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \end{array} $	$ \begin{array}{c} 3^{2} \\ 2 \\ 4 \\ 2 \\ 2 \\ 2 \\ 6 \\ 6 \\ 6 \\ 6 \\ 2 \end{array} $	11 + + + - + + + + + + +	(5 isog 4,7,1 2,8,2 1,7,1 1,10,4 2,9,1 1,12,2 6,7,3 3,8,6 12,3,1 6,3,2 4,9,3 2,9,6	geny class $ \begin{array}{ c c c c }\hline 4,1,1\\2,2,2\\1,1,1\\1,4,4\\\hline 2,3,1\\1,6,2\\6,1,3\\3,2,6\\\hline 12,0,1\\6,0,2\\4,0,3\\\end{array} $	ses) 2, 4, 1 2, 4, 2 1, 2, 1 1, 4, 4 1, 4, 2 6, 2, 3 3, 4, 6 1, 2, 2, 1 6, 2, 2 4, 2, 1	$\begin{bmatrix} I_4,I_1^*,I_1\\ I_2,I_2^*,I_2\\ I_1,I_1^*,I_1\\ I_1,I_4^*,I_4\\ \hline I_2,I_3^*,I_1\\ I_1,I_6^*,I_2\\ I_6,I_1^*,I_3\\ I_3,I_2^*,I_6\\ \hline I_{12},III,I_1\\ I_6,III,I_2\\ I_4,III^*,I_3\\ \end{bmatrix}$	$\begin{array}{ c c c } \textbf{2} : 2 \\ \textbf{2} : 1, 3, 4 \\ \textbf{2} : 2 \\ \textbf{2} : 2 \\ \hline \textbf{2} : 2; \textbf{3} : 3 \\ \textbf{2} : 1; \textbf{3} : 4 \\ \textbf{2} : 4; \textbf{3} : 1 \\ \textbf{2} : 3; \textbf{3} : 2 \\ \hline \textbf{2} : 1; \textbf{3} : 4 \\ \textbf{2} : 4; \textbf{3} : 1 \\ \hline \textbf{2} : 4; \textbf{3} : 1 \\ \hline \end{array}$
A1(I) A2(J) A3(L) A4(K) B1(E) B2(F) B3(G) B4(H) C1(M) C2(N) C3(O) C4(P)	$ \begin{vmatrix} 1 - 1 \\ 1 - 1 \end{vmatrix} $ $ \begin{vmatrix} 1 - 1 \\ 1 - 1 \end{vmatrix} $ $ \begin{vmatrix} 1 - 1 \\ 1 - 1 \end{vmatrix} $ $ \begin{vmatrix} 1 - 1 \\ 1 - 1 \end{vmatrix} $ $ \begin{vmatrix} 1 - 1 \\ 1 - 1 \end{vmatrix} $ $ \begin{vmatrix} 1 - 1 \\ 1 - 1 \end{vmatrix} $	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	4 1120 69430 2074 -115 -547 7661 15005 209 12881 -8207 4969 333	$ \begin{array}{c c} 2 \cdot 3 \\ \hline 1 \\ 1 \\ 1 \\ 1 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \end{array} $	3^{2} . 2 4 2 2 2 6 6 6 2 2	11 + + - + - + + + + +	(5 isog 4,7,1 2,8,2 1,7,1 1,10,4 2,9,1 1,12,2 6,7,3 3,8,6 12,3,1 6,3,2 4,9,3 2,9,6	geny class 4,1,1 2,2,2 1,1,1 1,4,4 2,3,1 1,6,2 6,1,3 3,2,6 12,0,1 6,0,2 4,0,3 2,0,6	$ \begin{array}{c} \text{ses}) \\ \hline 2, 4, 1 \\ 2, 4, 2 \\ 1, 2, 1 \\ 1, 4, 4 \end{array} $ $ \begin{array}{c} 2, 2, 1 \\ 1, 4, 2 \\ 6, 2, 3 \\ 3, 4, 6 \end{array} $ $ \begin{array}{c} 12, 2, 1 \\ 6, 2, 2 \\ 4, 2, 1 \\ 2, 2, 2 \end{array} $	$\begin{bmatrix} I_4,I_1^*,I_1\\ I_2,I_2^*,I_2\\ I_1,I_1^*,I_1\\ I_1,I_4^*,I_4\\ \end{bmatrix}$ $\begin{bmatrix} I_2,I_3^*,I_1\\ I_1,I_6^*,I_2\\ I_6,I_1^*,I_3\\ I_3,I_2^*,I_6\\ \end{bmatrix}$ $\begin{bmatrix} I_{12},III,I_1\\ I_6,III,I_2\\ I_4,III^*,I_3\\ I_2,III^*,I_6\\ \end{bmatrix}$	$\begin{array}{ c c c } \textbf{2} : 2 \\ \textbf{2} : 1, 3, 4 \\ \textbf{2} : 2 \\ \textbf{2} : 2 \\ \hline \textbf{2} : 2; \textbf{3} : 3 \\ \textbf{2} : 1; \textbf{3} : 4 \\ \textbf{2} : 4; \textbf{3} : 1 \\ \textbf{2} : 3; \textbf{3} : 2 \\ \hline \textbf{2} : 1; \textbf{3} : 4 \\ \textbf{2} : 4; \textbf{3} : 1 \\ \textbf{2} : 4; \textbf{3} : 1 \\ \textbf{2} : 3; \textbf{3} : 2 \\ \hline \end{array}$
A1(I) A2(J) A3(L) A4(K) B1(E) B2(F) B3(G) B4(H) C1(M) C2(N) C3(O) C4(P) D1(A)	$ \begin{array}{c cccc} 1 & -1 \\$	$egin{array}{cccc} 0 & -188 \\ 0 & -198 \\ 0 & -3168 \\ 0 & -108 \\ 1 & -50 \\ 1 & 40 \\ 1 & -725 \\ 1 & -365 \\ 1 & -65 \\ 1 & -1025 \\ 1 & -785 \\ 1 & -1325 \\ 0 & -87 \\ 0 & -147 \\ \hline \end{array}$	4 3 4 1120 69430 2074 -115 -547 7661 15005 -209 12881 -8207 4969 7 333 -135 -5068	2 · ; 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0	$ \begin{array}{c} 3^{2} \\ 2 \\ 4 \\ 2 \\ 2 \\ 6 \\ 6 \end{array} $	11 + + + - + + + + + + + + + + + + + + +	(5 isog 4,7,1 2,8,2 1,7,1 1,10,4 2,9,1 1,12,2 6,7,3 3,8,6 12,3,1 6,3,2 4,9,3 2,9,6 4,3,3	geny class $ \begin{array}{ c c c c }\hline & 4,1,1 \\ & 2,2,2 \\ & 1,1,1 \\ & 1,4,4 \\ \hline & & & \\ \hline & & \\ \hline & & & \\ \hline \\ \hline$	ses) 2, 4, 1 2, 4, 2 1, 2, 1 1, 4, 4 2, 2, 1 1, 4, 2 6, 2, 3 3, 4, 6 12, 2, 1 6, 2, 2 4, 2, 1 2, 2, 2 2, 2, 3	$\begin{bmatrix} I_4,I_1^*,I_1\\ I_2,I_2^*,I_2\\ I_1,I_1^*,I_1\\ I_1,I_4^*,I_4\\ \end{bmatrix}$ $\begin{bmatrix} I_2,I_3^*,I_1\\ I_1,I_6^*,I_2\\ I_6,I_1^*,I_3\\ I_3,I_2^*,I_6\\ \end{bmatrix}$ $\begin{bmatrix} I_{12},III,I_1\\ I_6,III,I_2\\ I_4,III^*,I_3\\ I_2,III^*,I_6\\ \end{bmatrix}$ $\begin{bmatrix} I_4,III,I_3\\ I_2,III,I_6\\ \end{bmatrix}$	$\begin{array}{ c c c } \textbf{2} : 2 \\ \textbf{2} : 1, 3, 4 \\ \textbf{2} : 2 \\ \textbf{2} : 2 \\ \hline \textbf{2} : 2; \textbf{3} : 3 \\ \textbf{2} : 1; \textbf{3} : 4 \\ \textbf{2} : 4; \textbf{3} : 1 \\ \textbf{2} : 3; \textbf{3} : 2 \\ \hline \textbf{2} : 2; \textbf{3} : 3 \\ \textbf{2} : 1; \textbf{3} : 4 \\ \textbf{2} : 4; \textbf{3} : 1 \\ \textbf{2} : 3; \textbf{3} : 2 \\ \hline \textbf{2} : 2; \textbf{3} : 3 \\ \textbf{2} : 3; \textbf{3} : 2 \\ \hline \end{array}$
A1(I) A2(J) A3(L) A4(K) B1(E) B2(F) B3(G) B4(H) C1(M) C2(N) C3(O) C4(P) D1(A) D2(B)	$ \begin{vmatrix} 1 - 1 \\ 1 - 1 \\ 1 - 1 \end{vmatrix} $ $ \begin{vmatrix} 1 - 1 \\ 1 - 1 \\ 1 - 1 \end{vmatrix} $ $ \begin{vmatrix} 1 - 1 \\ 1 - 1 \\ 1 - 1 \end{vmatrix} $ $ \begin{vmatrix} 1 - 1 \\ 1 - 1 \end{vmatrix} $ $ \begin{vmatrix} 1 - 1 \\ 1 - 1 \end{vmatrix} $ $ \begin{vmatrix} 1 - 1 \\ 1 - 1 \end{vmatrix} $	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	3 4 1120 6 69430 7 2074 1 -115 1 -547 1 7661 1 15005 1 12881 1 -8207 1 4969 1 333 1 -135 1 -5068	2 · ; 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	11 + + + - + + + + + + + + + + + + + + +	(5 isog 4,7,1 2,8,2 1,7,1 1,10,4 2,9,1 1,12,2 6,7,3 3,8,6 12,3,1 6,3,2 4,9,3 2,9,6 4,3,3 2,3,6	geny class 4,1,1 2,2,2 1,1,1 1,4,4 2,3,1 1,6,2 6,1,3 3,2,6 12,0,1 6,0,2 4,0,3 2,0,6 4,0,3 2,0,6	$ \begin{array}{c} \text{ses}) \\ \hline 2, 4, 1 \\ 2, 4, 2 \\ 1, 2, 1 \\ 1, 4, 4 \\ \hline 2, 2, 1 \\ 1, 4, 2 \\ 6, 2, 3 \\ 3, 4, 6 \\ \hline 12, 2, 1 \\ 6, 2, 2 \\ 4, 2, 1 \\ 2, 2, 2 \\ \hline 2, 2, 3 \\ 2, 2, 6 \\ 2, 2, 1 \\ \hline \end{array} $	$\begin{bmatrix} I_4,I_1^*,I_1\\ I_2,I_2^*,I_2\\ I_1,I_1^*,I_1\\ I_1,I_4^*,I_4\\ \end{bmatrix}$ $\begin{bmatrix} I_2,I_3^*,I_1\\ I_1,I_6^*,I_2\\ I_6,I_1^*,I_3\\ I_3,I_2^*,I_6\\ \end{bmatrix}$ $\begin{bmatrix} I_{12},III,I_1\\ I_6,III,I_2\\ I_4,III^*,I_3\\ I_2,III^*,I_6\\ \end{bmatrix}$ $\begin{bmatrix} I_4,III,I_3\\ I_2,III,I_6\\ \end{bmatrix}$	$\begin{array}{ c c c } \textbf{2} : 2 \\ \textbf{2} : 1, 3, 4 \\ \textbf{2} : 2 \\ \textbf{2} : 2 \\ \textbf{2} : 2 \\ \hline \textbf{2} : 2; \textbf{3} : 3 \\ \textbf{2} : 1; \textbf{3} : 4 \\ \textbf{2} : 4; \textbf{3} : 1 \\ \textbf{2} : 2; \textbf{3} : 3 \\ \textbf{2} : 1; \textbf{3} : 4 \\ \textbf{2} : 4; \textbf{3} : 1 \\ \textbf{2} : 3; \textbf{3} : 2 \\ \hline \textbf{2} : 2; \textbf{3} : 3 \\ \textbf{2} : 1; \textbf{3} : 4 \\ \hline \textbf{2} : 1; \textbf{3} : 4 \\ \hline \end{array}$
A1(I) A2(J) A3(L) A4(K) B1(E) B2(F) B3(G) B4(H) C1(M) C2(N) C3(O) C4(P) D1(A) D2(B) D3(C) D4(D)	$ \begin{array}{c cccc} 1 & -1 \\$	$egin{array}{ccccc} 0 & -188 \\ 0 & -198 \\ 0 & -3168 \\ 0 & -108 \\ 0 & -108 \\ 1 & -50 \\ 1 & 40 \\ 1 & -725 \\ 1 & -365 \\ 1 & -365 \\ 1 & -1025 \\ 1 & -785 \\ 1 & -1325 \\ 0 & -87 \\ 0 & -147 \\ 0 & -582 \\ 0 & -9222 \\ 1 & -9222 \\ 1 & -9222 \\ 1 & -108 $	3 4 3 1120 6 69430 6 2074 -115 -547 7661 15005 -209 12881 -8207 4969 7 333 7 -135 -5068 2 -338572	$ \begin{array}{c c} 2 \cdot \vdots \\ 1 & 1 \\ 1 & 1 \\ 0 & 0 \\ 0 & $	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	11 + + + - + + + + + + + + + + + + + + +	(5 isog 4,7,1 2,8,2 1,7,1 1,10,4 2,9,1 1,12,2 6,7,3 3,8,6 12,3,1 6,3,2 4,9,3 2,9,6 4,3,3 2,3,6 12,9,1	geny class 4, 1, 1 2, 2, 2 1, 1, 1 1, 4, 4 2, 3, 1 1, 6, 2 6, 1, 3 3, 2, 6 12, 0, 1 6, 0, 2 4, 0, 3 2, 0, 6 14, 0, 3 2, 0, 6 12, 0, 1 6, 0, 2 4 6, 0, 2 4 7 8 9 10, 0, 1 10, 0, 1 10, 0, 2 11, 0, 1 11, 0, 2 11, 0, 2 11, 0, 1 11, 0, 2 11, 0, 2 11, 0, 2 11, 0, 2 11, 0, 2 11, 0, 2 11, 0, 2 11, 0, 2 11, 0, 2 11, 0, 2 11, 0, 2 11, 0, 2 11, 0, 2 11, 0, 2 11, 0, 3 11, 0, 2 11, 0, 3 11, 0		$ \begin{bmatrix} I_4,I_1^*,I_1\\ I_2,I_2^*,I_2\\ I_1,I_1^*,I_1\\ I_1,I_4^*,I_4\\ -\frac{1}{2},I_3^*,I_1\\ I_1,I_6^*,I_2\\ I_6,I_1^*,I_3\\ I_3,I_2^*,I_6\\ -\frac{1}{2},IIII,I_1\\ I_6,III,I_2\\ I_4,III^*,I_3\\ I_2,III^*,I_6\\ -\frac{1}{4},III,I_3\\ I_2,III^*,I_6\\ -\frac{1}{4},III,I_3\\ I_2,III,I_6\\ -\frac{1}{4},III,I_3\\ I_2,III,I_6\\ -\frac{1}{4},III,I_3\\ I_2,III,I_6\\ -\frac{1}{4},III,I_3\\ I_2,III,I_6\\ -\frac{1}{4},III,I_3\\ -\frac{1}{4},III,I_3\\ -\frac{1}{4},III,I_3\\ -\frac{1}{4},III,I_3\\ -\frac{1}{4},III,I_3\\ -\frac{1}{4},III,I_3\\ -\frac{1}{4},III,I_3\\ -\frac{1}{4},III,I_4\\ -\frac{1}{4},III,I_5\\ -\frac{1}$	2:2 $2:1,3,4$ $2:2$ $2:2$ $2:3:3$ $2:1;3:4$ $2:4;3:1$ $2:4;3:1$ $2:4;3:1$ $2:3;3:2$ $2:1;3:4$ $2:4;3:1$ $2:3;3:2$ $2:1;3:4$ $2:4;3:1$
A1(I) A2(J) A3(L) A4(K) B1(E) B2(F) B3(G) B4(H) C1(M) C2(N) C3(O) C4(P) D1(A) D2(B) D3(C)	$ \begin{vmatrix} 1 - 1 \\ 1 - 1 \\ 1 - 1 \end{vmatrix} $ $ \begin{vmatrix} 1 - 1 \\ 1 - 1 \\ 1 - 1 \\ 1 - 1 \\ 1 - 1 \end{vmatrix} $ $ \begin{vmatrix} 1 - 1 \\ 1 - 1 \\ 1 - 1 \\ 1 - 1 \\ 1 - 1 \\ 1 - 1 \\ 1 - 1 \\ 1 - 1 \\ 1 - 1 \end{vmatrix} $	$egin{array}{ccccc} 0 & -18 & 0 & -198 & 0 & -3168 & 0 & -108 & 0 & -108 & 0 & 1 & -50 & 0 & 1 & -725 & 0 & -1325 & 0 & -87 & 0 & -147 & 0 & -582 & 0 & -9222 & 0 & -405 & 0 & -405 & 0 & -405 & 0 & -405 & 0 & -405 & 0 & -405 & 0 & -205 & 0 & -205 & 0 & -205 & 0 & -405 & 0 & -205 & 0 &$	4 1120 69430 2074 -115 -547 7661 15005 209 12881 -8207 4969 333 -135 -5068 -338572 -2187	1	3^{2} . 2 4 2 2 2 6 6 6 2 2 2 2 2 2 3 4 4 4 5 6 6 6 6 6 6 6 6 6 6	11 + + + - + + + + + + + + + + + + + + +	(5 isog 4,7,1 2,8,2 1,7,1 1,10,4 2,9,1 1,12,2 6,7,3 3,8,6 12,3,1 6,3,2 4,9,3 2,9,6 4,3,3 2,9,6 12,9,1 6,9,2	geny class 4, 1, 1 2, 2, 2 1, 1, 1 1, 4, 4 2, 3, 1 1, 6, 2 6, 1, 3 3, 2, 6 12, 0, 1 6, 0, 2 4, 0, 3 2, 0, 6 14, 0, 3 2, 0, 6 12, 0, 1 6, 0, 2	$ \begin{array}{c} \text{ses}) \\ \hline 2, 4, 1 \\ 2, 4, 2 \\ 1, 2, 1 \\ 1, 4, 4 \\ \hline 2, 2, 1 \\ 1, 4, 2 \\ 6, 2, 3 \\ 3, 4, 6 \\ \hline 12, 2, 1 \\ 6, 2, 2 \\ 4, 2, 1 \\ 2, 2, 2 \\ \hline 2, 2, 3 \\ 2, 2, 6 \\ 2, 2, 1 \\ \hline \end{array} $	$ \begin{bmatrix} I_4,I_1^*,I_1\\ I_2,I_2^*,I_2\\ I_1,I_1^*,I_1\\ I_1,I_4^*,I_4\\ \end{bmatrix} $ $ \begin{bmatrix} I_2,I_3^*,I_1\\ I_1,I_6^*,I_2\\ I_6,I_1^*,I_3\\ I_3,I_2^*,I_6\\ \end{bmatrix} $ $ \begin{bmatrix} I_{12},III,I_1\\ I_6,III,I_2\\ I_4,III^*,I_3\\ I_2,III^*,I_6\\ \end{bmatrix} $ $ \begin{bmatrix} I_4,III,I_3\\ I_2,III,I_6\\ I_{12},III,I_6\\ I_{12},III^*,I_1\\ I_6,III^*,I_2\\ \end{bmatrix} $ $ \begin{bmatrix} I_{10},I_5^*,I_1\\ \end{bmatrix} $	2:2 $2:1,3,4$ $2:2$ $2:2$ $2:3:3:3$ $2:1;3:4$ $2:4;3:1$ $2:3;3:2$ $2:1;3:4$ $2:4;3:1$ $2:3;3:2$ $2:1;3:4$ $2:4;3:1$ $2:3;3:2$
A1(I) A2(J) A3(L) A4(K) B1(E) B2(F) B3(G) B4(H) C1(M) C2(N) C3(O) C4(P) D1(A) D2(B) D3(C) D4(D) E1(Q)	$ \begin{vmatrix} 1 - 1 \\ 1 - 1 \\ 1 - 1 \end{vmatrix} $ $ \begin{vmatrix} 1 - 1 \\ 1 - 1 \\ 1 - 1 \end{vmatrix} $ $ \begin{vmatrix} 1 - 1 \\ 1 - 1 \\ 1 - 1 \\ 1 - 1 \end{vmatrix} $ $ \begin{vmatrix} 1 - 1 \\ 1 - 1 \\ 1 - 1 \\ 1 - 1 \end{vmatrix} $ $ \begin{vmatrix} 1 - 1 \\ 1 - 1 \\ 1 - 1 \end{vmatrix} $ $ \begin{vmatrix} 1 - 1 \\ 1 - 1 \\ 1 - 1 \end{vmatrix} $	$egin{array}{ccccc} 0 & -188 \\ 0 & -198 \\ 0 & -3168 \\ 0 & -108 \\ 1 & -50 \\ 1 & 40 \\ 1 & -725 \\ 1 & -365 \\ 1 & -365 \\ 1 & -1025 \\ 1 & -785 \\ 1 & -1325 \\ 0 & -87 \\ 0 & -147 \\ 0 & -582 \\ 0 & -9222 \\ 0 & -405 \\ 0 & 1035 \\ \hline \end{array}$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$egin{array}{c c} 2 \cdot \vdots \\ 1 & 1 \\ 1 & 1 \\ 1 & 0 \\ 0 $	3 ²	11 + + + - + - + + + + + + + + + + + + +	(5 isog 4,7,1 2,8,2 1,7,1 1,10,4 2,9,1 1,12,2 6,7,3 3,8,6 12,3,1 6,3,2 4,9,3 2,9,6 4,3,3 2,9,6 12,9,1 6,9,2 10,11,1	geny class $4,1,1$ $2,2,2$ $1,1,1$ $1,4,4$ $2,3,1$ $1,6,2$ $6,1,3$ $3,2,6$ $12,0,1$ $6,0,2$ $4,0,3$ $2,0,6$ $14,0,3$ $2,0,6$ $12,0,1$ $6,0,2$ $10,5,1$	ses) 2, 4, 1 2, 4, 2 1, 2, 1 1, 4, 4 2, 2, 1 1, 4, 2 6, 2, 3 3, 4, 6 12, 2, 1 6, 2, 2 4, 2, 1 2, 2, 2 2, 2, 6 2, 2, 1 2, 2, 2 2, 2, 1 2, 2, 2	$ \begin{bmatrix} I_4,I_1^*,I_1\\ I_2,I_2^*,I_2\\ I_1,I_1^*,I_1\\ I_1,I_4^*,I_4\\ -\frac{1}{2},I_3^*,I_1\\ I_1,I_6^*,I_2\\ I_6,I_1^*,I_3\\ I_3,I_2^*,I_6\\ -\frac{1}{2},IIII,I_1\\ I_6,III,I_2\\ I_4,III^*,I_3\\ I_2,III^*,I_6\\ -\frac{1}{4},III,I_3\\ I_2,III^*,I_6\\ -\frac{1}{4},III,I_3\\ I_2,III,I_6\\ -\frac{1}{4},III,I_3\\ I_2,III,I_6\\ -\frac{1}{4},III,I_3\\ I_2,III,I_6\\ -\frac{1}{4},III,I_3\\ I_2,III,I_6\\ -\frac{1}{4},III,I_3\\ -\frac{1}{4},III,I_3\\ -\frac{1}{4},III,I_3\\ -\frac{1}{4},III,I_3\\ -\frac{1}{4},III,I_3\\ -\frac{1}{4},III,I_3\\ -\frac{1}{4},III,I_3\\ -\frac{1}{4},III,I_4\\ -\frac{1}{4},III,I_5\\ -\frac{1}$	2:2 $2:1,3,4$ $2:2$ $2:2$ $2:3:3$ $2:1;3:4$ $2:4;3:1$ $2:3;3:2$ $2:1;3:4$ $2:4;3:1$ $2:3;3:2$ $2:1;3:4$ $2:4;3:1$ $2:3;3:2$ $2:2;3:3$ $2:1;3:4$ $2:4;3:1$ $2:2;3:3$ $2:1;3:4$
A1(I) A2(J) A3(L) A4(K) B1(E) B2(F) B3(G) B4(H) C1(M) C2(N) C3(O) C4(P) D1(A) D2(B) D3(C) D4(D) E1(Q) E2(R)	$ \begin{vmatrix} 1 - 1 \\ 1 - 1 \\ 1 - 1 \end{vmatrix} $ $ \begin{vmatrix} 1 - 1 \\ 1 - 1 \\ 1 - 1 \\ 1 - 1 \end{vmatrix} $ $ \begin{vmatrix} 1 - 1 \\ 1 - 1 \\ 1 - 1 \\ 1 - 1 \\ 1 - 1 \\ 1 - 1 \\ 1 - 1 \end{vmatrix} $ $ \begin{vmatrix} 1 - 1 \\ 1 - 1 \\ 1 - 1 \\ 1 - 1 \\ 1 - 1 \end{vmatrix} $	$egin{array}{ccccc} 0 & -188 \\ 0 & -198 \\ 0 & -3168 \\ 0 & -108 \\ 0 & -108 \\ 1 & -50 \\ 1 & 40 \\ 1 & -725 \\ 1 & -365 \\ 1 & -1025 \\ 1 & -1025 \\ 1 & -1325 \\ 0 & -87 \\ 0 & -147 \\ 0 & -582 \\ 0 & -9222 \\ 0 & -405 \\ 0 & 1035 \\ 0 & -90585 \\ \hline \end{array}$	3 1120 6 69430 7 2074 7 -115 7 -547 7 7661 1 15005 7 209 1 12881 7 -8207 9 4969 7 333 7 -135 8 -5068 8 -338572 7 -2187 8 10516473	$ \begin{array}{c c} 2 \cdot 3 \\ \hline 1 \\ 1 \\ 1 \\ 1 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0$	3^{2} . 2 4 2 2 2 6 6 6 2 2 2 2 2 2 2 2 2 2	11 + + + - + - + + + + + + + + + + + + +	(5 isog 4,7,1 2,8,2 1,7,1 1,10,4 2,9,1 1,12,2 6,7,3 3,8,6 12,3,1 6,3,2 4,9,3 2,9,6 4,3,3 2,3,6 12,9,1 6,9,2 10,11,1 5,16,2	geny class $ \begin{vmatrix} 4,1,1\\2,2,2\\1,1,1\\1,4,4\\2,3,1\\1,6,2\\6,1,3\\3,2,6\\2,0,6\\12,0,1\\6,0,2\\4,0,3\\2,0,6\\12,0,1\\6,0,2\\1,0,1\\6,0,2\\1,0,1\\5,10,2 \end{vmatrix} $		$ \begin{array}{c} I_4,I_1^*,I_1\\ I_2,I_2^*,I_2\\ I_1,I_1^*,I_1\\ I_1,I_4^*,I_4\\ \hline I_2,I_3^*,I_1\\ I_1,I_6^*,I_2\\ I_6,I_1^*,I_3\\ I_3,I_2^*,I_6\\ \hline I_{12},III,I_1\\ I_6,III,I_2\\ I_4,III^*,I_3\\ I_2,III^*,I_6\\ \hline I_4,III,I_3\\ I_2,III^*,I_6\\ \hline I_4,III,I_3\\ I_2,III,I_6\\ I_{12},III^*,I_1\\ I_6,III^*,I_2\\ \hline I_{10},I_5^*,I_1\\ I_5,I_{10}^*,I_2\\ \hline \end{array} $	$\begin{array}{ c c c } \textbf{2} : 2 \\ \textbf{2} : 1, 3, 4 \\ \textbf{2} : 2 \\ \textbf{2} : 2 \\ \textbf{2} : 2 \\ \hline \textbf{2} : 2; \textbf{3} : 3 \\ \textbf{2} : 1; \textbf{3} : 4 \\ \textbf{2} : 4; \textbf{3} : 1 \\ \textbf{2} : 3; \textbf{3} : 2 \\ \hline \textbf{2} : 2; \textbf{3} : 3 \\ \textbf{2} : 1; \textbf{3} : 4 \\ \textbf{2} : 4; \textbf{3} : 1 \\ \textbf{2} : 3; \textbf{3} : 2 \\ \hline \textbf{2} : 2; \textbf{3} : 3 \\ \textbf{2} : 1; \textbf{3} : 4 \\ \textbf{2} : 4; \textbf{3} : 1 \\ \textbf{2} : 3; \textbf{3} : 2 \\ \hline \textbf{2} : 2; \textbf{5} : 3 \\ \textbf{2} : 1; \textbf{5} : 4 \\ \hline \end{array}$
A1(I) A2(J) A3(L) A4(K) B1(E) B2(F) B3(G) B4(H) C1(M) C2(N) C3(O) C4(P) D1(A) D2(B) D3(C) D4(D) E1(Q) E2(R) E3(S)	$ \begin{vmatrix} 1 - 1 \\ 1 - 1 \\ 1 - 1 \end{vmatrix} $ $ \begin{vmatrix} 1 - 1 \\ 1 - 1 \\ 1 - 1 \\ 1 - 1 \\ 1 - 1 \end{vmatrix} $ $ \begin{vmatrix} 1 - 1 \\ 1 - 1$	$egin{array}{ccccc} 0 & -188 \\ 0 & -198 \\ 0 & -3168 \\ 0 & -108 \\ 0 & -108 \\ 1 & -50 \\ 1 & 40 \\ 1 & -725 \\ 1 & -365 \\ 1 & -1025 \\ 1 & -1025 \\ 1 & -1325 \\ 0 & -87 \\ 0 & -147 \\ 0 & -582 \\ 0 & -9222 \\ 0 & -405 \\ 0 & 1035 \\ 0 & -90585 \\ \hline \end{array}$	3 1120 6 69430 7 2074 7 -115 7 -547 7 7661 7 15005 7 12881 7 -8207 8 4969 7 333 7 -135 8 -5068 8 -338572 7 -2187 7 10516473	2 · ; 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3 ²	11 + + + - + - + + + + + + + + - + - + -	(5 isog 4,7,1 2,8,2 1,7,1 1,10,4 2,9,1 1,12,2 6,7,3 3,8,6 12,3,1 6,3,2 4,9,3 2,9,6 4,3,3 2,9,6 12,9,1 6,9,2 10,11,1 5,16,2 2,7,5 1,8,10	geny class $4, 1, 1$ $2, 2, 2$ $1, 1, 1$ $1, 4, 4$ $2, 3, 1$ $1, 6, 2$ $6, 1, 3$ $3, 2, 6$ $12, 0, 1$ $6, 0, 2$ $4, 0, 3$ $2, 0, 6$ $12, 0, 1$ $6, 0, 2$ $10, 5, 1$	ses) 2, 4, 1 2, 4, 2 1, 2, 1 1, 4, 4 2, 6, 2, 3 3, 4, 6 12, 2, 1 6, 2, 2 4, 2, 1 2, 2, 2 2, 2, 1 2, 2, 2 1, 4, 2 2, 2, 1 1, 4, 2 2, 2, 1 1, 4, 2	$\begin{bmatrix} I_4,I_1^*,I_1\\ I_2,I_2^*,I_2\\ I_1,I_1^*,I_1\\ I_1,I_4^*,I_4\\ -\frac{1}{1_2},I_3^*,I_1\\ I_1,I_6^*,I_2\\ I_6,I_1^*,I_3\\ I_3,I_2^*,I_6\\ -\frac{1}{1_2},III,I_1\\ I_6,III,I_2\\ I_4,III^*,I_3\\ I_2,III^*,I_6\\ -\frac{1}{1_4},IIII^*,I_3\\ I_2,III^*,I_6\\ -\frac{1}{1_4},IIII^*,I_1\\ I_6,III^*,I_2\\ -\frac{1}{1_5},I_{10}^*,I_2\\ I_2,I_1^*,I_5\\ \end{bmatrix}$	2:2 $2:1,3,4$ $2:2$ $2:2$ $2:3:3:3$ $2:1;3:4$ $2:4;3:1$ $2:3;3:2$ $2:1;3:4$ $2:4;3:1$ $2:3;3:2$ $2:1;3:4$ $2:4;3:1$ $2:3;3:2$ $2:1;3:4$ $2:4;3:1$ $2:4;3:1$ $2:4;3:1$ $2:4;3:1$ $2:4;3:1$ $2:4;3:1$ $2:4;3:1$ $2:4;3:1$ $2:4;3:1$

	a_1	a_2	$\overline{a_3}$	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
200					N =	20	0 = 2	2 ³ . !	5^2 (co.	ntinued)			200
B1(C)	0	1	0	-3	-2	1	2	+	4,3	0,0	2, 2	III,III	2 :2
B2(D)	0	1	0	-28	48	1	2	+	8,3	0,0	4,2	I ₁ *,III	2 :1
C1(G)	0	0	0	-50	125	0	4	+	4,7	0, 1	2,4	III,I_1^*	2 :2
C2(H) C3(J)	0	$0 \\ 0$	0	-175 -2675	$-750 \\ -53250$	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$\begin{array}{ c c }\hline 4\\ 2 \end{array}$	+ +	8, 8 $10, 7$	$0, 2 \\ 0, 1$	$\begin{array}{c} 4,4\\2,4\end{array}$	$egin{array}{c} \mathrm{I}_1^*, \mathrm{I}_2^* \ \mathrm{III}^*, \mathrm{I}_1^* \end{array}$	$\begin{bmatrix} 2 : 1, 3, 4 \\ 2 : 2 \end{bmatrix}$
C4(I)	0	0	0	325	-4250	0	2	_	10, 10	0, 1 $0, 4$	2, 4	III^*,I_4^*	2:2
D1(E)	0	-1	0	-83	-88	0	2	+	4,9	0,0	2, 2	III,III*	2 :2
D2(F)	0	-1	0	-708	7412	0	2	+	8,9	0,0	2,2	I ₁ *,III*	2 :1
E1(A)	0	0	0	5	-10	0	1	_	11, 2	0,0	1,1	II^*,II	
201					N = 20	1 =	3 · 6	57	(3 isoge	eny classes	s)		201
A1	0	-1	1	2	0	1	1	_	2, 1	2,1	2,1	I_2,I_1	
B1	1	0	0	-1	2	1	1	Ī —	3, 1	3,1	3,1	$ brack I_3, I_1$	
C1	1	1	0	-794	8289	1	1		5,1	5,1	1,1	$ brack I_5, I_1$	
202					N=20)2 =	= 2 · 1	101	(1 iso	geny class)		202
A1	1	-1	0	4	-176	0	1	_	17, 1	17, 1	1,1	I_{17} , I_1	
203					N = 20	3 =	7 · 2	29	(3 isoge	eny classes	s)		203
A1	0	-1	1	20	-8	0	5	_	5,1	5,1	5,1	I_5,I_1	5 :2
A2	0	-1	1	-2150	-37668	0	1	<u> </u>	1,5	1,5	1,1	I_1,I_5	5 :1
B1	1	1	1	0	-2	1	1		2,1	2,1	2,1	I_2,I_1	
C1	1	1	0	-9	8	0	2	_	1, 2	1,2	1, 2	I_1,I_2	2 :2
C2	1	1	0	-154	675	0	2	+	2,1	2,1	2,1	I_2,I_1	2 :1
204					V = 204	1		. 17	`	geny class	- 	T	204
A1	0			-1621	-24623	'	1	— 	8, 11, 1	0, 11, 1	3, 1, 1	IV^*, I_{11}, I_1	<u> </u>
B1	0	1	0	-5	<u>-9</u>	0	1	_	8, 1, 1	0, 1, 1	1, 1, 1	IV^*,I_1,I_1	
205	•				N = 20	5 =	5 · 4	1	(3 isoge	eny classes	s)	<u>-</u>	205
A1		-1	1	-22	44	1	4	+	2,1	2,1	2, 1	I_2,I_1	2 :2
A2 A3		-1 -1	1 1	$-27 \\ -232$	$ \begin{array}{r} 26 \\ -1286 \end{array} $	1 1	$\begin{array}{ c c }\hline 4 \\ 2 \end{array}$	+ +	$4, 2 \\ 8, 1$	$4, 2 \\ 8, 1$	$4, 2 \\ 8, 1$	$\begin{matrix} \mathrm{I}_4, \mathrm{I}_2 \\ \mathrm{I}_8, \mathrm{I}_1 \end{matrix}$	$egin{array}{ c c c c c c c c c c c c c c c c c c c$
A4		-1	1	98	126	1	$\frac{2}{4}$	_	2,4	2,4	2,4	I_2,I_4	2:2 2:2
B1	1	1	1	-21	-46	0	2	' +	$\frac{1}{2}, \frac{1}{1}$	$\begin{bmatrix} -2 & -2 & -2 & -2 & -2 & -2 & -2 & -2 $	$\begin{bmatrix} 2, 1 \end{bmatrix}$	I_2,I_1	2 :2
B2	1	1	1	-16	-62	0	2		4, 2	4,2	2,2	I_4,I_2	2 :1
C1	1	1	0	-2	-1		2	+	2, 1	2,1	2,1	$oxed{I_2,I_1}$	2 :2
C2	1	1	0	-27	44	0	2	+	1,2	1,2	1, 2	I_1,I_2	2 :1
206					N = 20)6 =		103		geny class)		206
A1 A2	1 1	1 1	0	$\begin{array}{c} 2 \\ -8 \end{array}$	$0 \\ -10$	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$\begin{array}{c c} 2 \\ 2 \end{array}$	 -	$2, 1 \\ 1, 2$	$2, 1 \\ 1, 2$	$2, 1 \\ 1, 2$	$\begin{matrix} \mathrm{I}_2,\!\mathrm{I}_1 \\ \mathrm{I}_1,\!\mathrm{I}_2 \end{matrix}$	2:2 2:1
	1	Т	0	-0					<u> </u>	· ·		11,12	
$\frac{207}{1}$	4	-1	-1	-	N=20	1		23	,	geny class	í –	Τψ Τ	$\frac{207}{200}$
A1 A2		-1 -1		$-5 \\ -140$	20 668	1 1	$\frac{2}{2}$	+	$8, 1 \\ 7, 2$	2,1 $1,2$	$4, 1 \\ 4, 2$	$egin{array}{c} I_2^*, I_1 \ I_1^*, I_2 \end{array}$	2:2 2:1

$a_1 \ a_2 a_3 \qquad a_4$	$a_6 r T s \operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$ c_p	Kodaira	Isogenies
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20	8		$N = 208 = 2^4 \cdot 13 (4)$	4 isogeny	classes)		208
A1	$0 - 1 \ 0$	8	$-16 \begin{vmatrix} 1 & 1 & - & 13, 1 \end{vmatrix}$	1,1	4, 1	I_{5}^{*},I_{1}	3 :2
A2	0 - 1 0	-72	496 1 1 -15,3	3,3	4,3	I_{7}^{*},I_{3}	3:1,3
A3	0 - 1 0	-7352	$245104 \begin{vmatrix} 1 \end{vmatrix} 1 \begin{vmatrix} - & 21, 1 \end{vmatrix}$	9, 1	4, 1	I_{13}^* , I_1	3 :2
B1	0 - 1 0	-16	32 1 1 -11,1	0, 1	4,1	I_3^*,I_1	
C1	0 0 0	1	10 0 2 -8,2	0, 2	1,2	I_0^*,I_2	2 :2
C2	0 0 0	-4	3 0 2 + 4,1	0, 1	1, 1	II,I_1	2 :1
D1	0 0 0	-43	-166 0 1 -19,1	7,1	2,1	$oxed{I_{11}^*,I_1}$	7 :2
D2	0 0 0	-3403	83834 0 1 - 13,7	1,7	2, 1	$\mathrm{I}_{5}^{st},\!\mathrm{I}_{7}$	7 :1

2 0	9				N = 2	209 =	= 11	. 19 ((1 isogeny	class)			209
A1		1	1	-27	55 1	3	_	3, 2	3, 2	3, 2	I_3,I_2	3 :2	
A2	0	1	1	193	-308 1	1	_	1,6	1,6	1,6	I_1,I_6	3 : 1	

210 210 $N = 210 = 2 \cdot 3 \cdot 5 \cdot 7$ (5 isogeny classes) A1 0 0 -390 $6 \mid +12, 3, 1, 1 \mid 12, 3, 1, 1$ $|12, 3, 1, 1|I_{12}, I_3, I_1, I_1|\mathbf{2}: 2; \mathbf{3}: 3$ 1 -41A20 0 -3612585 01 12 + 6, 6, 2, 26, 6, 2, 26, 6, 2, 2 $I_6, I_6, I_2, I_2 \mid \mathbf{2} : 1, 4, 5; \mathbf{3} : 6$ A3 -53655|0|1 0 0 -26812 + 4, 1, 3, 34, 1, 3, 34, 1, 1, 3 $I_4,I_1,I_3,I_3 | \mathbf{2}: 6; \mathbf{3}: 1$ -5761167825 0A4 $0 \quad 0$ +3,3,1,43, 3, 1, 43, 3, 1, 4 $I_3,I_3,I_1,I_4 \mid \mathbf{2}:2;\mathbf{3}:7$ **A**5 0 0 -816561 | 0 $-3, 12, 4, 1 \mid 3, 12, 4, 1 \mid 3, 12, 2, 1 \mid I_3, I_{12}, I_4, I_1 \mid \mathbf{2} : 2; \mathbf{3} : 8$ A60 0 -2701-5281902, 2, 6, 62, 2, 2, 61 +2,2,6,6 $|I_2,I_2,I_6,I_6|$ **2**: 3, 7, 8; **3**: 2 0 0 -6451124931 | 0A71 $|+1,1,3,12|1,1,3,12|1,1,1,12|I_1,I_1,I_3,I_{12}|\mathbf{2}:6;\mathbf{3}:4$ 0 0 729 $-1, 4, 12, 3 | 1, 4, 12, 3 | 1, 4, 2, 3 | I_1, I_4, I_{12}, I_3 | \mathbf{2} : 6; \mathbf{3} : 5$ A81 -176985|0|B10 1 4228 0+8,3,3,18, 3, 3, 12, 3, 3, 1 $| I_8, I_3, I_3, I_1 | \mathbf{2} : 2; \mathbf{3} : 3$ 1 -4986 B20 1 -5782756|0|12|+4,6,6,2|4,6,6,22, 6, 6, 2 $I_4,I_6,I_6,I_2 | \mathbf{2}:1,4,5;\mathbf{3}:6$ В3 0 1 -1473-16652|0 $|+24,1,1,3|24,1,1,3|2,1,1,3|I_{24},I_1,I_1,I_3|2:6;3:1$ 2**B**4 0 1 -4358-109132|06 $|+2,3,12,1|2,3,12,1|2,3,12,1|I_2,I_3,I_{12},I_1|\mathbf{2}:2;\mathbf{3}:7$ 1922 B50 1 20756 012 $[-2, 12, 3, 4|2, 12, 3, 4|2, 12, 3, 4|I_2, I_{12}, I_3, I_4|\mathbf{2}: 2; \mathbf{3}: 8]$ -21953B6 0 1 -1253644|0 $|+12, 2, 2, 6|12, 2, 2, 6|2, 2, 2, 6|I_{12},I_2,I_2,I_6|$ **2**: 3, 7, 8; **3**: 2 4 B7 $0 \ 1 - 351233 - 80149132 | 0$ 2 +6,1,4,3 $6, 1, 4, 3 \mid 2, 1, 4, 3$ $|I_6,I_1,I_4,I_3|$ **2**:6;**3**:4 B81 0 -20353 -14437240 $-6, 4, 1, 12 | 6, 4, 1, 12 | 2, 4, 1, 12 | I_6, I_4, I_1, I_{12} | \mathbf{2} : 6; \mathbf{3} : 5$ 1 4 C110 1 1 1 -13|0| $4 \mid -8, 1, 1, 2 \mid$ 8, 1, 1, 28, 1, 1, 2 $|I_8,I_1,I_1,I_2|$ **2**:2 C21 1 -70+4,2,2,41 -205|04, 2, 2, 44, 2, 2, 4 $I_4, I_2, I_2, I_4 \mid \mathbf{2} : 1, 3, 4$ 8 1 1 C3-1050-13533|02, 2, 4, 24 +2,4,4,22, 4, 4, 2 $I_2,I_4,I_4,I_2 \mid \mathbf{2} : 2,5,6$ C41 1 -3702435 04 |+2,1,1,8|2, 1, 1, 82, 1, 1, 8 $|I_2,I_1,I_1,I_8|$ **2**:2 C51 1 1 -16800-845133|02 +1,2,2,11, 2, 2, 11, 2, 2, 1 $|I_1,I_2,I_2,I_1|$ **2**:3 C6 1 1 1 -980-15325|0|2 1, 2, 8, 1-1, 8, 8, 11, 8, 8, 1 $|I_1,I_8,I_8,I_1|$ **2**:3 D11 0 -3-3|11 $2 \mid +4, 1, 1, 1$ 4, 1, 1, 1 $2, 1, 1, 1 \mid I_4, I_1, I_1, I_1 \mid \mathbf{2} : 2$ D21 0 -2333 1 2, 2, 2, 21 4 +2,2,2,22, 2, 2, 2 $I_2,I_2,I_2,I_2 \mid \mathbf{2} : 1,3,4$ D31 0 2623|12 1 -373+1,4,1,11, 4, 1, 1 $1, 2, 1, 1 \mid I_1, I_4, I_1, I_1 \mid \mathbf{2} : 2$ D41 1 0 147|1 $1, 1, 2, 2 | I_1, I_1, I_4, I_4 | \mathbf{2} : 2$ 7 -1, 1, 4, 41, 1, 4, 4

194			TABLE 1		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	.1 110 001tv	LD 210L 2	150		
a_1	$a_2 a_3$	a_4	a_6	r	T	$s \operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
210			N = 210) =	· 2 ·	$3 \cdot 5 \cdot 7$ (continued	.)		210
E1 1 E2 1 E3 1 E4 1 E5 1 E6 1 E7 1 E8 1	0 0 0 0 0 0 0 0 0 0 0 0	$ \begin{array}{r} 210 \\ -1070 \\ -7550 \\ -15070 \\ -120050 \\ 1270 \\ -1920800 \\ -119300 \end{array} $	$\begin{array}{c} 900 \\ 7812 \\ -247500 \\ 710612 \\ -16020000 \\ -789048 \\ -1024800150 \\ -16229850 \end{array}$	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	8 16 8 8 4 4 2 2	$\begin{array}{r} -16,4,2,1 \\ +8,8,4,2 \\ +4,4,8,4 \\ +4,16,2,1 \\ +2,2,4,8 \\ -2,2,16,2 \\ +1,1,2,4 \\ -1,1,2,16 \end{array}$	16, 4, 2, 1 8, 8, 4, 2 4, 4, 8, 4 4, 16, 2, 1 2, 2, 4, 8 2, 2, 16, 2 1, 1, 2, 4 1, 1, 2, 16	16, 4, 2, 1 8, 8, 4, 2 4, 4, 8, 2 4, 16, 2, 1 2, 2, 4, 2 2, 2, 16, 2 1, 1, 2, 2 1, 1, 2, 2	$\begin{matrix} I_{16},I_4,I_2,I_1\\ I_8,I_8,I_4,I_2\\ I_4,I_4,I_8,I_4\\ I_4,I_{16},I_2,I_1\\ I_2,I_2,I_4,I_8\\ I_2,I_2,I_{16},I_2\\ I_1,I_1,I_2,I_4\\ I_1,I_1,I_2,I_{16} \end{matrix}$	2:2 2:1,3,4 2:2,5,6 2:2 2:3,7,8 2:3 2:5
212	4 0					$\frac{53}{2}$ (2 iso		1	TT 7.1. T	212
B1 0	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{r} -4 \\ -12 \\ -17 \end{array} $	$ \begin{array}{c c} 8 \\ -40 \\ -22 \end{array} $	0	$\overline{2}$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	$\begin{array}{ c c c c c }\hline & 3,1 \\ \hline & 3,2 \\ & 3,1 \\ \hline \end{array}$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	2 : 2
213			N = 213	=	3 .	71 (1 iso	geny class	s)		213
A1 1 A2 1		$0 \\ -15$	1 19			$ \begin{array}{ccc} & 2, 1 \\ & 1, 2 \end{array} $	2, 1 1, 2	$2,1 \\ 1,2$	$\begin{matrix} I_2,I_1\\I_1,I_2\end{matrix}$	2:2 2:1
214			N = 214 =	= 2	2 · 1	07 (4 iso	geny class	es)		214
A1 1	0 0	-12	16	1	1	- 7,1	7,1	7,1	I_7,I_1	
B1 1	0 1	1	0	1	1	-1,1	1,1	1,1	$ I_1,I_1 $	
C1 1	0 1	-193	1012	1	1	-10,1	10, 1	2,1	I_{10},I_1	
D1 1 D2 1		$ \begin{array}{c} 2 \\ -18 \end{array} $	$ \begin{array}{c} 4 \\ -112 \end{array} $		3 1	$ \begin{array}{ccc} & 6, 1 \\ & 2, 3 \end{array} $	$\begin{bmatrix} 6,1\\2,3 \end{bmatrix}$	6, 1 $2, 1$	$\begin{bmatrix} I_6,I_1\\I_2,I_3 \end{bmatrix}$	3:2 3:1
215			N = 215	=	5 .	43 (1 iso	geny class	s)		215
A1 0	0 1	-8	-12	1	1	-4,1	4,1	2,1	I_4,I_1	
216			N = 216 =	= 2	2^3 .	3^3 (4 iso	geny class	es)		216
A1 0	0 0	-12	20	1	1	- 8,5	0,0	4,3	I_1^* ,IV	
B1 0	0 0	-3	-34	0	1	- 11,5	0,0	1,1	$ $ II * ,IV	
$C1 \mid 0$	0 0	-27	918	0	1	- 11,11	0,0	$\begin{bmatrix} 1,1 \end{bmatrix}$	II^*,II^*	
D1 0	0 0	-108	-540	0	1	- 8,11	0,0	2,1	I_1^*,II^*	
218			N = 218	=	$2 \cdot 1$	109 (1 is	ogeny clas	s)		218
A1 1		-2	4		3	- 6,1	6, 1	6, 1	I_6,I_1	3 :2
A2 1	0 0	18	-104	1	1	-2,3	2,3	2,3	I_2,I_3	3 : 1
219			N = 219	= ;	$3 \cdot 7$	73 (3 isog	geny classe	es)		219
	$-1 \ 1$	-6	8		1	1,1	1,1	$\begin{bmatrix} 1,1\\ \end{bmatrix}$	I_1,I_1	 :
B1 0		3	2		3	-3,1	3,1	3,1	I_3,I_1	3 :2
$\begin{array}{c c} B2 & 0 \\ \hline C1 & 1 \end{array}$		$ \begin{array}{r} -27 \\ -82 \end{array} $	-85 -205		$\begin{bmatrix} 1 \\ \hline 2 \end{bmatrix}$	- 1,3 	1,3	$\frac{1}{1}, \frac{1}{2}, \frac{3}{1}$	$\left \begin{array}{c} \mathrm{I}_{1}, \mathrm{I}_{3} \\ \mathrm{I}_{1}, \mathrm{I}_{3} \end{array} \right $	3 :1
C1 1 C2 1	_	-82 -1297	$ \begin{array}{r} -305 \\ -18530 \end{array} $		_	+ 10, 1 + 5, 2	$ \begin{array}{c c} 10, 1 \\ 5, 2 \end{array} $	2, 1 $1, 2$	$\begin{matrix} \mathrm{I}_{10}, \!\mathrm{I}_1 \\ \mathrm{I}_5, \!\mathrm{I}_2 \end{matrix}$	2:2 2:1
							1	1	l	

							Ι			1	I	T	1
	a_1	a_2	a_3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
220)				N = 220 =	= 2 ²	$2 \cdot 5 \cdot$	11	(2 isos	geny class	ses)		220
A1	0	1	0	-45	100	1	6	+	4, 3, 2	0, 3, 2	3, 3, 2	IV,I_3,I_2	2 :2; 3 :3
A2	0	1	0	-100	-252	1	6	+	8, 6, 1	0, 6, 1	3, 6, 1	IV^*,I_6,I_1	2:1;3:4
A3	0	1	0	-445	-3720	1	2	+	4, 1, 6	0, 1, 6	1, 1, 2	IV,I_1,I_6	2:4;3:1
A4	0	1	0	-7100	-232652	1	2	+	8, 2, 3	0, 2, 3	1, 2, 1	IV^*,I_2,I_3	2:3;3:2
B1	0	-1	0	-5	2	0	2	+	4, 1, 2	0, 1, 2	1, 1, 2	$ $ IV, I_1 , I_2	2 :2
B2	0	-1	0	-60	200	0	2	+	8, 2, 1	0, 2, 1	1, 2, 1	IV^*,I_2,I_1	2 : 1
221	L				N = 221	= -	13 · 1	7	(2 isoge	eny classes	s)		221
A1	1	-1	1	-733	7804	0	2	+	6,1	6, 1	2,1	I_6,I_1	2 :2
A2		-1	1	-11718		0	2	+	3, 2	3, 2	1,2	I_3,I_2	2:1
B1	 1	 1		 -59	152	0	$\frac{1}{2}$	¦	$\frac{1}{2}, \frac{1}{1}$	$\begin{bmatrix} 2, 1 \end{bmatrix}$	$\frac{1}{1} - \frac{1}{2} - \frac{1}{1}$	<u>'</u>	2 :2
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	1	1	0	-59 -54		0	$\frac{2}{2}$	+	$\frac{2}{4}, \frac{1}{2}$	4,2	2,1 $2,2$	$egin{array}{c} I_2,I_1 \ I_4,I_2 \end{array}$	$\begin{vmatrix} 2 & \cdot & 2 \\ 2 & \cdot & 1 \end{vmatrix}$
152						Ü				1, 2	2,2	14,12	
222	2				N = 222 =	= 2	. 3 . 3	37	(5 isog	geny classe	es)		222
A1	1	0	0	2	-4	0	3	-	3, 3, 1	3, 3, 1	3, 3, 1	I_3,I_3,I_1	3 :2
A2	1	0	0	-148	-706	0	1	_	1, 1, 3	1,1,3	1,1,3	I_1,I_1,I_3	3 :1
B1	1	1	1	17	179	0	1	_	1,11,1	1,11,1	1, 1, 1	$\mid I_1, I_{11}, I_1$	
C1	1	1	0	16	0	0	2	_	8, 3, 1	8, 3, 1	2, 1, 1	I_{8},I_{3},I_{1}	2 :2
C2	1	1	0	-64	-80	0	4	+	4, 6, 2	4, 6, 2	2, 2, 2	I_4, I_6, I_2	2:1,3,4
C3	1	1	0	-804		0	2	+	2, 12, 1	2, 12, 1	2, 2, 1	I_2, I_{12}, I_1	2 :2
C4	1	1	0	-604	5428	0	4	+	2, 3, 4	2, 3, 4	2, 1, 4	I_2, I_3, I_4	2:2
D1	1	0	1	1	-46	0	1	_	13, 1, 1	13, 1, 1	[1, 1, 1]	I_{13},I_1,I_1	
E1	1	1	0	-182317	29887645	0	1	-	23, 9, 1	23, 9, 1	[1, 1, 1]	I_{23}, I_{9}, I_{1}	
224	1				N = 224		$2^5 \cdot 7$	7	(2 isoge	ny classes)	!	224
A1	0	1	0	2	0	1	2	_	$\frac{(2 \log 6)}{6,1}$	0,1	2,1	III,I_1	2 :2
A1 A2	0	1	0	-8	-8	1	$\frac{2}{2}$	+	9, 2	$0, 1 \\ 0, 2$	2,1 $2,2$	I_0^{*}, I_2	2:2
				2		¦	2	¦ -' -		<u> </u>			2 :2
B1 B2		-1 -1	$0 \\ 0$	-8	0 8	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$\frac{2}{2}$	+	$6, 1 \\ 9, 2$	$0, 1 \\ 0, 2$	$\begin{bmatrix} 2,1\\1,2 \end{bmatrix}$	$\begin{matrix} \text{III}, \text{I}_1 \\ \text{I}_0^*, \text{I}_2 \end{matrix}$	$\begin{vmatrix} 2 & : & 2 \\ 2 & : & 1 \end{vmatrix}$
102	U								5,2	0,2	1,2	10,12	2 · 1
225	<u> </u>				N = 225	= ;	$3^2 \cdot 5$	2	(5 isoge	eny classes	s)		225
A1	0	0	1	0	1	1	1	-	3, 2	0,0	2, 1	III,II	3 :2
A2	0	0	1	0	-34	1	1	—	9, 2	0,0	2,1	III*,II	3 :1
B1	0	0	1	0	156	0	3	_	3,8	0,0	2,3	III,IV*	3 :2
B2	0	0	1	0	-4219	0	1	-	9,8	0, 0	2,1	III^*,IV^*	3 : 1
$\overline{\text{C1}}$	1	-1	1	-5	-628	0	4	_	7,7	1,1	4,4	I_1^*, I_1^*	2 :2
C2	1	-1	1	-1130	-14128	0	4	+	8,8	2, 2	4, 4	I_2^*, I_2^*	2:1,3,4
C3		-1	1	-18005	-925378	0	2	+	7, 7	1, 1	2,4	I_1^*, I_1^*	2 :2
C4		-1	1	-2255	19622	0	4	+	10, 10	4, 4	4,4	I_4^*, I_4^*	2:2,5,6
C5		-1	1	-30380	2044622	0	4	+	14,8	8, 2	4,4	I_8^*, I_2^*	2:4,7,8
C6		-1	1	7870	141122	0	2	-	8, 14	2,8	2,4	I_2^*, I_8^*	2:4
C7 C8		-1 -1	1 1	-486005 -24755	$130530872 \\ 2820872$	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$\begin{array}{c c} 2 \\ 2 \end{array}$	+	10,7	$\begin{bmatrix} 4,1\\ 16,1 \end{bmatrix}$	$2, 2 \\ 4, 2$	I_4^*, I_1^* I^* I^*	2:5 2:5
						!	!	¦	22,7	16,1	<u>-</u>	I ₁₆ ,I ₁ *	2 :5
D1	0	0	1	15	-99	0	1	-	11, 2	5,0	2, 1	I ₅ ,II	5 :2
D2	0	0	1	-1875	32031	0	1	_	7, 10	1,0	2, 1	I_1^* , II^*	5 :1

						0 001012	S == 0 = 0 :			
a_1 a_2 a_3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
225		N = 2	25	= 3	$^2 \cdot 5$	5^2 (con	tinued)			225
E1 0 0 1 E2 0 0 1	$-75 \\ 375$	$ \begin{array}{c c} 256 \\ -12344 \end{array} $	1 1	1 1	_ _	7, 4 11, 8	1, 0 5, 0	4, 3 $4, 3$	$\begin{matrix} I_1^*, IV \\ I_5^*, IV^* \end{matrix}$	5 :2 5 :1
226		N = 226	=	$2 \cdot 1$	13	(1 isog	eny class)			226
A1 1 0 0 A2 1 0 0	-5 -45	1 -119	1 1	2 2	+++	6, 1 3, 2	$6, 1 \\ 3, 2$	$6, 1 \\ 3, 2$	$I_6, I_1 \\ I_3, I_2$	2:2 2:1
228		N = 228 =	2^{2}	. 3 .	19		geny class	es)		228
$\begin{bmatrix} A1 & 0 & -1 & 0 \\ & & & & & \end{bmatrix}$	3	18	0	2	_	4, 3, 2	0, 3, 2	1, 1, 2	, , , –	2 :2
$\begin{array}{ c c c c c c } A2 & 0 & -1 & 0 \\ \hline & & & & & & & & & & & \\ \hline & & & & &$	-92 	360			:	8, 6, 1	$\begin{bmatrix} 0, 6, 1 \\ \end{bmatrix}$	$\frac{1,2,1}{2,2,1}$	$ \text{IV}^*, \text{I}_6, \text{I}_1 $:
B1 0 -1 0	3	9	1	1	_	8, 2, 1	0, 2, 1	3, 2, 1	IV^*,I_2,I_1	
229		N = 22	29 =	= 22	9	(1 isoger	ny class)			229
A1 1 0 0	-2	-1	1	1	+	1	1	1	I_1	
231		N = 231	= :	3 · 7	· 11	(1 iso	geny class	s)		231
A1 1 1 1	-34	62	0	4	+	1, 2, 1	1, 2, 1	1, 2, 1	I_1, I_2, I_1	2 :2
A2 1 1 1	-39	36	0	8	+	2, 4, 2	2, 4, 2	2, 4, 2	I_2, I_4, I_2	2:1,3,4
A3 1 1 1	-284	-1924	0	4	+	4, 2, 4	4, 2, 4	2, 2, 2	I_4,I_2,I_4	2:2,5,6
A4 1 1 1	126	432	0	4	_	1, 8, 1	1, 8, 1	1, 8, 1	I_1,I_8,I_1	2 :2
A5 1 1 1	-4519	-118810	0	2	+	8, 1, 2	8, 1, 2	2, 1, 2	I_8,I_1,I_2	2 :3
A6 1 1 1	31	-5578	0	2	_	2, 1, 8	2, 1, 8	2, 1, 2	I_2, I_1, I_8	2 :3
232		N = 232	= 2	$2^3 \cdot 2$	29	(2 isoge	ny classes	s)		232
A1 $0 - 1 0$	8	-4	1	1		10, 1	0,1	2,1	$ $ III * , I_1	<u> </u>
B1 0 1 0	-80	-304	0	1	_	10, 1	0,1	2, 1	III^*, I_1	
233		N = 23	33 =	= 23	3	(1 isoger	ny class)			233
A1 1 0 1	0		0	2	_	2	2	2	I_2	2 :2
A2 1 0 1	-5	3	0	2	+	1	1	1	I_1	2 :1
234		N = 234 =	2	3^2	13	(5 isog	geny class	es)		234
$\begin{bmatrix} A1 & 1 & -1 & 0 \\ A2 & 1 & 1 & 0 \end{bmatrix}$	-24		0	1	_	7, 6, 1	7, 0, 1	1, 1, 1	I_7,I_0^*,I_1	7 :2
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	-1914		0	1	— 	1,6,7	$\begin{bmatrix} 1, 0, 7 \\ \end{bmatrix}$	$\begin{bmatrix} 1,1,1\\ \end{bmatrix}$	$ I_1,I_0^*,I_7 $	7:1
B1 1 -1 1 B2 1 -1 1	-29	$ \begin{array}{r r} -107 \\ -5075 \end{array} $	$0 \\ 0$	$\frac{2}{2}$	_	4, 9, 1	4,0,1		I_4,III^*,I_1	2:2 2:1
!	-569 		!		+ 	2,9,2	$\frac{1}{1}, \frac{2}{1}, \frac{0}{1}, \frac{2}{1}$	2, 2, 2	$ I_2,III^*,I_2 $	2:1
$\begin{array}{c cccc} C1 & 1 & -1 & 0 \\ C2 & 1 & -1 & 0 \end{array}$	$-3 \\ -63$	5 209	1 1	$\frac{2}{2}$		4, 3, 1 2, 3, 2	4, 0, 1 2, 0, 2	2, 2, 1 2, 2, 2	$egin{array}{c} I_4, & III, I_1 \\ I_2, & III, I_2 \\ \end{array}$	2:2 2:1
					:				!	<u> </u>
D1 1 -1 1	-176	-18669	0	4		16, 11, 1	16, 5, 1	16, 4, 1	, 0, -	2 :2
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	-11696	-479469	0	4		8, 16, 2	8, 10, 2	8, 4, 2	I_8,I_{10}^*,I_2	$\begin{bmatrix} 2:1,3,4 \\ 2:2 \end{bmatrix}$
	-180050 -21056	-30992493	0	$\frac{2}{2}$		4, 11, 4	4, 5, 4	4, 2, 4	I_4, I_5^*, I_4	2:2 2:2
!		404115	0		<u> </u>	4, 26, 1	$\frac{1}{4}, 20, 1$	4, 4, 1	$ I_4, I_{20}^*, I_1 $	2 : 2
$\begin{array}{ c c c c c } E1 & 1 & -1 & 1 \\ E2 & 1 & -1 & 1 \end{array}$	$\frac{4}{41}$		$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$\frac{1}{3}$		1, 6, 1	1,0,1	1, 1, 1	I_1, I_0^*, I_1	3 :2
E2 1 -1 1 E3 1 -1 1	$-41 \\ -4136$	209 103403	0	3	_	3, 6, 3 9, 6, 1	3, 0, 3 9, 0, 1	3, 1, 3 9, 1, 1	$ \begin{array}{c c} I_3, I_0^*, I_3 \\ I_9, I_0^*, I_1 \end{array} $	3:1,3 3:2
TO I -I I	4100	109409	U	<u> </u>	L -	σ, σ, τ	σ, σ, τ	σ, τ, τ	19,1 ₀ ,11	9.2

$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	a. a. a.	<i>a.</i>	a _a	r	T	e	$\overline{\operatorname{ord}(\Delta)}$	$\operatorname{ord}_{-}(j)$	C	Kodaira	Isogenies
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	$a_1 a_2 a_3$	4	a_6	′	1	3	σrα(Δ)	$\operatorname{ord}_{-}(J)$	c_p	Rodalia	isogemes
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	235		N = 2	23	5 =	5 • 4	47 (3 is	sogeny cla	asses)		235
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		-5					,			I_3,I_1	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	B1 1 1 1	-3551	-82926	0	 1	+	9,1	9, 1	1,1	I_9,I_1	:
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	$C1 \mid 0 - 1 \mid 1$	4	1	0	1	—	3,1	3, 1	1,1	I_3,I_1	<u>-</u>
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$			L								
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	236		N = 2	36	$\ddot{s} = 2$	2^2 .	59 (2 i	sogeny cl	asses)		236
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	$A1 \mid 0 - 1 \mid 0$	-1	$2 \mid 1$	1	1	_	4,1	0, 1	3,1	IV,I_1	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$						-	,	*	-		
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	B2 0 1 0	31	68	U	1	_	4,3	0,3	1, 1	1V,I ₃	3 :1
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	238		N=99	00	_ 2	7	17 (5	icogony	laggag)		238
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$			1			1	`			I., I. I.	1
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$											
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	_			1		-	2, 1, 1				2 :2
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$				- '		+				[<u> </u>
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	_										
$\begin{array}{c c c c c c c c c c c c c c c c c c c $				_							
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$			0	2	-					
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$, ,				
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$				- '		<u>'</u>				[<u>' </u>
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$											
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$				ŭ		'	-,-,-	0, -, -	_, _, _	-37-27-4	
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	240		N = 24	10	$= 2^{6}$	$^4 \cdot 3$.5 (4	isogeny c	lasses)		240
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		-15	1			T .					2 :2
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $, ,	, ,		0	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$										_	
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	$A5 \ 0 \ -1 \ 0$				4				4, 1, 2	$\overline{\mathrm{I}_{3}^{*}},\!\mathrm{I}_{1},\!\mathrm{I}_{2}$	2 :3
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$!			- '		<u> -</u>	11,1,8			[[
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$											
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$, ,				
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$					2		, ,				
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$				_			, ,				
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$											
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$											· ·
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$				1						-	
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$\begin{array}{ c c c c c c c c c c c c c c c c c c c$
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
B2 0 0 1 0 1 II* 3:1 244 $N = 244 = 2^2 \cdot 61$ (1 isogeny class) 244
244 $N = 244 = 2^2 \cdot 61$ (1 isogeny class) 244
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$
245 $N = 245 = 5 \cdot 7^2$ (3 isogeny classes) 24 5
A1 0 0 1 -7 12 1 1 - 3,3 3,0 3,2 I ₃ ,III
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$
$\begin{bmatrix} \text{C1} & \text{0} & -1 & 1 & -65 & -204 & 1 & 1 & -1,7 & 1,1 & 1,4 & 1,1,1 & 3:2 \end{bmatrix}$
$egin{array}{ c c c c c c c c c c c c c c c c c c c$
$oxed{C3} oxed{0} -1 \ 1 \ -6435 \ 210006 \ 1 \ 1 \ -9,7 \ 9,1 \ 9,4 \ I_9,I_1^* \ 3:2$
246 $N = 246 = 2 \cdot 3 \cdot 41$ (7 isogeny classes) 246
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$
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$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$
$oxed{E1 \mid 1 0 0 -9 9 \mid 0 \mid 4 \mid + 4, 2, 1 \mid 4, 2, 1 \mid 4, 2, 1 \mid I_4, I_2, I_1 \mid 2 : 2}$
$oxed{\text{E2}} egin{array}{ c c c c c c c c c c c c c c c c c c c$
$oxed{E3} oxed{1} \ 0 \ 0 \ -439 \ -3577 oxed{0} oxed{2} oxed{+} \ 1, 8, 1 \ oxed{1}, 8, 1 \ oxed{1}, 8, 1 \ oxed{1} \ I_1, I_8, I_1 \ oxed{2} : 2$
1941 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$

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	a_1	a_2 (a_3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
248	3				N = 248	3 =	2^3 ·	31	(3 isog	eny classe	(s)		248
A1	0	1	0	0	1	1	1	-	4, 1	0, 1	2,1	III,I_1	
B1	0	1	0	8	0	0	2	[-	10, 1	[0, 1]	2,1	$ $ III^*,I_1	2 :2
B2	0	1	0	-32	-32	0	2	+	11,2	0,2	1,2	\prod_{-}^{+} \prod_{-}^{+} \prod_{-}^{+} \prod_{-}^{+}	2 :1
C1	0	0	0	1	-1	1	1	_	4,1	0,1	2,1	III,I_1	
249)				N = 24	9 =	3 · 8	33	(2 isoge	eny classes	s)		249
A1	1	1	1	-55	134	1	1	-	3, 1	3,1	1,1	I_3,I_1	
B1	1	1	0	2	1	1	$\begin{bmatrix} 1 \end{bmatrix}$	-	1, 1	1,1	1,1	I_1,I_1	
252	2				N = 252	= 2	$2^2 \cdot 3^2$	$2 \cdot 7$	(2 iso	geny class	ses)		252
A1	0	0	0	60	61	0	2	_	4,9,2	0, 3, 2	1, 2, 2	IV,I_3^*,I_2	2 :2; 3 :3
A2	0	0	0	-255	502	0	2	+	8, 12, 1	0, 6, 1	1, 4, 1	IV^*,I_6^*,I_1	2:1;3:4
A3	0	0	0	-1020	12913	0	6	_	4, 7, 6	0, 1, 6	3, 2, 6	IV,I_{1}^{*},I_{6}	2:4;3:1
A4	0	0	0 -	-16455	812446	0	6	+	8,8,3	0,2,3	3,4,3	$[IV^*,I_2^*,I_3]$	2 :3; 3 :2
B1	0	0	0	-12	65	1	2	_	4, 7, 2	0, 1, 2	3, 4, 2	IV,I_1^*,I_2	2 :2
B2	0	0	0	-327	2270	1	2	+	8, 8, 1	0, 2, 1	3, 4, 1	IV^*,I_2^*,I_1	2 :1
25 4	[N = 254	1 =	$2 \cdot 1$	27	(4 isog	eny classe	es)		254
A1	1	0	0	-22	36	1	3	+	9, 1	9, 1	9, 1	I_9,I_1	3 :2
A2	1	0	0	-302	-2036	1	3	+	3,3	3, 3	3,3	I_3,I_3	3:1,3
A3	1	0	. . -	-24432 -	-1471934	1	1	+	1, 1 	1,1	1,1	I_1,I_1	3 :2
B1	1	0	0	2	0	0	2	_	2, 1	2, 1	2, 1	I_2,I_1	2 :2
B2	1	0	0	_8 	-2	0	2	+	1,2	1,2	1,2	I_1,I_2	2 :1
C1	1 -	-1 	0	-5	-3	1	1	+	3, 1	3,1	1,1	$\left \begin{array}{cccccccccccccccccccccccccccccccccccc$	
D1	1 -	_	1	-19	51	0	4	-	12, 1	12, 1	12, 1	I_{12} , I_1	2 :2
D2	1 -		1	-339	2483	0	4	+	6, 2	6, 2	6, 2	I_6,I_2	2:1,3,4
D3 D4	1 - 1 -		1 1	$-379 \\ -5419$	1891 154883	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$\begin{array}{c c} 2 \\ 2 \end{array}$	+	$3, 4 \\ 3, 1$	$3, 4 \\ 3, 1$	3, 2 3, 1	I_3,I_4	$egin{array}{c} {f 2}:2 \ {f 2}:2 \end{array}$
D4	1 -		1	-5419	194009	U		+	3, 1	3, 1	3, 1	I_3,I_1	2.2
256	3				N=2	56	$= 2^{8}$	(4 isogen	y classes)	I		256
A1	0	1	0	-3	1	1	2	+	9	0	2	III	2 :2
A2	0	1 	0	-13	-21	1	2	+	15 	0	2	III* 	2 :1
B1	0	0	0	-2	0	1	2	+	9	0	2	III*	2 :2
B2	0		0		0	1	2	<u> </u> — .	15 	0	2	III* 	2 :1
C1	0		0	2	0	0	2	-	9	0	2	III*	2 :2
C2	0		0 -	_8 	0	0	2	+	15 	0	2	III* 	2 :1
D1	0 -		0	-3	-1		2	+	9	0	2	III III*	2 :2
D2	U -	-1	U	-13	21	0	2	+	15	0	2	III*	2 :1
258	3				N = 258	= :	$2 \cdot 3$	43	(7 isos	geny class	es)		258
A1	1	1	0	3	-3	1	1	[-	6, 1, 1	[6, 1, 1]	[2, 1, 1]	I_6,I_1,I_1	
B1	1	1	0	-1916	31440	0	2	+	14, 7, 1	14, 7, 1	[2, 1, 1]	I_{14}, I_7, I_1	2 :2
B2	1	1	0	-1276	53584	0	2	-	7,14,2	7, 14, 2		I_7, I_{14}, I_2	2 :1
C1	1	0	1	-15	22	1	1	Ī —	2, 5, 1	[2, 5, 1]	[2, 5, 1]	I_2,I_5,I_1	
							L	1		1	i	1	1

140				171011	<i>J</i> 1.		11 1	10 001001	20 2001-20	1D		
	a_1 a_2	a_3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
258	3			N =	258	3 = 2	. 3	· 43 (co	ontinued)			258
D1 D2 D3 D4	1 1 1 1 1 1 1 1	1 1 1 1	-24 -344 -5504 -304	-39 -2599 -159463 -3175		4 4 2 2	+ + + -	$ \begin{array}{c} 12, 1, 1 \\ 6, 2, 2 \\ 3, 1, 1 \\ 3, 4, 4 \end{array} $	12, 1, 1 6, 2, 2 3, 1, 1 3, 4, 4	$12, 1, 1 \\ 6, 2, 2 \\ 3, 1, 1 \\ 3, 2, 2$	$I_{12},I_1,I_1\\I_6,I_2,I_2\\I_3,I_1,I_1\\I_3,I_4,I_4$	2:2 2:1,3,4 2:2 2:2
E1	<u>-</u>		-44124 		¦ – –	¦	'	2, 19, 1	$\begin{bmatrix} 2, 19, 1 \\ 14, 7, 1 \end{bmatrix}$	[2, 1, 1]	I_{2},I_{19},I_{1}	
F1 F2	$\begin{array}{ c c c } 1 & 0 \\ 1 & 0 \\ \hline \end{array}$			1737 -5648523	¦	$\begin{bmatrix} 7 \\ 1 \\ -\frac{7}{2} \end{bmatrix}$		14, 7, 1 $2, 1, 7$;	$\begin{bmatrix} 14, 7, 1 \\ 2, 1, 7 \\ \end{bmatrix}$	$egin{array}{ c c c c c c c c c c c c c c c c c c c$	7:2 7:1
G1 G2	$\begin{array}{c c} 1 & 0 \\ 1 & 0 \end{array}$	0	$-2 \\ 8$	$0 \\ 2$	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$\begin{array}{c c} 2 \\ 2 \end{array}$	+	2, 1, 1 $1, 2, 2$	$2, 1, 1 \\ 1, 2, 2$	2, 1, 1 $1, 2, 2$	$I_2,I_1,I_1 \\ I_1,I_2,I_2$	2:2 2:1
259	9			N = 2	59	=7	37	(1 isog	geny class))		259
A1 A2	$ \begin{array}{c c} 1 & -1 \\ 1 & -1 \end{array} $		-5 -190	$-32 \\ -957$	0	$\frac{2}{2}$	+	$3, 2 \\ 6, 1$	3, 2 $6, 1$	$3, 2 \\ 6, 1$	$\begin{matrix} \mathrm{I}_3, \mathrm{I}_2 \\ \mathrm{I}_6, \mathrm{I}_1 \end{matrix}$	2:2 2:1
260)			N = 260) =	2^2 ·	$5 \cdot 1$.3 (1 is	ogeny clas	ss)		260
A1 A2	$ \begin{array}{c c} 0 & -1 \\ 0 & -1 \end{array} $		$-281 \\ -276$	1910 1976	0 0	2		4, 1, 2 8, 2, 4		$1, 1, 2 \\ 1, 2, 2$	$\begin{matrix} IV,I_1,I_2\\IV^*,I_2,I_4 \end{matrix}$	2:2 2:1
262	2			N = 262	2 =	· 2 · 1	.31	(2 isog	eny classe	(s)		262
A1		0	1	25	<u>'</u>	1		11,1	11,1	11,1	I_{11},I_1	
B1	1 -1	0	-2	2	1	1	_	1,1	1,1	1,1	I_1,I_1	
26 4	1			N = 264	= :	1	• 11	(4 isc	geny class		T	264
A1 A2	$\begin{bmatrix} 0 & 1 \\ 0 & 1 \end{bmatrix}$	$0 \\ 0$	$ \begin{array}{c} -8 \\ 32 \end{array} $	$0\\32$	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$\frac{2}{2}$	+	10, 1, 1 $11, 2, 2$	$0, 1, 1 \\ 0, 2, 2$	$2, 1, 1 \\ 1, 2, 2$	$\begin{array}{c} III^*,I_1,I_1\\ II^*,I_2,I_2 \end{array}$	2:2 2:1
B1	0 - 1	0	-12	-12	0	$\begin{vmatrix} -2 \\ 2 \end{vmatrix}$	 +	8, 1, 1	0,1,1	$\begin{bmatrix} 2, 1, 1 \end{bmatrix}$	$egin{array}{cccccccccccccccccccccccccccccccccccc$	2 :2
B2	0 - 1	0	-32	60	0	4	+	10, 2, 2	0, 2, 2	2, 2, 2	III^*,I_2,I_2	2:1,3,4
B3 B4	$ \begin{array}{c c} 0 & -1 \\ 0 & -1 \end{array} $	$0 \\ 0$	$-472 \\ 88$	4108 300	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$\frac{2}{2}$	+	11, 4, 1 $11, 1, 4$	$0, 4, 1 \\ 0, 1, 4$	$egin{array}{c} 1, 2, 1 \ 1, 1, 4 \end{array}$	$ II^*, I_4, I_1 II^*, I_1, I_4 $	2:2 2:2
C1	$\begin{bmatrix} 0 & 1 \\ 0 & 1 \end{bmatrix}$	$-\frac{0}{0}$	- - 1	6	0	$\begin{vmatrix} -2 \\ 4 \end{vmatrix}$! 	4, 4, 1	$\begin{bmatrix} 0, 1, 1 \\ -2, -2, -2 \\ 0, 4, 1 \end{bmatrix}$	$\begin{bmatrix} 1, 1, 1 \\ 2, 4, 1 \end{bmatrix}$	$\left \begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{bmatrix} {f 2} & . & 2 \\ {f 2} & . & 2 \end{bmatrix}$
C2	$\begin{bmatrix} 0 & 1 \\ 0 & 1 \end{bmatrix}$	0	-44	96	0	4	+	8, 2, 2	$0, 4, 1 \\ 0, 2, 2$	2, 4, 1 2, 2, 2	I_1^{*}, I_2, I_2	$egin{array}{c} {f 2} : 2 \\ {f 2} : 1, 3, 4 \end{array}$
С3	0 1	0	-104	-288	0	2	+	10, 1, 4	0, 1, 4	2, 1, 2	$\mathrm{III}^*,\!\mathrm{I}_1,\!\mathrm{I}_4$	2 :2
C4	0 1	0	-704	6960	0	2	+	10, 1, 1	0,1,1	$\begin{bmatrix} 2, 1, 1 \end{bmatrix}$	$IIII^*, I_1, I_1$	2 :2
D1 D2	$\begin{array}{c c} 0 & 1 \\ 0 & 1 \end{array}$	$0 \\ 0$	-8016 -7976	-278928 -281808	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$\begin{array}{c c} 2 \\ 2 \end{array}$	+	10, 7, 1 $11, 14, 2$	$0, 7, 1 \\ 0, 14, 2$	$\begin{bmatrix} 2, 7, 1 \\ 1, 14, 2 \end{bmatrix}$	$ III^*, I_7, I_1 II^*, I_{14}, I_2 $	2:2 2:1
			1310	201000	U			11, 11, 2	0,11,2	1, 11, 2	11 ,114,12	
265	1			N=2		1		,	geny class)		T	265
A1 A2	$\begin{vmatrix} 1 & -1 \\ 1 & -1 \end{vmatrix}$		$-138 \\ -133$	656 702	1 1	$\begin{array}{c c} 2 \\ 2 \end{array}$	+	3, 1 $6, 2$	3,1 $6,2$	$egin{array}{c} 1,1 \ 2,2 \end{array}$	$\begin{matrix} I_3,I_1\\I_6,I_2\end{matrix}$	2:2 2:1
267	7			N = 26	67 =	= 3 · 8	89	(2 isoge	eny classes		I	267
A1	0 1	1	-3	2	0	3	_	3,1	3,1	3,1	I_3,I_1	3 :2
A2	$\begin{bmatrix} 0 & 1 \\ \hline 0 & 1 \end{bmatrix}$	1	27 	-37 	$\begin{bmatrix} 0 \\ 1 \end{bmatrix}$	1	-	1,3	$\begin{bmatrix} 1, 3 \\ -17 \end{bmatrix}$	$\begin{bmatrix} 1,1 \\ \end{bmatrix}$	I_1,I_3	3 :1
B1	0 - 1	1	-441	6419	0	1	_	17, 1	17, 1	1, 1	I_{17},I_1	

				1710	ш .	1. DD	1111	110 0010	VES 208A	21011		141
	a_1 a_2	a_3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
268	3			N =	268	8 = 2	$2 \cdot 6$	57 (1 i	sogeny cla	uss)		268
A1	0 -1	. 0	3	-7	0	1	_	8, 1	0,1	1,1	IV^*,I_1	
269)			N =	= 20	69 =	269	(1 iso	ogeny clas	s)		269
A1	0 0	1	-2	-1	1	1	+	1	1	1	I_1	
270)			N=2	70 =	= 2 ·	3^3 ·	5 (4 is	sogeny cla	sses)	l	270
A1	1 -1	. 0	-15	35	0	3		1,9,1	1, 0, 1	1, 3, 1	I_1,IV^*,I_1	3 :2
A2	1 - 1	0	120		0	1		3, 11, 3	3,0,3	$\begin{bmatrix} 1, 1, 1 \\ \end{bmatrix}$	I ₃ ,II*,I ₃	3 :1
B1	1 - 1		7	-103	0	3		15, 3, 1	15, 0, 1	15, 1, 1	I_{15} , II , I_1	3 :2
B2	1 -1	_ 1	-1433	-20519	0	1	-	5, 9, 3	5,0,3	[5, 1, 1]	I_5,IV^*,I_3	3:1
C1	1 - 1		-2	-1	0	1	_	1, 3, 1	1, 0, 1	1, 1, 1	I_1,II,I_1	3 :2
C2	1 -1		13	11	0	3	— 	3, 5, 3	$\frac{1}{1}$ $\frac{3,0,3}{3}$	3,1,3	I ₃ ,IV,I ₃	3 :1
D1 D2	$\begin{array}{c c} 1 & -1 \\ 1 & -1 \end{array}$		$-159 \\ 66$	813 2708	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$\frac{3}{1}$	_	5, 3, 3 15, 9, 1	5,0,3 15,0,1	$\begin{bmatrix} 1, 1, 3 \\ 1, 1, 1 \end{bmatrix}$	$egin{array}{c} I_5, II, I_3 \ I_{15}, IV^*, I_1 \end{array}$	3:2 3:1
D2	1 -1	. 0	00	2100	U	1		10, 9, 1	15, 0, 1	1,1,1	115,1 V ,11	3 . 1
27 2	ı			N = 2	272	1	• 17	$7 (4 ext{ is}$	ogeny clas	sses)	T	272
A1	$\begin{bmatrix} 0 & 1 \\ 0 & 1 \end{bmatrix}$		-8	4	1	2	+	10, 1	0,1	4,1	I_2^*,I_1	2 :2
A2	0 1		-48 	-140	1	2	+	11, 2	$\frac{1}{1} - \frac{0,2}{1} - \frac{1}{1} - \frac{1}{1}$	2,2	I_3^*, I_2	2 :1
B1 B2	$\begin{bmatrix} 0 & 0 \\ 0 & 0 \end{bmatrix}$		$-11 \\ -91$	$-6 \\ 330$	1 1	$\begin{bmatrix} 2 \\ 4 \end{bmatrix}$	+++++++++++++++++++++++++++++++++++++++	$12, 1 \\ 12, 2$	$0, 1 \\ 0, 2$	$\begin{array}{c c} 4,1 \\ 4,2 \end{array}$	I_4^*,I_1	$egin{array}{ c c c c c c c c c c c c c c c c c c c$
B3	0 0		-91 -1451	21274	1	4	+	12, 2 $12, 1$	$0, 2 \\ 0, 1$	4, 2 $4, 1$	$I_4^*, I_2 \\ I_4^*, I_1$	$\begin{bmatrix} 2 & 1 & 3 & 4 \\ 2 & 2 & 2 \end{bmatrix}$
B4	0 0		-11	890	1	4	<u> </u>	12,4	0, 4	2,4	I_4^*, I_4	2 :2
$\bar{\mathrm{C1}}$	0 - 1	- 0	-4	0	0	2		8,1	0,1	2, 1	$oxed{I_0^*,I_1}$	2 :2
C2	0 - 1	. 0	16	-16	0	2	_	10, 2	0, 2	2, 2	I_2^*, I_2	2 :1
D1	0 - 1	0	-48	-64	0	2	+	18, 1	[6, 1]	4,1	$oxed{I_{10}^*,I_1}$	2:2;3:3
D2	0 - 1		-688	-6720	0	2	+	15, 2	3, 2	4,2	I_7^*, I_2	2 :1; 3 :4
D_4	0 - 1		-1648 -1808	26304	0	$\begin{array}{c} 2 \\ 2 \end{array}$	+	14, 3	2,3	$\frac{4,1}{4,2}$	I_{6}^{*},I_{3}	2:4;3:1
D4	0 -1	. 0	-1808	21056	0	2	+	13,6	1,6	4,2	I_{5}^{*},I_{6}	2:3;3:2
27 3	3			N=2	73 =	= 3 ·	$7 \cdot 1$.3 (2 i	sogeny cla	sses)		273
A1	0 - 1	1	-26	68	1	1	_	4, 3, 1	4, 3, 1	[2, 3, 1]	I_4,I_3,I_1	
B1	0 1	1	2540	-157433	0	1	-	8,7,3	8, 7, 3	8, 1, 1	I_{8}, I_{7}, I_{3}	
27 4	1			N = 2	274	= 2	137	7 (3 is	ogeny clas	sses)		274
A1	1 0	0	-7	9	1	1	_	7, 1	7, 1	7, 1	I_7,I_1	
B1	1 - 1	0	-2846	59156	1	1	: 	11, 1	$\begin{bmatrix} 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 $	1,1	$oxed{I_{11},I_1}$;
$\bar{C}1$	 1 1 –1		-2	0	! 1	2	 +	2,1	$\begin{bmatrix} - & - & - \\ 2 & 1 \end{bmatrix}$	$\frac{1}{2}, \frac{1}{1}$	$\begin{bmatrix} I_2,I_1 \end{bmatrix}$	2 :2
C2	1 - 1		8	-6	1	2	_	1, 2	1, 2	1, 2	I_1,I_2	2 :1
275	ó			N = 2	275	$= 5^2$. 11	(2 is	ogeny clas	sses)		275
A1	1 -1	1	20	22	1	4	_	$\frac{7,1}{7,1}$	1,1	4,1	I_1^*,I_1	2 :2
A2	1 - 1		-105	272	1	4	+	8, 2	2, 2	4, 2	I_2^*,I_2	2:1,3,4
A3	1 - 1		-730	-7228	1	2	+	7, 4	1, 4	4, 2	$\mathrm{I}_{1}^{st},\!\mathrm{I}_{4}$	2 :2
A4	1 -1	1	-1480	22272	1	2	+	10, 1	4, 1	4,1	I_4^*,I_1	2 :2

a_1	a_2	a_3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
275				N = 2	75	$=5^{2}$	• 1	1 (con	tinued)			275
B1 () 1	1	-8	19	0	1	_	6,1	0,1	1,1	I_0^*, I_1	5 :2
B2 (1	-258	-2981	0	1	_	6, 5	0, 5	1,5	I_0^*, I_5	5 :1,3
B3 () 1	1	-195508	-33338481	0	1	_	6, 1	0, 1	1,1	I_0^*, I_1	5 :2
277				N = 27	7 =	= 277	7	(1 isoger	ny class)			277
A1 1	L 0	1	0	-1	1	1	_	1	1	1	I_1	
278				N = 278 =	= 2	. 139	9	(2 isoge	ny classes	s)		278
A1 1	1 0	0	-1	9	1	1	_	8,1	8,1	8,1	I_8,I_1	
B1 1	1 0	1	-537	6908	0	3		12,3	12,3	2,3	I_{12},I_3	3:2,3
B2 1	0	1	4328	-100122	0	1	_	36, 1	36, 1	2, 1	I_{36},I_1	3 :1
B3 1	0	1	-602	5628	0	3	_	4, 1	4, 1	2, 1	$_{\mathrm{I_4,I_1}}$	3 : 1
280				N = 280 =	= 2 ³	$3 \cdot 5 \cdot$	7	(2 isog	eny classe	es)		280
A1 () -1	0	-1	5	1	1	_	8, 1, 1	0, 1, 1	4, 1, 1	I_1^*, I_1, I_1	
B1 (0	0	-412	3316	1		- -	8, 5, 3	0, 5, 3	4, 5, 3	I_1^*, I_5, I_3	<u> </u>
282				N = 282 =	= 2	. 3 . 4	17	(2 isog	env classe	es)		282
A1 1	l 1	1	58	-61	0	4	T .	12, 4, 1	12, 4, 1	12, 2, 1	I_{12}, I_4, I_1	2 :2
A2 1		1	-262	-829	0	4		6, 8, 2		6, 2, 2	I_6, I_8, I_2	2:1,3,4
A3 1	l 1	1	-3502	-81181	0	2	+	3, 4, 4	3, 4, 4	3, 2, 2	I_3,I_4,I_4	2 :2
A4 1	l 1	1	-2142	36771	0	2	+	3, 16, 1	3, 16, 1	3, 2, 1	I_3, I_{16}, I_1	2 :2
B1 1	l 1	1	-15	21	1	2	-	8, 2, 1	8, 2, 1	8, 2, 1	I_{8},I_{2},I_{1}	2 :2
B2 1	l 1	1	-255	1461	1	2	+	4, 1, 2	4, 1, 2	4, 1, 2	I_4,I_1,I_2	2 :1
285				N = 285 =	= 3	$\cdot 5 \cdot 1$	19	(3 isog	eny classe	es)		285
A1 1	1 0	0	19	0	1	2	_	5, 1, 2	5, 1, 2	5, 1, 2	I_5, I_1, I_2	2 :2
A2 1	0	0	-76	-19	1	2	+	10, 2, 1	10, 2, 1	10, 2, 1	I_{10}, I_2, I_1	2 : 1
B1 1	l 1	0	2	-17	1	2	-	1, 3, 2	1, 3, 2	1, 1, 2	I_1,I_3,I_2	2 :2
B2 1	1	0	-93	-378	1	2	+	2, 6, 1	2, 6, 1	2, 2, 1	I_2,I_6,I_1	2 :1
C1 1	l 1	0	23	-176	0	2	<u> </u>	8, 3, 1	8, 3, 1	[2, 3, 1]	I_{8},I_{3},I_{1}	2 : 2
	l 1	_	-382		0			4, 6, 2	1 1	2, 6, 2	I_4,I_6,I_2	2:1,3,4
		0	-6007					2, 3, 4	, ,	2, 3, 2	I_2,I_3,I_4	2 :2
C4 1	l 1	0	-1237	13054	0	4	+	2, 12, 1	2, 12, 1	2, 12, 1	I_2,I_{12},I_1	2 :2
286				N = 286 =	2 ·	11 ·	13	(6 isog	geny class	es)		286
		1	-7	42				, ,	5, 1, 3		0 1 5	3 :2
A2 1	0	1	58	-1128	0	1		15, 3, 1	15, 3, 1	$\begin{bmatrix} 1,1,1 \end{bmatrix}$	I_{15}, I_{3}, I_{1}	3 :1
B1 1	1	1	13	177	1	1	_	13, 2, 1	13, 2, 1	13, 2, 1	I_{13},I_2,I_1	<u> </u>
C1 1	l 1	0	-33	61	1^{-1}	1	<u> </u>	3, 2, 1	[3, 2, 1]	1, 2, 1	I_3,I_2,I_1	
D1 1	1	1	280	393	0	5	-	5, 2, 5	[5, 2, 5]	5, 2, 5	I_5, I_2, I_5	5:2
D2	1	1	-27930	-1808687	0	1				1, 10, 1	I_1, I_{10}, I_1	5 :1
E1 1	1	1	-66	-313	0	1	-	3, 5, 1	[3, 5, 1]	3, 1, 1	I_3, I_5, I_1	
F1 1	1	1	0	-1	0	1	-	1, 1, 1	$\begin{bmatrix} 1,1,1 \end{bmatrix}$	1,1,1	I_1,I_1,I_1	

	a_1 a_2 a_3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
					-	0	<u> </u>		c_p	Hodaira	isogemes
288	3		N = 288	3 =	$2^5 \cdot 3$	\mathbf{S}^2	(5 isoge	eny classes	3)		288
A1	0 0 0	3	0	1	2	_	6, 3	0,0	2,2	III,III	2 :2
A2	0 0 0	-12	0	1	2	+ 	12,3	0,0	4,2	I ₃ ,III	2 :1
B1	0 0 0	-21	-20	1	4	+	6, 8	0, 2	2,4	III,I_2^*	2:2,3,4
B2 B3	$\begin{bmatrix} 0 & 0 & 0 \\ 0 & 0 & 0 \end{bmatrix}$	$-291 \\ -156$	$-1910 \\ 736$	1 1	$\frac{2}{4}$	+	9,7	0,1	1, 2	I_0^*, I_1^*	2:1 2:1
B4	$\begin{bmatrix} 0 & 0 & 0 \\ 0 & 0 & 0 \end{bmatrix}$	-150	-146	1	$\frac{4}{2}$	+	12, 7 $9, 10$	$0, 1 \\ 0, 4$	$egin{array}{c} 4,4 \ 2,4 \end{array}$	$I_3^*, I_1^* \ I_0^*, I_4^*$	2:1 2:1
C1	$\begin{bmatrix} 0 & 0 & 0 \\ 0 & 0 & 0 \end{bmatrix}$	-21	20	0	<u>-</u> 4	!		$\begin{bmatrix} 0, 1 \\ 0, 2 \end{bmatrix}$		$\begin{bmatrix} 1 & 10, 14 \\ 111, 12 \end{bmatrix}$	
$\begin{array}{ c c }\hline C1 \\ C2 \end{array}$	$\begin{bmatrix} 0 & 0 & 0 \\ 0 & 0 & 0 \end{bmatrix}$	-21 -156	-736	$0 \\ 0$	$\frac{4}{2}$	+ +	6, 8 $12, 7$	0, 2 0, 1	$2, 4 \\ 2, 2$	$I_{3}^{111,1_{2}},I_{1}^{*}$	$\begin{bmatrix} 2 : 2, 3, 4 \\ 2 : 1 \end{bmatrix}$
C3	$\begin{bmatrix} 0 & 0 & 0 \\ 0 & 0 & 0 \end{bmatrix}$	-291	1910	0	$\frac{2}{4}$	+	9,7	$0, 1 \\ 0, 1$	2, 2 $2, 4$	$egin{array}{c} \mathbf{I}_0^{3}, \mathbf{I}_1^{\mathbf{*}} \ \mathbf{I}_0^{\mathbf{*}} \end{array}$	2:1
C4	0 0 0	69	146	0	2	_	9,10	0, 4	1,4	$\mathrm{I}_0^*,\!\mathrm{I}_4^*$	2 : 1
$\overline{D1}$	0 0 0	-9	0	0	4	i +	6,6	0,0	2, 4	$ III,I_0^* $	2:2,3,4
D2	0 0 0	-99	-378	0	2	+	9, 6	0,0	2, 2	I_0^*, I_0^*	2 :1
D3	0 0 0	-99	378	0	2	+	9,6	0,0	1, 2	I_0^*, I_0^*	2 :1
D4	0 0 0	36	0	0	2		12, 6	0,0	2, 2	I_3^*, I_0^*	2 :1
E1	0 0 0	27	0	0	2	Ī —	6, 9	0,0	2, 2	III,III*	2 :2
E2	0 0 0	-108	0	0	2	+	12, 9	0, 0	2, 2	I_3^* , III^*	2 :1
289)		N = 2	289	= 17	2	(1 isoge	ny class)			289
A1	1 - 1 1	-199	510	1	4	+	7	1	4	I_1^*	2 :2
A2	1 - 1 1	-1644	-24922	1	4	+	8	2	4	I_2^*	2:1,3,4
A3			-1626560	1	$\frac{2}{2}$	+	7	$\frac{1}{4}$	4	I* 1*	2 :2
A4	1 –1 1	-199	-68272	1		_	10	4	4	I_4^*	2 :2
290)		N = 290) —	2.5	. 20	(1 iso	geny class	.)		290
A1	1 -1 0	-70	$\frac{17 - 236}{-204}$	1	$\frac{2}{2}$	+	8, 3, 1	8,3,1	2, 1, 1	I_{8},I_{3},I_{1}	2 :2
A2	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	10	-700	1	$\frac{2}{2}$	_	4, 6, 2	4, 6, 2	$2, 1, 1 \ 2, 2, 2$	I_{4},I_{6},I_{2}	2 : 2 2 : 1
					_		-, =, =	1, 0, -	_, _, _	14,10,12	_ , _
291	L		N = 29	1 =	$3 \cdot 9$	7	(4 isoge	ny classes)		291
A1	0 - 1 1	-2174	151262	0	1	_	23, 1	23, 1	1,1	I_{23},I_{1}	
B1	1 1 1	-169	686	0	4	 +	8,2	8,2	2, 2	I_8,I_2	2:2,3,4
B2	1 1 1	-654	-5910	0	2	+	16, 1	16, 1	2, 1	I_{16},I_1	2 :1
В3	1 1 1	-164	740	0	4	+	4, 1	4, 1	2, 1	I_4,I_1	2 :1
B4	1 1 1	236	3926	0	4	<u> </u>	4,4	4,4	2,4	I_4,I_4	2 :1
C1	1 1 1	-3	0	1	2	+	2, 1	2,1	2, 1	I_2,I_1	2 :2
C2	1 1 1	-18	-36	1	2	+	1, 2	1, 2	1, 2	I_1,I_2	2 :1
D1	0 -1 1	0	-1	0	1		1,1	1,1	1, 1	$oxed{I_1,I_1}$	
29 4	1		N = 294	= 2	2 · 3 ·	7^2	(7 isog	geny classe	es)		294
A1	1 1 1	-50	293	0	1	_	1,1,8	1, 1, 0	1, 1, 1	I_1,I_1,IV^*	7 :2
A2	1 1 1	-6910	-232261	0	1	_	7, 7, 8	7,7,0	7, 1, 1	I_7,I_7,IV^*	7 :1
B1	$\begin{bmatrix} 1 & 1 & 0 & 0 \end{bmatrix}$	-1	 -1	0	<u>-</u> 1	<u> </u>	1, 1, 2	$\begin{bmatrix} 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 $	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c c} I_1, I_1, II \end{array}$	$ {f 7} : 2 $
B2	$\begin{bmatrix} 1 & 0 & 0 \\ 1 & 0 & 0 \end{bmatrix}$	-141	657	0	7		7, 7, 2	7,7,0	7, 7, 1	I_7,I_7,II	7 :1
1	I			l	l			<i>' '</i>	. /	. , . ,	

	<i>Q</i> .1	a_2	a.	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
29 4		ω <u>z</u>	<i>u</i> 3				' '			ν- /		Hodding	294
C1	t 1	0	0	-197	-2367	0	4 = 1	Z • 3	$\frac{8 \cdot 7^{2}}{8, 2, 7}$	$ \begin{array}{ c c } \hline 8,2,1 \end{array} $	8, 2, 4	T T T*	2 : 2
$\begin{array}{ c c }\hline C1 \\ C2 \end{array}$	$\begin{array}{c c} 1 \\ 1 \end{array}$	0	0	-197 -4117	-2307 -101935	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$\frac{4}{4}$	+	4, 4, 8	$\begin{bmatrix} 6, 2, 1 \\ 4, 4, 2 \end{bmatrix}$	$\begin{bmatrix} 6, 2, 4 \\ 4, 4, 4 \end{bmatrix}$	$I_8,I_2,I_1^* \ I_4,I_4,I_2^*$	$\begin{bmatrix} {f 2} & . & . & . \\ {f 2} & : 1, 3, 4 \end{bmatrix}$
C3	1	0	-		-6510547	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	2	+	2, 2, 7	2, 2, 1	2, 2, 2	I_{2},I_{2},I_{1}^{*}	2:1,5,4 2:2
C4	1	0	0	-5097	-49995	0	$\frac{1}{4}$	+	2, 8, 10	2, 8, 4	2, 8, 4	I_2,I_8,I_4^*	2:2,5,6
C5	1	0	0	-44787	3609423	0	2	+	1, 4, 14	1,4,8	1, 4, 4	I_1, I_4, I_8^*	2 :4
C6	1	0	0	18913	-381333	0	2	_	1, 16, 8	1, 16, 2	1, 16, 2	I_1, I_{16}, I_2^*	2 :4
D1	1	0	1	23	-52	0	3	Ī-	5, 3, 4	5, 3, 0	[1, 3, 3]	I_5,I_3,IV	3 :2
D2	1	0	1	-712	-7402	0	1	_	15, 1, 4	15, 1, 0	1, 1, 3	I_{15} , I_1 , IV	3 :1
E1	1	1	0	1151	18901	0	1	Ī-	5, 3, 10	5, 3, 0	[1, 1, 1]	I_5,I_3,II^*	3 :2
E2	1	1	0	-34864	2503936	0	1	_	15, 1, 10	15, 1, 0	1, 1, 1	I_{15},I_1,II^*	3 : 1
$\overline{F1}$	1	1	0	122	-10940	0	2	<u> </u>	4, 4, 9	4, 4, 0	[2, 2, 2]	I_4,I_4,III^*	2 :2
F2	1	1	0	-6738	-209880	0	2	+	2, 8, 9	2, 8, 0	2, 2, 2	I_2,I_8,III^*	2 :1
$\overline{G1}$	1	0	1	2	32	1	2	<u> </u>	4, 4, 3	4,4,0	2, 4, 2	I_4,I_4,III	2 :2
G2	1	0	1	-138	592	1	2	+	2, 8, 3	2, 8, 0	2, 8, 2	I_2,I_8,III	2 :1
296 $N = 296 = 2^3 \cdot 37$ (2 isogeny classes) 296													
A1	0	-1	0	-9	13	1	1	+	8,1	0,1	4, 1	I_1^*, I_1	
B1	0	-1^{-1}	0	-33	85	1	1	+	8,1	0, 1	2, 1	I_1^*, I_1	<u>:</u>
												297	
A1	0	0	1	-81	290	1	1	_	9, 2	0,2	3, 2	IV^*,I_2	
B1	<u>-</u> 1	1	1	 1	0	<u> </u>	 1	<u> </u>	3,1	$\begin{bmatrix} 0, 1 \end{bmatrix}$		$ II,I_1 $	<u>-</u>
$\bar{C1}$	<u>'</u>	-1^{-1}	0	12	-19	<u> </u>	1 1	<u> </u>	9,1	$\begin{bmatrix} 0, 1 \end{bmatrix}$	$\begin{bmatrix} -2 & -2 \\ 3 & 1 \end{bmatrix}$	$ V^*, I_1 $	<u> </u>
D1	0	0	1	 -9	-11	0	1	<u> </u>	3, 2	0, 2	1, 2	$_{ m II,I_2}$	<u>:</u>
298	298 $N = 298 = 2 \cdot 149$ (2 isogeny classes) 298												
A1		0	0	-19	33	1	1	_	9,1	9,1	9,1	I_9,I_1	
B1	<u>-</u>	1		 1	-1	1 1	1	<u>-</u>	['] 1, 1	$\begin{bmatrix} - & - & - & - & - & - & - & - & - & - $	$\begin{bmatrix} 1 & 1 & 1 \end{bmatrix}$	$\begin{bmatrix} I_1,I_1 \end{bmatrix}$	<u>-</u>
300)				N = 300) =	$2^2 \cdot 1$	3 · F	5^2 (4 is	ogeny cla	sses)	<u> </u>	300
A1		-1	0	-13	-23	1	1	_	8, 3, 2	0,3,0	1,1,1	IV^*,I_3,II	3 :2
A2		-1	0	-1213	-15863		1	_	8, 1, 2	0, 0, 0	3, 1, 1	IV^*,I_1,II	3 :1
B1	<u>-</u>	 1		-333	-3537	<u> </u>	3	<u>-</u> -	8,3,8	0,3,0	$\begin{bmatrix} 2 & 2 & 2 & 2 & 2 & 2 & 2 & 2 & 2 & 2 $	$ \text{IV*}, \text{I}_3, \text{IV*} $	$\frac{1}{3}:2$
B1 B2	0	1	-		-3537 -2043537		1	_		, ,	$\begin{bmatrix} 3, 3, 3 \\ 1, 1, 1 \end{bmatrix}$	$IV^{,13,1V}$ IV^*,I_1,IV^*	3:1
C1	- 0 0	1		-333	2088	<u>-</u> -	$\frac{1}{2}$	<u> </u>		<u>:</u>	[1, 2, 2]	$ \text{IV,I}_2, \text{III}^* $	2 :2
C1	0	1	0	-333 292	9588			_	4, 2, 9 8, 4, 9			$IV,I_2,III IV*,I_4,III*$	2:2 2:1
D1	<u>-</u>		0	 -13	22	1 1	$\frac{1}{2}$	<u> </u>	$-\frac{0}{4}, \frac{1}{2}, \frac{3}{3}$	$\begin{bmatrix} 0, 1, 0 \\ 0, 2, 0 \end{bmatrix}$	$\begin{bmatrix} 1, 1, 2 \\ 3, 2, 2 \end{bmatrix}$	IV,I ₂ ,III	$\frac{1}{2} \cdot \frac{1}{2} \cdot \frac{1}$
D1 $D2$	_	$-1 \\ -1$		-13 12	72	1	$\frac{2}{2}$		4, 2, 3 8, 4, 3	$0, 2, 0 \\ 0, 4, 0$	3, 2, 2 3, 2, 2	IV,I_2,III IV^*,I_4,III	2:2 2:1
302					N = 30					geny class		<u> </u>	302
A1	1	1	1	-230	1251	1	5		15, 1	15,1	15,1	I_{15}, I_{1}	5 :2
A2	1	1	1	1650	-27389		1	_	3, 5	3, 5	3,5	I_{3},I_{5}	5 :1
B1	' 1	 1	0	 1	 5	$\frac{1}{1}$ $\frac{1}{0}$	2	<u>.</u> _	$\frac{-6}{1}$	$\begin{bmatrix} -6, 1 \end{bmatrix}$	$\begin{bmatrix} 2,1 \end{bmatrix}$	I_6,I_1	2 : 2
B2	1	1	0	-39	77	0	2	+	3, 2	3,2	1, 2	I_3,I_2	2:1
C1	<u>-</u>	 -1		0		$\frac{1}{1}$	<u>-</u>	<u> </u>	5,1	$\begin{bmatrix} 5, 1 \\ 5, 1 \end{bmatrix}$	$\begin{bmatrix} -7 & -7 \\ 5 & 1 \end{bmatrix}$	$oxed{I_5,I_1}$	<u> </u>
	1	. Т	Т	U	3	1	1 +		σ , τ	⁰ , 1	$_{\rm 0, 1}$	15,11	

								C COILVI				140
	a_1 a_2	a_3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
303	3			N = 303	3 =	$3 \cdot 1$.01	(2 isog	geny class	es)		303
A1	0 1	1	-197	-208	1	1	+	14, 1	14, 1	14, 1	I_{14},I_1	
B1	0 1	1	-6	2	1	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	+	4,1	4,1	4,1	I_4,I_1	·
304	1			$N = 30^{4}$	4 =	2^4 ·	19	(6 isog	geny class	es)		304
A1	0 1	0	0	-76	1	1	_	17, 1	5,1	4,1	I_{9}^{*},I_{1}	5 :2
A2	0 1	0	-1120	15604	1	1	—	13, 5	1,5	4,5	$ m I_5^*, m I_5$	5 :1
B1	0 - 1	0	-248	-1424	0	$\begin{bmatrix} 1 \end{bmatrix}$	[-	15, 1	3, 1	2,1	$oxed{I_7^*,I_1}$	3 :2
B2	0 - 1	0	152	-5776	0	1	_	21, 3	9,3	2, 1	I_{13}^*, I_3	3:1,3
B3	0 - 1	0	-1368	157168	0	1		39, 1	$\frac{1}{1}$ 27, 1	$\frac{2}{1}$	$\left[\begin{array}{cccccccccccccccccccccccccccccccccccc$	3 :2
C1	0 - 1	0	-8	16	1	1	-	11, 1	0, 1	4,1	I_3^*,I_1	
D1	0 - 1	0	-1	-3	0	$\begin{bmatrix} 1 \end{bmatrix}$	-	8,1	0, 1	1,1	I_0^*,I_1	
E1	0 -1	0	11	-3	0	1	<u> </u>	12, 1	0, 1	1,1	II^*,I_1	3 :2
E2	0 - 1	0	-149	797	0	1	_	12, 3	0,3	1, 1	$\mathrm{II}^*, \mathrm{I}_3$	3 :1,3
E3	0 - 1	0	-12309	529757	0	1	_	12, 1	0, 1	1, 1	$\mathrm{II}^*,\!\mathrm{I}_1$	3 :2
F1	0 1	0	-21	31	1	$\begin{vmatrix} 1 \end{vmatrix}$	_	8,1	0,1	2,1	I_0^*, I_1	
306	3			N = 306	= 2	$2 \cdot 3^2$. 17	(4 iso	ogeny clas	sses)		306
A1	1 -1	1	-2300	-41857	0	2	+	6, 12, 1	6, 6, 1	6, 2, 1	I_6, I_6^*, I_1	2:2;3:3
A2	1 - 1	1	-1940	-55681	0	2		3, 18, 2	3, 12, 2	3, 4, 2	I_3,I_{12}^*,I_2	2:1;3:4
$A_{\Lambda \Lambda}$	1 - 1	1	-6755	163235	0	6		18, 8, 3	18, 2, 3	18, 2, 3	I_{18},I_2^*,I_3	2:4;3:1
A4	1 -1	1	16285	1020323	0	6	<u>'</u>	9, 10, 6	$\frac{9,4,6}{1,2,2,2}$	9,4,6	I_9,I_4^*,I_6	2 :3; 3 :2
B1	1 - 1	0	-27	-27	1	$\frac{2}{2}$		6, 6, 1	6, 0, 1	2, 2, 1	I_6, I_0^*, I_1	2:2;3:3
B2 B3	$\begin{array}{c c} 1 & -1 \\ 1 & -1 \end{array}$	$0 \\ 0$	$-387 \\ -927$	-2835 11097	1 1	$\begin{bmatrix} 2 \\ 6 \end{bmatrix}$	++	3, 6, 2 2, 6, 3	3, 0, 2 2, 0, 3	1, 2, 2 $2, 2, 3$	$ \begin{array}{c} I_3, I_0^*, I_2 \\ I_2, I_0^*, I_3 \end{array} $	$egin{array}{ c c c c c c c c c c c c c c c c c c c$
B4	1 - 1		-1017	8883		6		1, 6, 6	1, 0, 6	1, 2, 6	I_1,I_0^*,I_6	2:4,3:1 2:3;3:2
$\bar{C}1$	<u>-</u>	0	-306	-1836	0	$\begin{vmatrix} -1 & -1 \\ 2 & 2 \end{vmatrix}$		8, 10, 1	[8,4,1]	$\frac{1}{2}, \frac{1}{2}, \frac{1}{2}$	$\begin{bmatrix} I_{8},I_{4}^{*},I_{1} \end{bmatrix}$	2 :2
C2	1 - 1		-1026	10692	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$\frac{2}{4}$		4, 14, 2	4, 8, 2	2, 2, 1 2, 4, 2	I_4,I_8^*,I_2	$\begin{bmatrix} {f 2} : 2 \\ {f 2} : 1, 3, 4 \end{bmatrix}$
C3	1 - 1		-15606	754272	0	4		2, 10, 4	2,4,4	2, 4, 2	I_2, I_4^*, I_4	2:2,5,6
C4	1 - 1		2034	60264	0	2	-	2,22,1	2, 16, 1	2, 4, 1	I_2,I_{16}^*,I_1	2 :2
C5				48087270	0	2	+	1, 8, 2	1, 2, 2	1, 2, 2	I_1,I_2^*,I_2	2 :3
C6	1 -1		-14796	835434	0	2		1,8,8	1,2,8	1, 4, 2	I_1,I_2^*,I_8	2 :3
D1 D2	$\begin{array}{c c} 1 & -1 \\ 1 & -1 \end{array}$		$-23 \\ 67$	$-21 \\ -201$	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$			2, 8, 1 $1, 10, 2$	2, 2, 1 $1, 4, 2$	$\begin{bmatrix} 2, 2, 1 \\ 1, 4, 2 \end{bmatrix}$	$ \begin{array}{c c} I_2,I_2^*,I_1 \\ I_1,I_4^*,I_2 \end{array} $	2:2 2:1
							<u> </u>			<u> </u>	11,14,12	
$\frac{307}{\text{A1}}$	0 0	1	-8	N = 3 -9	1		7 _	$\frac{\text{(4 isoge}}{1}$	ny classes	s) 1	I_1	307
B1			 0		'	<u> </u>	 		!	!	<u>'</u>	
$\begin{array}{ c c }\hline & & & \\ \hline \end{array}$	<u>-</u>				'	1 	- -	1	1	1	I ₁ 	
D1	$\begin{bmatrix} 0 & 0 \\ 0 & -1 \end{bmatrix}$	1 1	$\begin{bmatrix} 1 \\ 2 \end{bmatrix}$		'	1 1	 	- 1	1 1	1 1	$\left egin{array}{c} \mathrm{I}_1 \ \ \mathrm{I}_1 \end{array} ight $	
							7 1				<u> 1</u>	200
$\frac{308}{\text{A1}}$	0 -1	0	-21	N = 308 49	1		$\frac{7 \cdot 1}{-}$	$\frac{1}{8,2,1}$	$\frac{\text{sogeny cla}}{0, 2, 1}$	(3,2,1)	IV^*,I_2,I_1	308
											- ,-2,-1	200
$\frac{309}{\text{A1}}$		0	-6	$\frac{N=30}{9}$	1		103	$\frac{(1 \text{ isc})}{5,1}$	$\frac{\text{geny clas}}{5,1}$	s) 5,1	I_5,I_1	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$
		<u> </u>						~, <u>-</u>			-0,-1	

			1112				7 20 01011	0100		
	a_1 a_2 a_3	a_4	a_6	r	T	$s \operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
310)		N = 3	10 :	$= 2 \cdot$	$5 \cdot 31$ (2 is	sogeny cla	sses)		310
A1	1 1 1		-241	0	2	- 6,4,1	6, 4, 1	6, 2, 1	I_6, I_4, I_1	2 :2
A2	1 1 1	-1066	-13841	0	2	+3,2,2	3, 2, 2	[3, 2, 2]	I_3,I_2,I_2	2 :1
B1		-106	420	1	6	-12, 2, 1	12, 2, 1	12, 2, 1	I_{12}, I_2, I_1	2:2;3:3
B2		-1706	26980	1	6	+6,1,2	6, 1, 2	6, 1, 2	I_6,I_1,I_2	2:1;3:4
B3	1 0 0		1876	1	2	-4,6,3	4, 6, 3	4, 2, 3	I_4,I_6,I_3	2:4;3:1
B4	1 0 0	-2046	15376	1	2	+ 2, 3, 6	2, 3, 6	2, 1, 6	I_2, I_3, I_6	2:3;3:2
312	2		N = 31	2 =	$=2^3$	$3 \cdot 13$ (6 i	sogeny cla	asses)		312
A1	0 1 0	_	-6	0	2	-4, 1, 2	0, 1, 2	2, 1, 2	III,I_1,I_2	2 :2
A2	0 1 0	-68	-240	0	2	+8,2,1	0, 2, 1	[2, 2, 1]	$ I_1^*,I_2,I_1$	2 :1
B1	0 - 1 0		0	1	2	+4,2,1	0, 2, 1	2, 2, 1	III,I_2,I_1	2 :2
B2	$\begin{bmatrix} 0 & -1 & 0 \end{bmatrix}$	12	-12	1	$\begin{bmatrix} 2 \end{bmatrix}$	[-8,1,2]	[0, 1, 2]	[2, 1, 2]	I_1^*,I_1,I_2	2:1
C1	0 1 0	-7	2	0	4	+4,4,1	0, 4, 1	2, 4, 1	III,I_4,I_1	2 :2
C2	0 1 0		-160	0	4	+ 8, 2, 2	0, 2, 2	4, 2, 2	I_1^*, I_2, I_2	2:1,3,4
C3	0 1 0		-9520	0	2	+ 10, 1, 1	0, 1, 1	2, 1, 1	III^*,I_1,I_1	2 :2
C4	0 1 0	8	-448	0	2	[-10, 1, 4]	[0, 1, 4]	$\begin{bmatrix} 2,1,4 \end{bmatrix}$	$ III^*,I_1,I_4 $	2 :2
D1	0 - 1 0	-39	108	0	4	+4,2,1	0, 2, 1	2, 2, 1	III,I_2,I_1	2 :2
D2	0 - 1 0		84	0	4	+ 8, 4, 2	0, 4, 2	2, 2, 2	I_1^*, I_4, I_2	2:1,3,4
D3	0 - 1 0		-1892	0	2	+ 10, 8, 1	0, 8, 1	2, 2, 1	III^*,I_8,I_1	2 :2
D4	$\begin{bmatrix} 0 & -1 & 0 \\ -1 & -1 & -1 \end{bmatrix}$	136	444	0	4	[-10, 2, 4]	[0, 2, 4]	[2, 2, 4]	$ $ III*, I_2 , I_4	2 :2
E1	0 - 1 0	-651	6228	0	2	+4,10,3	0, 10, 3	2, 2, 1	III,I_{10},I_3	2 :2
E2	$\begin{bmatrix} 0 & -1 & 0 \end{bmatrix}$	564	25668	0	2	-8, 5, 6	0, 5, 6	4,1,2	I_1^*, I_5, I_6	2 :1
F1	0 1 0	5	14	1	2	-4, 3, 2	0, 3, 2	2, 3, 2	III,I_3,I_2	2 :2
F2	0 1 0	-60	144	1	2	+ 8, 6, 1	0, 6, 1	4, 6, 1	I_1^*, I_6, I_1	2 :1
31 4	1		N =	31	4 = 2	2 · 157 (1 is	sogeny cla	ss)		314
A1	1 -1 0	13	-11	1	1	- 10,1	10,1	2,1	I_{10} , I_1	
315	5		N=3	15	$= 3^2$	$\cdot 5 \cdot 7$ (2 is	sogeny cla	sses)		315
A1	0 0 1	-12	-18	0	1	-6,1,1	0, 1, 1	1, 1, 1	I_0^*, I_1, I_1	3 :2
A2	0 0 1		45	0	3	$\begin{bmatrix} -6, 3, 3 \end{bmatrix}$	0, 3, 3	1, 3, 3	I_0^*, I_3, I_3	3:1,3
A3		-1182	16362	0	3	-6,9,1	0, 9, 1	1,9,1	I_0^*, I_9, I_1	3 :2
B1	1 -1 1	-23	-34	1	2	+7,1,1	1, 1, 1	$\begin{bmatrix} 2, 1, 1 \end{bmatrix}$	$ I_1^*, I_1, I_1 $	2:2
B2	1 - 1 1		182	1	4	+8,2,2	2, 2, 2	4, 2, 2	I_{2}^{*},I_{2},I_{2}	2:1,3,4
В3		-1013	12656	1	2	+7,4,1	1, 4, 1	4, 2, 1	_	2 :2
B4	1 - 1 1	157	992	1	2	-10, 1, 4	4, 1, 4	4, 1, 4	_	2 :2
316	3		N = 3	316	$= 2^{2}$	$2 \cdot 79$ (2 iso	ogeny clas	ses)		316
A1	0 -1 0	-180	-872	0	1	+ 8,1	0,1	1,1	IV^*,I_1	
B1	0 0 0	-7	-2	1	 1	+ 8,1	0,1	$\begin{bmatrix} -3, 1 \end{bmatrix}$	$ V^*,I_1 $	'
318	} }		N=3	18 :	$\equiv 2 \cdot$	$3 \cdot 53$ (5 is	sogeny cla	sses)	<u> </u>	318
A1	1 1 1	2	-7	0	1	` `	1,5,1	1, 1, 1	I_{1},I_{5},I_{1}	
B1	$\begin{bmatrix} 1 & 0 & 1 \\ 1 & 0 & 1 \end{bmatrix}$	-61	' 176	0	3		$\begin{bmatrix} -1 & -1 & -1 & -1 \\ 3, 3, 1 & 1 \end{bmatrix}$	$\begin{bmatrix} 1 & 1 & 2 & 2 & 2 & 2 & 2 & 2 & 2 & 2 &$	I_3, I_3, I_1	3 :2
B2	$\begin{bmatrix} 1 & 0 & 1 \\ 1 & 0 & 1 \end{bmatrix}$		722	0		, ,	9, 1, 3	1, 0, 1 1, 1, 1	I_9,I_1,I_3	3:1
C1	$\begin{bmatrix} 1 & 1 & 0 \\ 1 & 1 & 0 \end{bmatrix}$			- 1	1 1		$\begin{bmatrix} 1, 6, 1 \\ 1, 6, 1 \end{bmatrix}$	$\begin{bmatrix} 1, 2, 1 \\ 1, 2, 1 \end{bmatrix}$	$ I_1, I_6, I_1 $	
\circ 1	1 1 0	1	-9	Т	<u>T</u>	-1,0,1	1,0,1	1, 4, 1	11,16,11	

	a_1	a_2	a_3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
318	}				N	<i>T</i> =	318 =	= 2 ·	$3 \cdot 53$	(continued	d)		318
D1	1	1	1	-12	45	1	1	_	11, 2, 1	11, 2, 1	11, 2, 1	I_{11}, I_2, I_1	
E1	1	1	0	142	180	0	1	_	17, 3, 1	17, 3, 1	$\begin{bmatrix} 1, 1, 1 \end{bmatrix}$	I_{17}, I_{3}, I_{1}	:
319					N =	$= 3^{-}$	19 =	11 •	29 (1 i	sogeny cla	uss)		319
A1	0	0	1	-37		0	1		$\frac{1,2}{1,2}$	1,2	1,2	I_1,I_2	
320)				N =	= 32	20 = 2	$2^6 \cdot 5$	5 (6 iso	ogeny class	ses)		320
A1	0	0	0	-8		0	2	+	$\frac{10,1}{10}$	0,1	2,1	$\mathrm{I}_0^*,\!\mathrm{I}_1$	2 :2
A2	0	0	0	-28	48	0	4	+	14, 2	0, 2	4,2	I_4^*, I_2	2:1,3,4
A3	0	0	0	-428	3408	0	2	+	16, 1	0,1	2, 1	I_6^*, I_1	2 :2
A4	0	0	0	52	272	0	2	_	16, 4	0, 4	2, 2	I_6^*, I_4	2 :2
B1	0	0	0	-8	8	1	2	+	10,1	[0, 1]	[2,1]	I_0^*, I_1	2 :2
B2	0	0	0	-28	-48	1	4	+	14, 2	0, 2	4,2	I_4^*, I_2	2:1,3,4
В3	0	0	0	-428	-3408	1	2	+	16, 1	0, 1	2, 1	I_6^*, I_1	2 :2
B4	0	0	0	52	-272	1	2	_	16, 4	0, 4	4, 2	I_6^*, I_4	2 :2
C1	0	-1	0	-5	5	0	2	+	10,1	[0,1]	[-2, 1]	I_0^*, I_1	2 :2; 3 :3
C2		-1	0	15	17	0	$\overline{2}$	<u> </u>	14, 2	0, 2	2,2	I_4^*, I_2	2:1;3:4
С3	0	-1	0	-165	-763	0	2	+	10, 3	0, 3	2, 3	I_0^*, I_3	${f 2}:4;{f 3}:1$
C4	0	-1	0	-145	-975	0	2	_	14, 6	0, 6	2, 6	I_{4}^{*}, I_{6}	2:3;3:2
D1	0	 -1	0	0	2	0	2	i	-6, 2	0, 2	1, 2	II,I_2	2 :2
D_2		-1	0	-25	57	0	2	+	12, 1	$0, 2 \\ 0, 1$	2, 1	I_2^*,I_1	2:1
E1	0	 1	0	0	 -2	0	2	! -	6,2	$\begin{bmatrix} 0, 2 \end{bmatrix}$	$\begin{bmatrix} -1 & 1 & 1 & 2 & 1 & 1 & 1 & 1 & 1 & 1 & $	$ II,I_2 $	2 :2
E2	0	1	0	-25	-27 - 57	$0 \\ 0$	$\frac{2}{2}$	+	12, 1	$0, 2 \\ 0, 1$	2, 1	I_2^{*},I_1	2:2 $2:1$
F1	0	 1	0	-5	 -5	1	2	' +	10, 1	0, 1	[-2,1]	$\left egin{array}{c} oldsymbol{I}_0^*, oldsymbol{I}_1 \end{array} ight $	2:2;3:3
F2	_	1			-17	1	2	_	14, 2	0, 2	4, 2	I_4^*, I_2	2:1;3:4
F3	0	1		-165	763	1	2	+	10, 3	0, 3	2,3	I_0^*, I_3	${f 2}:4;{f 3}:1$
F4	0	1	0	-145	975	1	2	_	14, 6	0,6	4, 6	I_{4}^{*}, I_{6}	2:3;3:2
322					N =	322	t=2	. 7 .	23 (4 i	sogeny cla	usses)		322
A1	1	-1	0	-8	44	1	2	_	2, 3, 2	2, 3, 2	2, 3, 2	I_2,I_3,I_2	2 :2
A2	1	-1	0	-238	1470	1	2	+	1, 6, 1	1, 6, 1	1, 6, 1	I_1, I_6, I_1	2 :1
B1	1	1	0	35	381	0	2	_	14, 1, 2	14, 1, 2	[2, 1, 2]	$ I_{14},I_1,I_2 $	2 :2
B2	1	1	0	-605	5117	0	2	+	7, 2, 4	7, 2, 4	1, 2, 2	I_7,I_2,I_4	2 :1
$\overline{C1}$	1	 1	 1	-4	1	0	2	: +	2, 1, 1	2, 1, 1	$\begin{bmatrix} 2, 1, 1 \end{bmatrix}$	I_{2},I_{1},I_{1}	2 :2
C2	1	1	1	-14	-23	0	2	+	1, 2, 2	1, 2, 2	1, 2, 2	I_1, I_2, I_2	2:1
D1	<u> </u>			-14	4	1	2	_ · _ +	10, 1, 1	$\begin{bmatrix} 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 $	$\begin{bmatrix} 1 & 1 & 2 & 2 & 2 & 2 & 2 & 2 & 2 & 2 &$	$\left \begin{array}{cccccccccccccccccccccccccccccccccccc$	2 :2
D1	1	0		-174	868	1	$\frac{2}{2}$	+	5, 2, 2	5, 2, 2	5, 2, 2	I_{10},I_{1},I_{1} I_{5},I_{2},I_{2}	2:2 2:1
323)				N =	= 35	23 =	17 ·	19 (1 i	sogeny cla	uss)		323
A1	0	0	1	-46	277	0	1	_	5,1	5,1	1,1	I_5,I_1	
324					N =	= 32	4 = 2	$^{2} \cdot 3$	6^4 (4 is	ogeny clas	sses)		324
A1	0	0	0	-21	37	0	3	+	4,4	0,0	3,1	IV,II	3 :2
A1 A2	0	0	0	$-21 \\ -81$	-243	0	1	+	4, 12	$0,0 \\ 0,0$	1, 1	IV,II*	3:2 $3:1$
B1	0	0	0	9	-18	0	3	¦ -		!	<u> </u>	IV*,IV	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$
B1 B2	0	0			-18 -2538	0	3 1		8, 6 8, 10	$0,0 \\ 0,0$	3, 3 $1, 3$	$ IV^*, IV $ $ IV^*, IV^* $	3:2 3:1
104		U	U	991	2000	U	1		\circ , 10	0,0	1,0	· · · · · · ·	9.1

$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	325
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	325
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	325
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	325
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	325
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	325
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	
$oxed{B1 \mid 0-1 1 -3 3 \mid 1 \mid 1 \mid + 2,1 \mid 0,1 \mid 1,1 \mid II,I_1 \mid 3:2}$	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	
1	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	
326 $N = 326 = 2 \cdot 163$ (3 isogeny classes)	326
$egin{array}{ c c c c c c c c c c c c c c c c c c c$	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	
$egin{array}{ c c c c c c c c c c c c c c c c c c c$	3
$egin{array}{ c c c c c c c c c c c c c c c c c c c$	′
$oxed{C3} oxed{1} \ 0 \ 1 \ -300 \ 1970 \ 0 \ 3 \ + \ 3,1 \ 3,1 \ 1,1 \ I_3,I_1 \ 3:1$	
327 $N = 327 = 3 \cdot 109$ (1 isogeny class)	327
$egin{array}{ c c c c c c c c c c c c c c c c c c c$	
328 $N = 328 = 2^3 \cdot 41$ (2 isogeny classes)	328
$egin{array}{ c c c c c c c c c c c c c c c c c c c$	
$egin{array}{ c c c c c c c c c c c c c c c c c c c$	
$egin{array}{ c c c c c c c c c c c c c c c c c c c$	
B2 $0-1$ 0 <	
329 $N = 329 = 7 \cdot 47$ (1 isogeny class)	329
	923
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	
330 $N = 330 = 2 \cdot 3 \cdot 5 \cdot 11 (5 \text{ isogeny classes})$	330
A1 1 1 0 -1393 -20603 0 2 + 4,5,2,1 4,5,2,1 2,1,2,1 I_4,I_5,I_2,I_1 2 : 2	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	

	1					Imi	1	1(4)	1 (1)		77 1 .	
	a_1	$a_2 a_2$	l_3	a_4	$a_6 r$	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
33	0				N = 33	0 = 0	2 ·	$3 \cdot 5 \cdot 11$	(continue	ed)		330
B1	1	0		5	17 0		_	8, 2, 1, 1	8, 2, 1, 1	8, 2, 1, 1	I_8, I_2, I_1, I_1	2 :2
B2	1	0		-75	225 0		+	, , ,	4, 4, 2, 2	4, 4, 2, 2		2:1,3,4
B3	1	0		-255	-13230		+	, , ,	2, 2, 4, 4	[2, 2, 4, 2]		2:2,5,6
B4 B5	$\begin{vmatrix} 1 \\ 1 \end{vmatrix}$	$0 \\ 0$	0	$-1175 \\ -3885$	$ \begin{array}{r r} 15405 & 0 \\ -93525 & 0 \end{array} $		+++++++++++++++++++++++++++++++++++++++	2, 8, 1, 1 $1, 1, 8, 2$	2, 8, 1, 1 $1, 1, 8, 2$	$\begin{bmatrix} 2, 8, 1, 1 \\ 1, 1, 8, 2 \end{bmatrix}$	$egin{array}{c} { m I}_2, { m I}_8, { m I}_1, { m I}_1 \ { m I}_1, { m I}_1, { m I}_8, { m I}_2 \end{array}$	2:2 2:3
B6		0		-3605 495	-335250 -74730		_	1, 1, 0, 2 $1, 1, 2, 8$	1, 1, 0, 2 $1, 1, 2, 8$	1, 1, 0, 2 $1, 1, 2, 2$		2:3
C1	 1	1		255	$\frac{255 0}{25}$	<u>'</u>	<u> </u> - 					2 :2
C_2	1		1	-1025	$\frac{2550}{7670}$		+	16, 3, 1, 2 8, 6, 2, 4	$ \begin{array}{c} 16, 3, 1, 2 \\ 8, 6, 2, 4 \end{array} $	$\begin{bmatrix} 10, 1, 1, 2 \\ 8, 2, 2, 4 \end{bmatrix}$	10, 0, 1, 2	2 : 2 $ 2: 1, 3, 4 $
C3		1		-1025 -10705	-4290250			4, 12, 4, 2	4, 12, 4, 2	4, 2, 4, 2	I_{4},I_{12},I_{4},I_{2}	
C4		1		-11825	488927 0		+	4, 3, 1, 8	4, 3, 1, 8	4, 1, 1, 8		2:2
C5	1	1		-171085	-273087130			2, 6, 8, 1	2, 6, 8, 1	2, 2, 8, 1		2 :3
C6	1	1	1	-5205	-8624250	2	_	2, 24, 2, 1	2, 24, 2, 1	2, 2, 2, 1	I_2, I_{24}, I_2, I_1	2 :3
D1	1	1	 1	-40266	2921559 0	$\overline{4}$	Ī+	28, 5, 4, 1	28, 5, 4, 1	28, 1, 2, 1	I_{28}, I_5, I_4, I_1	2 :2
D2	1	1	1	-122186	-128726170	4					$I_{14}, I_{10}, I_{8}, I_{2}$	
D3	1	1	1 -	-1832906 -	-955821481 0	2		7, 5, 16, 1			I_7, I_5, I_{16}, I_1	
D4	1	1	1	277814	-791126170	2	-	7,20,4,4	7, 20, 4, 4	7, 2, 2, 2	I_7, I_{20}, I_4, I_4	2:2
E1	1	1	0	-22	-44 1	$\overline{2}$	+	8, 1, 2, 1	8, 1, 2, 1	[2, 1, 2, 1]	I_8,I_1,I_2,I_1	2 :2
E2	1	1	0	-102	324 1	4	+	4, 2, 4, 2	4, 2, 4, 2	2, 2, 4, 2	I_4, I_2, I_4, I_2	2:1,3,4
E3	1	1		-1602	24024 1		+	2, 1, 2, 4	2, 1, 2, 4	2, 1, 2, 4	I_2, I_1, I_2, I_4	2 :2
E4	1	1	0	118	1776 1	2	_	2, 4, 8, 1	2, 4, 8, 1	2, 2, 8, 1	I_2, I_4, I_8, I_1	2 :2
วา	1				3 7 0	0.4		.04 (4.1	,	`		991
$\frac{33}{41}$			0		N=3	1	= კ 		ogeny class		т	331
A1	1	0	U	-5	4 1	1		1	1	1	I_1	
33	3				N = 333	= :	3^2 .	37 (4 is	sogeny clas	ses)		333
A1	0	0	1	-30	-63 1	1	+	6, 1	0, 1	1, 1	I_0^*, I_1	3 :2
A2	0	0	1	-210	1134 1	3	+	6, 3	0,3	1, 3		3:1,3
A3	0	0	1	-16860	842625 1	3	+	6, 1	0, 1	1, 1	$\mathrm{I}_0^*,\!\mathrm{I}_1$	3 :2
B1	1	-1	0	12	35 1	2	Ī-	9,1	0, 1	2,1	$\mathrm{III}^*,\mathrm{I}_1$	2 :2
B2	1	-1	0	-123	494 1	2	+	9, 2	0, 2	2, 2	$\mathrm{III}^*,\!\mathrm{I}_2$	2 : 1
$\bar{\text{C1}}$	1	-1	 1	1	-2 1	2	Ī_	3,1	0,1	2,1	III,I_1	2 :2
				-14					0,2	2,2	/ 1	2 : 1
	· – –				-7 0	'			0, 1	1,1	$\mathrm{I}_0^*,\!\mathrm{I}_1$	<u> </u>
33	4				N=32	1 —	2.	167 (1	isogeny cla	ee)		334
		-1	1	-1				1,1	1,1	1,1	I_1,I_1	
				1	10			-, -		-, -	*1,*1	
33								`	sogeny clas			335
A1	0	0	1	-2	2 1	1	_	2,1	2,1	2,1	I_2,I_1	
33	6				N = 336	=2	4 .	$3 \cdot 7$ (6 i	sogeny cla	sses)		336
1.		-1	0	7	0 0	2	<u> </u>	4, 3, 2	0, 3, 2	1, 1, 2	II,I_3,I_2	2:2;3:3
								, ,	, ,			
A2	0	-1	0	-28	28 0	2	+	8, 6, 1	0, 6, 1	1, 2, 1		2:1;3:4
A2 A3	0		0	-28 -113 -1828	$\begin{array}{c} 28 \\ 516 \end{array} 0$	$\begin{vmatrix} 2\\2 \end{vmatrix}$	+	8, 6, 1 $4, 1, 6$	0, 6, 1 $0, 1, 6$ $0, 2, 3$	1, 2, 1		$egin{array}{c} {f 2}:1;{f 3}:4 \ {f 2}:4;{f 3}:1 \ {f 2}:3;{f 3}:2 \ \end{array}$

	a_1	<i>a.</i> (7.9	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
226		<i>a</i> ₂ c	<i>*</i> 3				' '	1		(6)	c_p	Hodaira	
336		1	0		N =	1				ontinued)	1 1 1	TT T T	336
B1	0 -		0	-7	10	0	2	+	4, 1, 1	0, 1, 1	1, 1, 1	II,I_1,I_1	2 :2
B2	0 -		0	-12	0 679	0	$\begin{array}{c c} 4 \\ 2 \end{array}$	+	8, 2, 2	0, 2, 2	2, 2, 2	I_0^*, I_2, I_2	2:1,3,4
B3 B4	0 -		0	$-152 \\ 48$	$-672 \\ -48$	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$\frac{2}{4}$	+	10, 4, 1 $10, 1, 4$	$0, 4, 1 \\ 0, 1, 4$	$\begin{bmatrix} 2, 2, 1 \\ 4, 1, 4 \end{bmatrix}$	$I_2^*, I_4, I_1 I_2^*, I_1, I_4$	2:2 2:2
						!	!	¦		'	'	:	<u> </u>
C1	0	1	0	-7	-52	0	2	_	4, 3, 4	0, 3, 4	1, 3, 2	II,I_3,I_4	2 :2
C2 C3	$\begin{array}{c} 0 \\ 0 \end{array}$	1 1	0	$-252 \\ -4032$	-1620	0	$\begin{array}{ c c }\hline 4 \\ 2 \end{array}$	+	8, 6, 2	0, 6, 2	2, 6, 2	I_0^*, I_6, I_2	$egin{array}{c} {f 2}:1,3,4 \ {f 2}:2 \end{array}$
C3	0	1	0	-4032 -392	-99900 228	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$\frac{2}{4}$	+ +	10, 3, 1 $10, 12, 1$	$0, 3, 1 \\ 0, 12, 1$	$\begin{bmatrix} 4, 3, 1 \\ 2, 12, 1 \end{bmatrix}$	$I_2^*, I_3, I_1 $ I_2^*, I_{12}, I_1	2:2 2:2
						!	!	. – –		<u>'</u>	'		<u>-</u>
D1	0		0	-64	-460	0	2		20, 2, 1	8, 2, 1	4, 2, 1	I_{12}^*, I_2, I_1	2 :2
D2 D3	0	1 1	0	-1344	-19404 -1220940	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$\frac{4}{2}$	+	16, 4, 2	4, 4, 2	4, 4, 2	I_{8}^{*},I_{4},I_{2} I_{8}^{*}	$egin{array}{c} {f 2}:1,3,4 \ {f 2}:2 \end{array}$
D3 D4	$\begin{array}{c} 0 \\ 0 \end{array}$	1	0	-21504 -1664	-1220940 -9804	$0 \\ 0$	8	+ +	14, 2, 1 $14, 8, 4$	2, 2, 1 $2, 8, 4$	$\begin{bmatrix} 2, 2, 1 \\ 4, 8, 4 \end{bmatrix}$	$I_6^*, I_2, I_1 I_6^*, I_8, I_4$	$\begin{bmatrix} 2 : 2 \\ 2 : 2, 5, 6 \end{bmatrix}$
D5	0	1		-1604 -14624	-9804 669300	$0 \\ 0$	8	+	14, 6, 4 $13, 4, 8$	1, 4, 8	4, 6, 4 $4, 4, 8$	I_{5}^{*},I_{4},I_{8}	2:2,5,6
D6	0	1	0	6176	-69388	0	4		13, 4, 6 $13, 16, 2$	1, 1, 1, 0 $1, 16, 2$	2, 16, 2	I_5^{*}, I_{16}, I_2	2:4 2:4
E1	l		- 0	16	0	 1	$\begin{vmatrix} 1 & 1 \\ 2 & 2 \end{vmatrix}$	' -	12, 2, 1	$\begin{bmatrix} 1, 10, 2 \\ 0, 2, 1 \end{bmatrix}$	<u>'</u>		$\begin{bmatrix} 2 : 2 \end{bmatrix}$
E1 E2	0 -		0	-64	64	1	$\frac{2}{4}$		12, 2, 1 $12, 4, 2$	$0, 2, 1 \\ 0, 4, 2$	4, 2, 1 $4, 2, 2$	I_4^*, I_2, I_1 I_4^*, I_2, I_3	$\begin{bmatrix} 2 : 2 \\ 2 : 1, 3, 4 \end{bmatrix}$
E3	0 -		0	-624	-5760	1	$\frac{4}{2}$	+ +	12, 4, 2 $12, 8, 1$	$0, 4, 2 \\ 0, 8, 1$	2, 2, 1	$I_4^*, I_4, I_2 I_4^*, I_8, I_1$	2:1,3,4 2:2
E4	0 -		0	-784	8704	1	8	+	12, 0, 1 $12, 2, 4$	$0, 0, 1 \ 0, 2, 4$	4, 2, 4	$I_4^{*}, I_8, I_1 \\ I_4^{*}, I_2, I_4$	2:2,5,6
E5	0 -			-12544	544960	1	$\frac{3}{4}$	+	12, 1, 1 $12, 1, 2$	$0, 2, 1 \\ 0, 1, 2$	2, 1, 2	I_4^*, I_2, I_4 I_4^*, I_1, I_2	2:4
E6	0 -		0	-544	13888	1	$\overline{4}$	_	12, 1, 8	0, 1, 8	4, 1, 8	I_4^*, I_1, I_8	2:4
F1	0		0	-1	2	0	$\frac{1}{2}$	' - - _	-4, 1, 2	$\begin{bmatrix} 0, 1, 2 \end{bmatrix}$	$\begin{bmatrix} 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 $	$ II,I_1,I_2 $	2 :2
F2	0		0	-36	72	0	$\frac{2}{2}$	+	8, 2, 1	$0, 1, 2 \\ 0, 2, 1$	$1, 1, 2 \\ 1, 2, 1$	I_0^{*}, I_2, I_1	2 : 2 2 : 1
338	2						0 1		<u> </u>			0 / 2 / 1	338
		1	0	-1	N = 33		ı	.o-	, ,	eny classe		T TT	
A1	1 -		0	1	1	1	1	_	2,2	$\frac{2}{14}$, 0	2, 1	$_{\mathrm{I}_{2},\mathrm{II}}$	7 :2
A2	1 - 1 -	-1 	. <u>.</u> .	-389	-2859	<u>'</u>	1	— 	14,2	14,0	$\begin{bmatrix} 2, 1 \\ \end{bmatrix}$	I_{14} , II	7 :1
B1	1 -	-1	1	137	2643		1	-	2,8	2,0	2, 1	I_2,IV^*	7 :2
B2	1 -	-1	1 -	-65773 	-6478507	0	1		14,8	14,0	14,1	I_{14} , IV^*	7:1
C1	1	0	0	81	467	0	1	—	1,7	1,1	1, 2	$\mathrm{I}_1,\!\mathrm{I}_1^*$	3 :2
C2	1	0	0	-764	-16264	0	1	_	3, 9	9 9	9.9	т т*	3:1,3
C3	1	0	Ω						*	3, 3	3, 2	$\mathrm{I}_3,\!\mathrm{I}_3^*$	
_			· -	-77659	-8336303		1	_	9,7	$\begin{bmatrix} 3, 3 \\ 9, 1 \end{bmatrix}$	$\begin{bmatrix} 3,2\\9,2 \end{bmatrix}$	I_{3},I_{3} I_{9},I_{1}^{*}	3:2
D1	1	- - - 1	0	-77659 -504				 - -	*		,		
D1 D2	1 1		0		-8336303	0	1	 - - -	9,7	9,1	9,2	I_9,I_1^*	3 :2
D2	_	1 1 1	0	504 -54421	-8336303 -13112	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	1 1 1 1	_ _ _ _ _	9,7 3,9 15,9	$\begin{vmatrix} 9,1\\ 3,0\\ 15,0 \end{vmatrix}$	$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	I_{9},I_{1}^{*} I_{3},III^{*} I_{15},III^{*}	$egin{array}{ c c c c c c c c c c c c c c c c c c c$
	1	1 1 	0	504	-8336303 -13112 4945517	$\begin{bmatrix} 0 \\ 0 \\ 0 \end{bmatrix}$	1 1	 - - - -	$ \begin{array}{r} 9,7 \\ \hline 3,9 \\ 15,9 \\ \hline 3,3 \end{array} $	$ \begin{array}{c c} 9,1\\ 3,0\\ 15,0\\ \hline 3,0 \end{array} $	$ \begin{array}{ c c c } \hline 9,2\\ \hline 1,2\\ 1,2\\ \hline 3,2\\ \hline \end{array} $	I_{9},I_{1}^{*} I_{3},III^{*} I_{15},III^{*} I_{3},III	$egin{array}{ c c c c c c c c c c c c c c c c c c c$
D2 E1 E2	1 1 1 1	1 1 	0 0 - 1 1 1	504 -54421 3 -322	-8336303 -13112 4945517 -5 2127	$ \begin{vmatrix} 0 \\ 0 \\ 0 \end{vmatrix} $			9,7 3,9 15,9 3,3 15,3	$ \begin{array}{ c c c } \hline 9,1\\ \hline 3,0\\ 15,0\\ \hline 3,0\\ 15,0\\ \hline \end{array} $	$ \begin{array}{ c c c } \hline 9,2\\ \hline 1,2\\ 1,2\\ \hline 3,2\\ 15,2\\ \hline \end{array} $	I_{9},I_{1}^{*} I_{3},III^{*} I_{15},III^{*} I_{3},III I_{15},III	$egin{array}{ c c c c c c c c c c c c c c c c c c c$
D2 E1 E2 F1	1 1 1 1 1 -	1 1 1 1 	0 0 1 1 1 0	504 -54421 3 -322 -454	$ \begin{array}{r} -8336303 \\ -13112 \\ 4945517 \\ -5 \\ 2127 \\ 5812 \end{array} $	$\begin{bmatrix} 0 \\ 0 \\ 0 \\ 1 \\ 1 \end{bmatrix}$		 	$ \begin{array}{r} 9,7 \\ -3,9 \\ 15,9 \\ -3,3 \\ 15,3 \\ -7,7 \end{array} $	$ \begin{array}{ c c c } \hline 9,1\\ \hline 3,0\\ 15,0\\ \hline 3,0\\ 15,0\\ \hline 7,1\\ \hline \end{array} $	$ \begin{array}{c c} 9,2\\ 1,2\\ 1,2\\ 3,2\\ 15,2\\ 1,4 \end{array} $	I_{9},I_{1}^{*} I_{3},III^{*} I_{15},III^{*} I_{3},III I_{15},III I_{7},I_{1}^{*}	$egin{array}{c ccccccccccccccccccccccccccccccccccc$
D2 E1 E2 F1 F2	1 1 1 1 1 -	1 1 1 1 	0 0 1 1 1 0	504 -54421 3 -322 -454	-8336303 -13112 4945517 -5 2127 5812 -2868878	$egin{array}{ c c c c c c c c c c c c c c c c c c c$			9,7 3,9 15,9 3,3 15,3 7,7 1,13	$ \begin{array}{ c c c } \hline 9,1\\ \hline 3,0\\ 15,0\\ \hline 3,0\\ 15,0\\ \hline 7,1\\ 1,7\\ \hline \end{array} $	$ \begin{array}{c c} 9,2\\ \hline 1,2\\ 1,2\\ \hline 3,2\\ 15,2\\ \hline 1,4\\ 1,4 \end{array} $	I_{9},I_{1}^{*} I_{3},III^{*} I_{15},III^{*} I_{3},III I_{15},III	3:2 5:2 5:1 5:2 5:1 7:2 7:1
D2 E1 E2 F1 F2	1 1 1 1 -	1 1 1 1 1 	0 0 1 1 1 0 0 0	504 -54421 3 -322 -454 -35944	-8336303 $ -13112 $ $ 4945517 $ $ -5 $ $ 2127 $ $ 5812 $ $ -2868878 $ $ N = 336$	$\begin{vmatrix} 0 \\ 0 \\ 0 \end{vmatrix}$ $\begin{vmatrix} 1 \\ 1 \\ 1 \end{vmatrix}$ $9 = \begin{vmatrix} 0 \\ 0 \\ 0 \end{vmatrix}$		- - - - - -	9,7 3,9 15,9 3,3 15,3 7,7 1,13 (3 isog	$ \begin{array}{ c c c } & 9, 1 \\ \hline & 3, 0 \\ & 15, 0 \\ \hline & 3, 0 \\ & 15, 0 \\ \hline & 7, 1 \\ & 1, 7 \\ \hline & eny classe $	$ \begin{array}{ c c } & 9, 2 \\ \hline & 1, 2 \\ \hline & 1, 2 \\ \hline & 3, 2 \\ \hline & 15, 2 \\ \hline & 1, 4 \\ \hline & 1, 4 \end{array} $	I_{9},I_{1}^{*} I_{3},III^{*} I_{15},III^{*} I_{3},III I_{15},III I_{15},III I_{15},III	$egin{array}{c ccccccccccccccccccccccccccccccccccc$
D2 E1 E2 F1 F2 339	1 1 1 1 - 1 - 1 - 0	1 1 1 1 1 		504 -54421 3 -322 -454 -35944	-8336303 $ -13112 $ $ 4945517 $ $ -5 $ $ 2127 $ $ 5812 $ $ -2868878 $ $ N = 339 $ $ 3422$	$ \begin{vmatrix} 0 \\ 0 \\ 0 \end{vmatrix} $ $ \begin{vmatrix} 1 \\ 1 \\ 1 \end{vmatrix} $ $ \begin{vmatrix} 1 \\ 1 \end{vmatrix} $		-	9,7 3,9 15,9 3,3 15,3 7,7 1,13 (3 isog	$\begin{array}{ c c c }\hline 9,1\\\hline 3,0\\\hline 15,0\\\hline 15,0\\\hline 7,1\\\hline 1,7\\\hline \text{eny classe}\\\hline 9,1\\\hline \end{array}$	$ \begin{array}{ c c c } \hline 9,2\\ \hline 1,2\\ 1,2\\ \hline 1,2\\ \hline 1,4\\ 1,4\\ \hline 1,4\\ \hline\\\\\\\\\\\\\\ $	I_{9},I_{1}^{*} I_{3},III^{*} $I_{15},IIII^{*}$ I_{3},III I_{15},III I_{7},I_{1}^{*} I_{1},I_{7}^{*}	3:2 5:2 5:1 5:2 5:1 7:2 7:1
D2 E1 E2 F1 F2 339 A1 B1	1 1 1 1 - 1 - 1 - 0 0 - 0 - 0 - 0	1 1 1 1 1 -1 -1		504 -54421 3 -322 -454 -35944 -441 -112	-8336303 -13112 4945517 -5 2127 5812 -2868878 $ N = 33 3422 501 $	$\begin{vmatrix} 0 \\ 0 \\ 0 \end{vmatrix}$ $\begin{vmatrix} 1 \\ 1 \\ 1 \end{vmatrix}$ $\begin{vmatrix} 1 \\ 0 \\ 0 \end{vmatrix}$	$ \begin{array}{c cccc} & 1 & & \\ & 1 & & $	-	9,7 3,9 15,9 -3,3 15,3 -7,7 1,13 (3 isoge 9,1 -9,1	$\begin{array}{ c c c }\hline 9,1\\\hline 3,0\\\hline 15,0\\\hline -3,0\\\hline 15,0\\\hline -7,1\\\hline 1,7\\\hline \text{eny classe}\\\hline 9,1\\\hline -9,1\\\hline \end{array}$	$ \begin{array}{ c c } \hline 9,2\\ \hline 1,2\\ 1,2\\ \hline 3,2\\ 15,2\\ \hline 1,4\\ 1,4\\ \hline 9,1\\ \hline 1,1 \end{array} $	I_{9},I_{1}^{*} I_{3},III^{*} I_{15},III^{*} I_{3},III I_{15},III I_{15},III I_{7},I_{1}^{*} I_{1},I_{7}^{*} I_{9},I_{1} I_{9},I_{1}	3:2 5:2 5:1 5:2 5:1 7:2 7:1
D2 E1 E2 F1 F2 A1 B1 C1	1 1 1 1 - 1 -	1 1 1 1 1 -1 -1		504 -54421 3 -322 -454 -35944	-8336303 $ -13112 $ $ 4945517 $ $ -5 $ $ 2127 $ $ 5812 $ $ -2868878 $ $ N = 339 $ $ 3422$	$\begin{vmatrix} 0 \\ 0 \\ 0 \end{vmatrix}$ $\begin{vmatrix} 1 \\ 1 \\ 1 \end{vmatrix}$ $\begin{vmatrix} 1 \\ 0 \\ 0 \end{vmatrix}$		- - - - - - -	9,7 3,9 15,9 3,3 15,3 7,7 1,13 (3 isog	$\begin{array}{ c c c }\hline 9,1\\\hline 3,0\\\hline 15,0\\\hline 15,0\\\hline 7,1\\\hline 1,7\\\hline \text{eny classe}\\\hline 9,1\\\hline \end{array}$	$ \begin{array}{ c c c } \hline 9,2\\ \hline 1,2\\ 1,2\\ \hline 1,2\\ \hline 1,4\\ 1,4\\ \hline 1,4\\ \hline\\\\\\\\\\\\\\ $	I_{9},I_{1}^{*} I_{3},III^{*} $I_{15},IIII^{*}$ I_{3},III I_{15},III I_{7},I_{1}^{*} I_{1},I_{7}^{*}	3:2 5:2 5:1 5:2 5:1 7:2 7:1
D2 E1 E2 F1 F2 339 A1 B1 C1 340	1 1 1 1 - 1 -	1 1 1 1 -1 -1 -1 1 1 1 1 1 1 1 1 1 1 1		504 -54421 3 -322 -454 -35944 -441 -112 -2	-8336303 -13112 4945517 -5 2127 5812 -2868878 $ N = 33 3422 501 $	$ \begin{vmatrix} 0 & \\ 0 & \\ 0 & \\ 1 & \\ 1 & \\ 1 & \\ 0 & \\ 1$	$ \begin{array}{c c} 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 2^2 \\ 1 \end{array} $	- - -	$ \begin{array}{r} 9,7\\ \hline 3,9\\ 15,9\\ \hline 3,3\\ 15,3\\ \hline 7,7\\ 1,13\\ \hline (3 isogenical section of the content of th$	$\begin{array}{ c c c }\hline 9,1\\\hline 3,0\\\hline 15,0\\\hline -3,0\\\hline 15,0\\\hline -7,1\\\hline 1,7\\\hline \text{eny classe}\\\hline 9,1\\\hline -9,1\\\hline \end{array}$	$ \begin{array}{ c c c } \hline 9,2\\ \hline 1,2\\ \hline 1,2\\ \hline 3,2\\ \hline 15,2\\ \hline 1,4\\ 1,4\\ \hline 1,1\\ \hline 3,1\\ \hline ss) \end{array} $	I_{9},I_{1}^{*} I_{3},III^{*} I_{15},III^{*} I_{3},III I_{15},III I_{15},III I_{7},I_{1}^{*} I_{1},I_{7}^{*} I_{9},I_{1} I_{9},I_{1}	3:2 5:2 5:1 5:2 5:1 7:2 7:1
D2 E1 E2 F1 F2 A1 B1 C1	1 1 1 1 - 1 -	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		504 -54421 3 -322 -454 -35944 -441 -112	-8336303 -13112 4945517 -5 2127 -5812 -2868878 $ N = 33 3422 -501 -2 $	$ \begin{vmatrix} 0 & \\ 0 & \\ 0 & \\ 1 & \\ 1 & \\ 1 & \\ 0 & \\ 1$	$ \begin{array}{c c} 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\$	- - -	$ \begin{array}{r} 9,7\\ \hline 3,9\\ 15,9\\ \hline 3,3\\ 15,3\\ \hline 7,7\\ 1,13\\ \hline (3 isogenical section of the content of th$	$\begin{array}{ c c c }\hline 9,1\\\hline 3,0\\\hline 15,0\\\hline 3,0\\\hline 15,0\\\hline 7,1\\\hline 1,7\\\hline \text{eny classe}\\\hline 9,1\\\hline -3,1\\\hline \end{array}$	$ \begin{array}{ c c c } \hline 9,2\\ \hline 1,2\\ \hline 1,2\\ \hline 3,2\\ \hline 15,2\\ \hline 1,4\\ \hline 1,4\\ \hline 1,4\\ \hline -3,1\\ \hline \end{array} $	I_{9},I_{1}^{*} I_{3},III^{*} I_{15},III^{*} I_{3},III I_{15},III I_{15},III I_{7},I_{1}^{*} I_{1},I_{7}^{*} I_{9},I_{1} I_{9},I_{1}	3:2 5:2 5:1 5:2 5:1 7:2 7:1

					Imi	1/4)	1 (1)	1	T7 1 1	
	a_1 a_2 a_3	a_4	a_6	r	T	$s \operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
342	2		N = 342 =	= 2	$2 \cdot 3^2$	· 19 (7 iso	ogeny clas	ses)		342
A1	1 - 1 1	-140	-601	0		-3,6,1	3, 0, 1	3, 1, 1	I_3,I_0^*,I_1	3 :2
A2	1 - 1 1	85	-2437	0	3	- 9,6,3	9,0,3	9, 1, 3	I_9,I_0^*,I_3	3 :1,3
A3	1 -1 1	-770	66305	0	3	-27, 6, 1	27, 0, 1	27, 1, 1	I_{27},I_0^*,I_1	3:2
B1	1 - 1 1	-860	9915	0		+ 2, 11, 1	2, 5, 1	2, 2, 1	I_2,I_5^*,I_1	2 :2
B2	1 -1 1	-770	12003	0	2	-1,16,2	1, 10, 2	[1, 4, 2]	I_1,I_{10}^*,I_2	2 : 1
C1	1 - 1 0	-72	0	1	2	+6,9,1	6, 3, 1	2, 4, 1	I_6, I_3^*, I_1	2:2;3:3
C2	1 - 1 0	288	-216	1	2	-3, 12, 2	3, 6, 2	1, 4, 2	I_3,I_6^*,I_2	2:1;3:4
C3 C4	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$-3852 \\ -3762$	92988 97470	1 1	6	+ 2,7,3	$\begin{bmatrix} 2, 1, 3 \\ 1, 2, 6 \end{bmatrix}$	$\begin{bmatrix} 2, 4, 3 \\ 1, 4, 6 \end{bmatrix}$	I_2,I_1^*,I_3	$egin{array}{ c c c c c c c c c c c c c c c c c c c$
	<u> </u>			<u> </u>	<u>'</u>	-1,8,6	$\frac{1}{1}, \frac{1}{2}, \frac{6}{6}$	$\begin{bmatrix} 1, 4, 6 \\ \\ 2 & 1 \end{bmatrix}$	I_1,I_2^*,I_6	<u> </u>
D1 D2	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	$-29 \\ -299$	$\begin{array}{c} 1 \\ 2053 \end{array}$	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$\begin{array}{ c c }\hline 2\\ 2 \end{array}$	+ 2, 9, 1	$\begin{bmatrix} 2, 0, 1 \\ 1, 0, 2 \end{bmatrix}$	$\begin{bmatrix} 2, 2, 1 \\ 1, 2, 2 \end{bmatrix}$	$ \begin{vmatrix} I_2, III^*, I_1 \\ I_1, III^*, I_2 \end{vmatrix} $	$egin{array}{c} {f 2}:2 \ {f 2}:1 \end{array}$
				<u> </u>	<u>'</u>	+1,9,2	$\begin{bmatrix} 1, 0, 2 \\ -2, -1 \end{bmatrix}$	$\begin{bmatrix} 1, 2, 2 \\ -2, 2 \end{bmatrix}$		<u> </u>
E1 E2	$\begin{bmatrix} 1 & -1 & 0 \\ 1 & -1 & 0 \end{bmatrix}$	$-3 \\ -33$	$ \begin{array}{c} 1 \\ -65 \end{array} $	1 1	$\begin{array}{ c c }\hline 2\\ 2\\ \end{array}$	$\begin{vmatrix} + & 2, 3, 1 \\ + & 1, 3, 2 \end{vmatrix}$	$\begin{bmatrix} 2, 0, 1 \\ 1, 0, 2 \end{bmatrix}$	$\begin{bmatrix} 2, 2, 1 \\ 1, 2, 2 \end{bmatrix}$	$\begin{array}{c c} I_2, III, I_1 \\ I_1, III, I_2 \end{array}$	$egin{array}{c} {f 2}:2 \ {f 2}:1 \end{array}$
				<u>-</u> -	<u>'</u>	<u> </u>	-!	$\begin{bmatrix} 1, 2, 2 \\ -2, 2 \end{bmatrix}$		<u> </u>
F1 F2	$\begin{bmatrix} 1 & -1 & 0 \\ 1 & -1 & 0 \end{bmatrix}$	-3168 -49248	$62464 \\ 4218880$		$\begin{vmatrix} 2 \\ 4 \end{vmatrix}$	$\begin{vmatrix} + & 20, 9, 1 \\ + & 10, 12, 2 \end{vmatrix}$	$\begin{bmatrix} 20, 3, 1 \\ 10, 6, 2 \end{bmatrix}$	$\begin{bmatrix} 2, 2, 1 \\ 2, 4, 2 \end{bmatrix}$	I_{20},I_3^*,I_1	$egin{array}{ c c c c c c c c c c c c c c c c c c c$
F3			269419360	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	2	$\begin{bmatrix} + & 10, 12, 2 \\ + & 5, 9, 1 \end{bmatrix}$	$\begin{bmatrix} 10, 0, 2 \\ 5, 3, 1 \end{bmatrix}$	$\begin{bmatrix} 2, 4, 2 \\ 1, 4, 1 \end{bmatrix}$	$ \begin{vmatrix} I_{10}, I_6^*, I_2 \\ I_5, I_3^*, I_1 \end{vmatrix} $	2:1,3,4 2:2
F4	1 - 1 0	-47808	4476064		_	$\begin{bmatrix} -5, 0, 1 \\ -5, 18, 4 \end{bmatrix}$	5, 12, 4	1, 4, 2	I_5, I_{12}^*, I_4	2:2
G1	1 - 1 0	0	-32	<u>-</u> -	' 1	$\begin{bmatrix} -5, 6, 1 \end{bmatrix}$	$\begin{bmatrix} -1 & -1 & -1 & -1 \\ 5, 0, 1 \end{bmatrix}$	1,1,1	I_5, I_0^*, I_1	$ {f 5}:2$
G2	1 - 1 0	-630	6898	$\begin{vmatrix} 0 \\ 0 \end{vmatrix}$	1	$\begin{bmatrix} -1, 6, 5 \end{bmatrix}$	1, 0, 5	1, 1, 1	I_1, I_0^*, I_5	5 :1
									-7 07 0	
34	4		N = 34	4 =	$= 2^3$	· 43 (1 iso	geny class	s)	T	344
A1	0 0 0	4	4	1	1	-8,1	0.1	2, 1	T* T	
	II.				_	0,1	0,1	2, 1	I_1^*, I_1	
34	5			<u> </u>		,	1	·	11,11	345
			N = 345	= :	3 · 5 ·	· 23 (6 iso	geny class	ses)		345
A1	0 -1 1	-731 	N = 345 -7369	= 0	3 · 5 ·	23 (6 iso	geny class $2, 5, 1$	ses)	I_{2},I_{5},I_{1}	345
A1 B1	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	-731 -1	N = 345 -7369 1	= 3 0 1	3 · 5 · 1 	$\begin{array}{c cccc} 23 & (6 \text{ iso} \\ \hline - & 2, 5, 1 \\ \hline - & 2, 1, 1 \end{array}$	geny class $2,5,1$ $2,1,1$	ses) 2,1,1 2,1,1	I_2,I_5,I_1 I_2,I_1,I_1	
A1 B1 C1	$\begin{array}{ c c c c c c } \hline 0 & -1 & 1 \\ \hline 0 & 1 & 1 \\ \hline 1 & 0 & 1 \\ \hline \end{array}$	-731 	N = 345 -7369 1 -2401	= 3 0 1 0	$ \begin{array}{c c} 3 \cdot 5 \cdot \\ \hline 1 \\ \hline 1 \\ \hline 2 \end{array} $	23 (6 iso $-2,5,1$ $-2,1,1$ $-5,3,4$	geny class $2, 5, 1$ $2, 1, 1$ $5, 3, 4$	ses) 2, 1, 1 2, 1, 1 5, 1, 2	$\begin{array}{c c} I_2,I_5,I_1 \\ \hline I_2,I_1,I_1 \\ \hline I_5,I_3,I_4 \end{array}$	 2 : 2
A1 B1	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	-731 -1	N = 345 -7369 1	= 3 0 1 0 0	$ \begin{array}{c c} 3 \cdot 5 \cdot \\ \hline 1 \\ 1 \\ \hline 2 \\ 4 \end{array} $	$\begin{array}{c cccc} 23 & (6 \text{ iso} \\ \hline - & 2, 5, 1 \\ \hline - & 2, 1, 1 \end{array}$	geny class $2,5,1$ $2,1,1$	ses) 2,1,1 2,1,1	$\begin{array}{c c} I_2,I_5,I_1 \\ \hline I_2,I_1,I_1 \\ \hline I_5,I_3,I_4 \\ I_{10},I_6,I_2 \end{array}$	
A1 B1 C1 C2	$\begin{array}{ c c c c c c }\hline 0 & -1 & 1 \\\hline 0 & 1 & 1 \\\hline 1 & 0 & 1 \\\hline 1 & 0 & 1 \\\hline \end{array}$	-731 -1 456 -2189	N = 345 -7369 1 2401 20387	= 3 0 1 0 0 0	$ \begin{array}{c c} 3 \cdot 5 \cdot \\ \hline 1 \\ \hline -1 \\ \hline 2 \\ 4 \\ 2 \end{array} $	$\begin{array}{c cccc} 23 & (6 \text{ iso} \\ - & 2, 5, 1 \\ \hline - & 2, 1, 1 \\ - & 5, 3, 4 \\ + & 10, 6, 2 \end{array}$	geny class $2, 5, 1$ $2, 1, 1$ $5, 3, 4$ $10, 6, 2$	ses) 2,1,1 2,1,1 5,1,2 10,2,2	$\begin{array}{c c} I_2,I_5,I_1 \\ \hline I_2,I_1,I_1 \\ \hline I_5,I_3,I_4 \end{array}$	2:2 2:1,3,4
A1 B1 C1 C2 C3	$\begin{array}{ c c c c c c }\hline 0 & -1 & 1 \\\hline 0 & 1 & 1 \\\hline 1 & 0 & 1 \\\hline 1 & 0 & 1 \\\hline 1 & 0 & 1 \\\hline \end{array}$	-731 -1 456 -2189 -16564		= 3 0 1 0 0 0 0	$ \begin{array}{c c} 3 \cdot 5 \cdot \\ \hline 1 \\ \hline -1 \\ \hline 2 \\ 4 \\ 2 \end{array} $	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	geny class 2, 5, 1 2, 1, 1 5, 3, 4 10, 6, 2 20, 3, 1 5, 12, 1	ses) $ \begin{array}{c c} 2, 1, 1 \\ \hline 2, 1, 1 \\ \hline 5, 1, 2 \\ 10, 2, 2 \\ 20, 1, 1 \end{array} $	$\begin{array}{c c} I_2,I_5,I_1\\ \hline I_2,I_1,I_1\\ \hline I_5,I_3,I_4\\ I_{10},I_6,I_2\\ I_{20},I_3,I_1\\ I_5,I_{12},I_1\\ \end{array}$	2:2 2:1,3,4 2:2
A1 B1 C1 C2 C3 C4	$\begin{array}{ c c c c c }\hline 0 & -1 & 1 \\\hline 0 & 1 & 1 \\\hline 1 & 0 & 1 \\\hline \end{array}$	$ \begin{array}{r} -731 \\ -1 \\ \hline 456 \\ -2189 \\ -16564 \\ -30134 \end{array} $	N = 345 -7369 1 2401 20387 -807613 2010071	$= \begin{cases} 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \end{cases}$	$ \begin{array}{ c c c c } \hline 3 \cdot 5 \cdot \\ \hline 1 \\ \hline 2 \\ 4 \\ 2 \\ \hline 2 \end{array} $	$ \begin{array}{c cccc} 23 & (6 \text{ iso} \\ - & 2, 5, 1 \\ \hline - & 2, 1, 1 \\ - & 5, 3, 4 \\ + & 10, 6, 2 \\ + & 20, 3, 1 \\ + & 5, 12, 1 \end{array} $	geny class $ \begin{array}{c c} 2,5,1\\ 2,1,1\\ 5,3,4\\ 10,6,2\\ 20,3,1\\ 5,12,1\\ 4,2,1 \end{array} $	ses) $ \begin{array}{c c} (2,1,1) \\ (2,1,1) \\ (3,1,2) \\ (10,2,2) \\ (20,1,1) \\ (5,2,1) \end{array} $	$\begin{array}{c c} I_2,I_5,I_1\\\hline I_2,I_1,I_1\\\hline I_5,I_3,I_4\\I_{10},I_6,I_2\\I_{20},I_3,I_1\\ \end{array}$	2:2 2:1,3,4 2:2 2:2
A1 B1 C1 C2 C3 C4 D1 D2 D3	$\begin{array}{ c c c c c } \hline 0 & -1 & 1 \\ \hline 0 & 1 & 1 \\ \hline 1 & 0 & 1 \\ 1 & 0 & 1 \\ 1 & 0 & 1 \\ \hline 1 & 0 & 0 \\ 1 & 0 & 0 \\ \hline 1 & 0 & 0 \\ \hline \end{array}$	$ \begin{array}{r} -731 \\ -1 \\ \hline -1 \\ \hline -2189 \\ -16564 \\ -30134 \\ \hline -36 \\ -411 \\ \end{array} $	N = 345 -7369 -1 2401 20387 -807613 2010071 -9 -3234		$ \begin{vmatrix} 3 \cdot 5 \cdot 6 \\ 1 & 1 \\ -1 & 2 \\ 4 & 2 \\ 2 & 4 \\ 4 & 4 \\ 2 \end{vmatrix} $	$\begin{array}{c cccc} 23 & (6 \text{ iso} \\ \hline -2,5,1 \\ \hline -2,1,1 \\ \hline -5,3,4 \\ +10,6,2 \\ +20,3,1 \\ +5,12,1 \\ \hline -4,2,1 \\ +2,4,2 \\ +1,2,4 \end{array}$	geny class $ \begin{array}{c c} 2, 5, 1 \\ 2, 1, 1 \end{array} $ $ \begin{array}{c c} 5, 3, 4 \\ 10, 6, 2 \\ 20, 3, 1 \\ 5, 12, 1 \end{array} $ $ \begin{array}{c c} 4, 2, 1 \\ 2, 4, 2 \\ 1, 2, 4 \end{array} $	ses) $ \begin{array}{c c} (2,1,1) \\ (2,1,1) \\ (3,1,2) \\ (10,2,2) \\ (20,1,1) \\ (5,2,1) \\ (4,2,1) \\ (2,2,2) \\ (1,2,2) \end{array} $	$\begin{array}{ c c c c }\hline I_2,I_5,I_1\\\hline I_2,I_1,I_1\\\hline I_5,I_3,I_4\\\hline I_{10},I_6,I_2\\\hline I_{20},I_3,I_1\\\hline I_5,I_{12},I_1\\\hline I_4,I_2,I_1\\\hline I_2,I_4,I_2\\\hline I_1,I_2,I_4\\\hline \end{array}$	$\begin{array}{ c c c } \hline & 2 : 2 \\ 2 : 1, 3, 4 \\ 2 : 2 \\ 2 : 2 \\ \hline & 2 : 2 \\ 2 : 1, 3, 4 \\ 2 : 2 \\ \end{array}$
A1 B1 C1 C2 C3 C4 D1 D2	$\begin{array}{ c c c c c } \hline 0 & -1 & 1 \\ \hline 0 & 1 & 1 \\ \hline 1 & 0 & 1 \\ 1 & 0 & 1 \\ 1 & 0 & 1 \\ \hline 1 & 0 & 0 \\ 1 & 0 & 0 \\ \hline 1 & 0 & 0 \\ \hline \end{array}$	$ \begin{array}{r} -731 \\ -1 \\ \hline 456 \\ -2189 \\ -16564 \\ -30134 \\ \hline 9 \\ -36 \end{array} $	N = 345 -7369 1 2401 20387 -807613 2010071 0 -9		$ \begin{array}{c c} 3 \cdot 5 \cdot \\ 1 \\ -1 \\ 2 \\ 4 \\ 2 \\ 2 \\ 4 \\ 4 \end{array} $	$ \begin{array}{c cccc} & 23 & (6 \text{ iso} \\ & -2, 5, 1 \\ & -2, 1, 1 \\ & -5, 3, 4 \\ & +10, 6, 2 \\ & +20, 3, 1 \\ & +5, 12, 1 \\ & -4, 2, 1 \\ & +2, 4, 2 \end{array} $	geny class 2, 5, 1 2, 1, 1 5, 3, 4 10, 6, 2 20, 3, 1 5, 12, 1 4, 2, 1 2, 4, 2	ses) $ \begin{array}{c c} (2,1,1) \\ (2,1,1) \\ (3,1,2) \\ (10,2,2) \\ (20,1,1) \\ (5,2,1) \\ (4,2,1) \\ (2,2,2) \end{array} $	$\begin{array}{ c c c c }\hline I_2,I_5,I_1\\\hline I_2,I_1,I_1\\\hline I_5,I_3,I_4\\\hline I_{10},I_6,I_2\\\hline I_{20},I_3,I_1\\\hline I_5,I_{12},I_1\\\hline I_4,I_2,I_1\\\hline I_2,I_4,I_2\\\hline \end{array}$	$\begin{array}{ c c c } \hline & & & \\ & & & \\ \hline & & & \\ 2:2\\ 2:2\\ 2:2\\ \hline & & \\ 2:1,3,4\\ \hline \end{array}$
A1 B1 C1 C2 C3 C4 D1 D2 D3	$\begin{array}{ c c c c c } \hline 0 & -1 & 1 \\ \hline 0 & 1 & 1 \\ \hline 1 & 0 & 1 \\ 1 & 0 & 1 \\ 1 & 0 & 1 \\ \hline 1 & 0 & 0 \\ 1 & 0 & 0 \\ \hline 1 & 0 & 0 \\ \hline \end{array}$	$ \begin{array}{r} -731 \\ -1 \\ \hline -1 \\ \hline -2189 \\ -16564 \\ -30134 \\ \hline -36 \\ -411 \\ \end{array} $	N = 345 -7369 -1 2401 20387 -807613 2010071 -9 -3234	$ \begin{array}{c c} & = 5 \\ \hline 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \end{array} $	$3 \cdot 5 \cdot \frac{1}{2}$ $\begin{vmatrix} 1 & 1 & 1 \\ 2 & 4 & 2 \\ 2 & 2 & 1 \end{vmatrix}$ $\begin{vmatrix} 4 & 4 & 2 \\ 2 & 2 & 2 \end{vmatrix}$	$\begin{array}{c cccc} 23 & (6 \text{ iso} \\ \hline -2,5,1 \\ \hline -2,1,1 \\ \hline -5,3,4 \\ +10,6,2 \\ +20,3,1 \\ +5,12,1 \\ \hline -4,2,1 \\ +2,4,2 \\ +1,2,4 \end{array}$	geny class $ \begin{array}{c c} 2, 5, 1 \\ 2, 1, 1 \end{array} $ $ \begin{array}{c c} 5, 3, 4 \\ 10, 6, 2 \\ 20, 3, 1 \\ 5, 12, 1 \end{array} $ $ \begin{array}{c c} 4, 2, 1 \\ 2, 4, 2 \\ 1, 2, 4 \end{array} $	ses) $ \begin{array}{c c} (2,1,1) \\ (2,1,1) \\ (3,1,2) \\ (10,2,2) \\ (20,1,1) \\ (5,2,1) \\ (4,2,1) \\ (2,2,2) \\ (1,2,2) \end{array} $	$\begin{array}{ c c c c }\hline I_2,I_5,I_1\\\hline I_2,I_1,I_1\\\hline I_5,I_3,I_4\\\hline I_{10},I_6,I_2\\\hline I_{20},I_3,I_1\\\hline I_5,I_{12},I_1\\\hline I_4,I_2,I_1\\\hline I_2,I_4,I_2\\\hline I_1,I_2,I_4\\\hline \end{array}$	$\begin{array}{ c c c } \hline & 2 : 2 \\ 2 : 1, 3, 4 \\ 2 : 2 \\ 2 : 2 \\ \hline & 2 : 2 \\ 2 : 1, 3, 4 \\ 2 : 2 \\ \end{array}$
A1 B1 C1 C2 C3 C4 D1 D2 D3 D4	$\begin{array}{ c c c c c } \hline 0 & -1 & 1 \\ \hline 0 & 1 & 1 \\ \hline 1 & 0 & 1 \\ 1 & 0 & 1 \\ 1 & 0 & 1 \\ \hline 1 & 0 & 0 \\ 1 & 0 & 0 \\ 1 & 0 & 0 \\ \hline 1 & 0 & 0 \\ \hline \end{array}$	$ \begin{array}{r} -731 \\ -1 \\ \hline -1656 \\ -2189 \\ -16564 \\ -30134 \\ \hline -36 \\ -411 \\ -381 \\ \end{array} $	N = 345 -7369 1 2401 20387 -807613 2010071 0 -9 -3234 2820		$3 \cdot 5 \cdot \frac{1}{2}$ $\begin{vmatrix} 1 & 1 & 1 \\ 2 & 4 & 2 \\ 2 & 2 & 1 \end{vmatrix}$ $\begin{vmatrix} 4 & 4 & 2 \\ 2 & 2 & 1 \end{vmatrix}$	$ \begin{array}{c cccc} 23 & (6 \text{ iso} \\ - & 2, 5, 1 \\ \hline - & 2, 1, 1 \\ - & 5, 3, 4 \\ + & 10, 6, 2 \\ + & 20, 3, 1 \\ + & 5, 12, 1 \\ \hline - & 4, 2, 1 \\ + & 2, 4, 2 \\ + & 1, 2, 4 \\ + & 1, 8, 1 \end{array} $	geny class 2, 5, 1 2, 1, 1 5, 3, 4 10, 6, 2 20, 3, 1 5, 12, 1 4, 2, 1 2, 4, 2 1, 2, 4 1, 8, 1	ses) $ \begin{array}{ c c c } \hline 2,1,1\\ 2,1,1\\ \hline 5,1,2\\ 10,2,2\\ 20,1,1\\ 5,2,1\\ \hline 4,2,1\\ 2,2,2\\ 1,2,2\\ 1,2,1 \end{array} $	$\begin{array}{ c c c c }\hline I_2,I_5,I_1\\\hline I_2,I_1,I_1\\\hline I_5,I_3,I_4\\\hline I_{10},I_6,I_2\\\hline I_{20},I_3,I_1\\\hline I_5,I_{12},I_1\\\hline I_4,I_2,I_1\\\hline I_2,I_4,I_2\\\hline I_1,I_2,I_4\\\hline I_1,I_8,I_1\\\hline \end{array}$	$\begin{array}{ c c c } \hline & & & \\ \hline & \\ \hline & & \\ \hline & \\ \hline & & \\ \hline & & \\ \hline & \\ \hline & & \\ \hline & & \\ \hline & & \\ \hline & \\ \hline & & \\$
A1 B1 C1 C2 C3 C4 D1 D2 D3 D4	$\begin{array}{ c c c c c } \hline 0 & -1 & 1 \\ \hline 0 & 1 & 1 \\ \hline 1 & 0 & 1 \\ 1 & 0 & 1 \\ 1 & 0 & 1 \\ 1 & 0 & 0 \\ 1 & 0 & 0 \\ 1 & 0 & 0 \\ \hline 1 & 0 & 0 \\ \hline 1 & 0 & 1 \\ \hline 0 & 1 & 1 \\ \hline \end{array}$	$ \begin{array}{r} -731 \\ -1 \\ \hline 456 \\ -2189 \\ -16564 \\ -30134 \\ \hline 9 \\ -36 \\ -411 \\ -381 \\ \hline 30 \\ \hline 30 \\ \hline 30 \\ \end{array} $	N = 345 -7369 -2401 20387 -807613 2010071 -9 -3234 2820 -97		$egin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	geny class 2, 5, 1 2, 1, 1 5, 3, 4 10, 6, 2 20, 3, 1 5, 12, 1 4, 2, 1 2, 4, 2 1, 2, 4 1, 8, 1 4, 1, 3	ses) 2,1,1 2,1,1 5,1,2 10,2,2 20,1,1 5,2,1 4,2,1 2,2,2 1,2,2 1,2,1 2,1,1 8,3,1	$\begin{array}{ c c c c c }\hline I_2,I_5,I_1\\\hline I_2,I_1,I_1\\\hline I_5,I_3,I_4\\\hline I_{10},I_6,I_2\\\hline I_{20},I_3,I_1\\\hline I_5,I_{12},I_1\\\hline I_4,I_2,I_1\\\hline I_2,I_4,I_2\\\hline I_1,I_8,I_1\\\hline I_4,I_1,I_3\\\hline I_4,I_1,I_3\\\hline \end{array}$	$\begin{array}{ c c c } \hline & 2 : 2 \\ 2 : 1, 3, 4 \\ 2 : 2 \\ 2 : 2 \\ \hline & 2 : 2 \\ 2 : 1, 3, 4 \\ 2 : 2 \\ \end{array}$
A1 B1 C1 C2 C3 C4 D1 D2 D3 D4 E1 F1	$\begin{array}{ c c c c c } \hline 0 & -1 & 1 \\ \hline 0 & 1 & 1 \\ \hline 1 & 0 & 1 \\ 1 & 0 & 1 \\ 1 & 0 & 1 \\ 1 & 0 & 0 \\ 1 & 0 & 0 \\ 1 & 0 & 0 \\ \hline 1 & 0 & 0 \\ \hline 1 & 0 & 1 \\ \hline 0 & 1 & 1 \\ \hline \end{array}$	$ \begin{array}{r} -731 \\ -1 \\ \hline 456 \\ -2189 \\ -16564 \\ -30134 \\ \hline 9 \\ -36 \\ -411 \\ -381 \\ \hline 30 \\ \hline 30 \\ \hline 30 \\ \end{array} $	N = 345 -7369 -1 2401 20387 -807613 2010071 -9 -3234 2820 -97 -406		$3 \cdot 5 \cdot \frac{1}{2}$ $\begin{vmatrix} 1 & 1 & 1 \\ 2 & 4 & 2 \\ 2 & 2 & 1 \end{vmatrix}$ $\begin{vmatrix} 1 & 1 & 1 \\ 2 & 1 & 1 \end{vmatrix}$	$ \begin{array}{c cccc} 23 & (6 \text{ iso} \\ -2,5,1 \\ -2,1,1 \\ -5,3,4 \\ +10,6,2 \\ +20,3,1 \\ +5,12,1 \\ -4,2,1 \\ +2,4,2 \\ +1,2,4 \\ +1,8,1 \\ -4,1,3 \\ -8,3,1 \end{array} $	geny class 2, 5, 1 2, 1, 1 5, 3, 4 10, 6, 2 20, 3, 1 5, 12, 1 4, 2, 1 2, 4, 2 1, 2, 4 1, 8, 1 4, 1, 3 8, 3, 1 geny classe	ses) 2,1,1 2,1,1 5,1,2 10,2,2 20,1,1 5,2,1 4,2,1 2,2,2 1,2,2 1,2,1 2,1,1 8,3,1	$ \begin{array}{c c} I_{2},I_{5},I_{1} \\ \hline I_{2},I_{1},I_{1} \\ \hline I_{5},I_{3},I_{4} \\ I_{10},I_{6},I_{2} \\ I_{20},I_{3},I_{1} \\ \hline I_{5},I_{12},I_{1} \\ \hline I_{4},I_{2},I_{1} \\ I_{2},I_{4},I_{2} \\ I_{1},I_{8},I_{1} \\ \hline I_{4},I_{1},I_{3} \\ \hline I_{8},I_{3},I_{1} \\ \end{array} $	2:2 2:1,3,4 2:2 2:2 2:1,3,4 2:2 2:2
A1 B1 C2 C3 C4 D1 D2 D3 D4 E1 F1	0 -1 1 0 1 1 1 0 1 1 0 1 1 0 1 1 0 1 1 0 0 1 0 0 1 0 0 1 0 1 0 1 1	$ \begin{array}{r} -731 \\ -1 \\ \hline -1 \\ \hline -2189 \\ -16564 \\ -30134 \\ \hline -36 \\ -411 \\ -381 \\ \hline -100 \\ \hline -100 \\ \hline -166 \\ \hline -16 \\ -16 \\ \hline -16 \\ $	N = 345 -7369 -2401 20387 -807613 2010071 0 -9 -3234 2820 -97 -406 $N = 346$ -26		$ \begin{vmatrix} 3 \cdot 5 \cdot \\ 1 \\ \hline 1 \\ \hline 2 \\ 4 \\ 2 \\ \hline 2 \\ \hline 1 \\ 1 \\ \hline 1 \\ 1 \\ \hline 1 \\ 1$	$ \begin{array}{c cccc} & 23 & (6 \text{ iso} \\ & -2, 5, 1 \\ & -2, 1, 1 \\ & -3, 3, 4 \\ & +10, 6, 2 \\ & +20, 3, 1 \\ & +5, 12, 1 \\ & -4, 2, 1 \\ & +2, 4, 2 \\ & +1, 2, 4 \\ & +1, 8, 1 \\ & -4, 1, 3 \\ & -8, 3, 1 \\ \end{array} $ $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	geny class 2, 5, 1 2, 1, 1 5, 3, 4 10, 6, 2 20, 3, 1 5, 12, 1 4, 2, 1 2, 4, 2 1, 2, 4 1, 8, 1 4, 1, 3 8, 3, 1 geny classe 1, 1	ses) 2, 1, 1 2, 1, 1 5, 1, 2 10, 2, 2 20, 1, 1 5, 2, 1 4, 2, 1 2, 2, 2 1, 2, 2 1, 2, 1 2, 1, 1 8, 3, 1 es) 1, 1	$ \begin{array}{c c} I_2,I_5,I_1\\ \hline I_2,I_1,I_1\\ \hline I_5,I_3,I_4\\ I_{10},I_6,I_2\\ I_{20},I_3,I_1\\ I_5,I_{12},I_1\\ \hline I_4,I_2,I_1\\ I_2,I_4,I_2\\ I_1,I_8,I_1\\ \hline I_4,I_1,I_3\\ \hline I_8,I_3,I_1\\ \hline \end{array} $	2:2 2:1,3,4 2:2 2:2 2:1,3,4 2:2 2:2
A1 B1 C1 C2 C3 C4 D1 D2 D3 D4 E1 F1	0 -1 1 0 1 1 1 0 1 1 0 1 1 0 1 1 0 1 1 0 0 1 0 0 1 0 0 1 0 0 1 0 1 0 1 1	$ \begin{array}{r} -731 \\ -1 \\ \hline -2189 \\ -16564 \\ -30134 \\ \hline -36 \\ -411 \\ -381 \\ \hline -100 \\ \end{array} $	N = 345 -7369 1 2401 20387 -807613 2010071 0 -9 -3234 2820 -97 406 $N = 346$		$ \begin{vmatrix} 3 \cdot 5 \cdot \\ 1 \\ \hline 1 \\ \hline 2 \\ 4 \\ 2 \\ \hline 2 \\ \hline 1 \\ 1 \\ \hline 1 \\ 1 \\ \hline 1 \\ 1$	$ \begin{array}{c cccc} 23 & (6 \text{ iso} \\ -2,5,1 \\ -2,1,1 \\ -5,3,4 \\ +10,6,2 \\ +20,3,1 \\ +5,12,1 \\ -4,2,1 \\ +2,4,2 \\ +1,2,4 \\ +1,8,1 \\ -4,1,3 \\ -8,3,1 \end{array} $	geny class 2, 5, 1 2, 1, 1 5, 3, 4 10, 6, 2 20, 3, 1 5, 12, 1 4, 2, 1 2, 4, 2 1, 2, 4 1, 8, 1 4, 1, 3 8, 3, 1 geny classe	ses) 2,1,1 2,1,1 5,1,2 10,2,2 20,1,1 5,2,1 4,2,1 2,2,2 1,2,2 1,2,1 2,1,1 8,3,1	$ \begin{array}{c c} I_{2},I_{5},I_{1} \\ \hline I_{2},I_{1},I_{1} \\ \hline I_{5},I_{3},I_{4} \\ I_{10},I_{6},I_{2} \\ I_{20},I_{3},I_{1} \\ \hline I_{5},I_{12},I_{1} \\ \hline I_{4},I_{2},I_{1} \\ I_{2},I_{4},I_{2} \\ I_{1},I_{8},I_{1} \\ \hline I_{4},I_{1},I_{3} \\ \hline I_{8},I_{3},I_{1} \\ \end{array} $	2:2 2:1,3,4 2:2 2:2 2:1,3,4 2:2 2:2
A1 B1 C2 C3 C4 D1 D2 D3 D4 E1 F1	0 -1 1 0 1 1 1 0 1 1 0 1 1 0 1 1 0 1 1 0 0 1 0 0 1 0 0 1 0 1 0 1 1 0 1 1	$ \begin{array}{r} -731 \\ -1 \\ \hline -1 \\ \hline -2189 \\ -16564 \\ -30134 \\ \hline -36 \\ -411 \\ -381 \\ \hline -100 \\ \hline -100 \\ \hline -166 \\ \hline -16 \\ -16 \\ \hline -16 \\ $	N = 345 -7369 -2401 20387 -807613 2010071 0 -9 -3234 2820 -97 -406 $N = 346$ -26		$ \begin{vmatrix} 3 \cdot 5 \cdot 6 \\ 1 \\ -1 \\ 2 \\ 4 \\ 2 \\ 2 \\ -1 \\ 1 \end{vmatrix} $	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	geny class 2, 5, 1 2, 1, 1 5, 3, 4 10, 6, 2 20, 3, 1 5, 12, 1 4, 2, 1 2, 4, 2 1, 2, 4 1, 8, 1 4, 1, 3 8, 3, 1 geny classe 1, 1	ses) 2, 1, 1 2, 1, 1 5, 1, 2 10, 2, 2 20, 1, 1 5, 2, 1 4, 2, 1 2, 2, 2 1, 2, 2 1, 2, 1 2, 1, 1 8, 3, 1 es) 1, 1	$ \begin{array}{c c} I_2,I_5,I_1\\ \hline I_2,I_1,I_1\\ \hline I_5,I_3,I_4\\ I_{10},I_6,I_2\\ I_{20},I_3,I_1\\ I_5,I_{12},I_1\\ \hline I_4,I_2,I_1\\ I_2,I_4,I_2\\ I_1,I_8,I_1\\ \hline I_4,I_1,I_3\\ \hline I_8,I_3,I_1\\ \hline \end{array} $	2:2 2:1,3,4 2:2 2:2 2:1,3,4 2:2 2:2

	T				Impl		1/4)	1 (1)		77 1 .	
	a_1 a_2 a_3	a_2	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
348	8		N = 348	3 =	2^2 ·	3 ·	29 (4 i	sogeny cl	asses)		348
A1	0 -1	0 2	2 1	1	1	_	4, 1, 1	0, 1, 1	3, 1, 1	IV,I_1,I_1	
B1	0 1	0 - 2	-3	0	1	_	4, 1, 1	0, 1, 1	1, 1, 1	IV,I_1,I_1	
C1	0 - 1	0 -94	3973	0	1	-	4, 15, 1	0, 15, 1	1,1,1	$ $ IV, I_{15} , I_{1}	
D1	0 1	0 -50	129	1	1	-	4, 7, 1	0, 7, 1	3,7,1	IV,I_7,I_1	
350	0		N = 35	0 =	= 2 ·	5^2 ·	7 (6 is	sogeny cla	asses)		350
A1	1 -1	0 58	-284	0	2	_	4, 8, 1	4, 2, 1	2, 2, 1	I_4, I_2^*, I_1	2 :2
A2		0 -442		0	4	+	2, 10, 2	2, 4, 2	2, 4, 2	I_2,I_4^*,I_2	2:1,3,4
A_{Λ}		0 -6692		0	2	+	1, 8, 4	1, 2, 4	1, 2, 4	I_1, I_2^*, I_4	2 :2
A4	<u> </u> -	0 -2192		0	2	+	1, 14, 1	1,8,1	1,4,1	I_1, I_8^*, I_1	2 :2
B1		$0 \qquad 112$		0	3	_	3, 8, 2	3, 0, 2	3, 3, 2	I_3,IV^*,I_2	3 :2
B2	<u>-</u>	0 -1138		0	1		1, 8, 6	1,0,6	1,1,6	I_1,IV^*,I_6	3 :1
C1		0 5		1	1	_	3, 2, 2	3, 0, 2	1, 1, 2	I_3 , II , I_2	3 :2
C2	1 1	0 - 45	5 - 185	1	1	<u> </u>	1, 2, 6	1,0,6	$\frac{1}{1}, \frac{1}{2}, \frac{2}{2}$	I_1,II,I_6	3 : 1
D1		1 - 13		0	2	_	2, 6, 1	2, 0, 1	2, 2, 1	I_2,I_0^*,I_1	2:2;3:3
D2		1 - 263		0	2	+	1, 6, 2	1, 0, 2	1, 2, 2	I_1, I_0^*, I_2	2:1;3:4
D3		1 112		0	2	_	6, 6, 3	6,0,3	6, 2, 1	I_6, I_0^*, I_3	2:4;3:1,5
D4 D5	1 1 1 1	$ \begin{array}{rr} 1 & -888 \\ 1 & -4263 \end{array} $		$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$\frac{2}{2}$	+	3, 6, 6 $18, 6, 1$	3,0,6	3, 2, 2	I_3,I_0^*,I_6	2:3;3:2,6
D_{6}			6 - 109219 $6 - 6893219$	0	$\frac{2}{2}$	+	9, 6, 2	18, 0, 1 9, 0, 2	$\begin{vmatrix} 18, 2, 1 \\ 9, 2, 2 \end{vmatrix}$	$ \begin{vmatrix} I_{18}, I_0^*, I_1 \\ I_9, I_0^*, I_2 \end{vmatrix} $	$egin{array}{c} {f 2}:6;{f 3}:3 \ {f 2}:5;{f 3}:4 \end{array}$
E1	<u> </u>	0 -4492				¦	11, 10, 2	:	:	',	-
F1	! 	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		$\begin{vmatrix} 0 \\ -1 \end{vmatrix}$	1 1	¦	11, 10, 2 $11, 4, 2$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$		$\frac{ I_{11},II^*,I_2 }{ I_{11},IV,I_2 }$	<u> </u>
<u> </u>		1 -100								111,1 V ,12	252
$\frac{352}{4}$		0 4	N = 3				\	ogeny clas		TTT* T	352
	0 1					- -		0,1	:	$ III^*,I_1$	<u> </u>
B1	0 1			<u>''</u>	1	-	12, 1	0,1	$\begin{bmatrix} 2,1 \\ \end{bmatrix}$	$\prod_{i=1}^{n}\prod_{j=1}^{n}\prod_{i=1}^{n}\prod_{j=1}^{n}\prod_{i=1}^{n}\prod_{j=1}^{n}\prod_{i=1}^{n}\prod_{j=1}^{n}\prod_{i=1}^{n}\prod_{j=1}^{n}\prod_{i=1}^{n}\prod_{j=1}^{n}\prod_{i=1}^{n}\prod_{j=1}^{n}\prod_{i=1}^{n}\prod_{j=1}^{n}\prod_{i=1}^{n}\prod_{j=1}^{n}\prod_{i=1}^{n}\prod_{j=1}^{n}\prod_{i=1}^{n}\prod_{j=1}^{n}\prod_{i=1}^{n}\prod_{j=1}^{n}\prod_{i=1}^{n}\prod_{j=1}^{n}\prod_{i=1}^{n}\prod_{j=1}^{n}\prod_{i=1}^{n}\prod_{j=1}^{n}\prod_{i=1}^{n}\prod_{j=1}^{n}\prod_{i=1}^{n}\prod_{j=1}^{n}\prod_{i=1}^{n}\prod_{j=1}^{$:
C1	0 -1	0 - 45		1	1	— 	12, 1	0,1	2,1	$\prod_{i=1}^{n} \prod_{j=1}^{n} \prod_{i=1}^{n} \prod_{j=1}^{n} \prod_{j=1}^{n} \prod_{j=1}^{n} \prod_{i=1}^{n} \prod_{j=1}^{n} \prod_{i=1}^{n} \prod_{j=1}^{n} \prod_{j$	
D1	0 - 1	0 3	3 -11	1	1	<u> </u>	12,1	0,1	2,1	$\prod_{i=1}^{n} \prod_{j=1}^{n} \prod_{i=1}^{n} \prod_{j=1}^{n} \prod_{j=1}^{n} \prod_{i=1}^{n} \prod_{j=1}^{n} \prod_{j=1}^{n} \prod_{i=1}^{n} \prod_{j=1}^{n} \prod_{j$	
E1	0 0	0 8	-112	0	1	-	12,3	0,3	2,1	III*,I ₃	
F1	0 0	0 8	3 112	1	1	_	12, 3	0,3	2,3	III^*,I_3	
353	3		N =	35	3 =	353	3 (1 iso	geny clas	s)		353
A1	1 1	1 -2	2 16	0	2	_	2	2	2	I_2	2 :2
A2	1 1	1 - 7	7 4	0	2	+	1	1	1	I_1	2 :1
354	4		N = 35	4 =	2 ·	$3 \cdot 5$	59 (6 is	sogeny cla	asses)		354
A1	1 1	1 -3	3 -3	0	2	+	2, 1, 1	2, 1, 1	2, 1, 1	I_2,I_1,I_1	2 :2
A2	1 1	1 7	$7 \qquad -7$	0	2	_	1, 2, 2	1, 2, 2	1, 2, 2	I_1,I_2,I_2	2 :1
B1	1 0	1 9	_8	0	3	_	1, 6, 1	1, 6, 1	1, 6, 1	I_1, I_6, I_1	3 :2
B2	1 0	1 -216	-1250	0	1	-	3, 2, 3	3, 2, 3	1, 2, 1	I_3,I_2,I_3	3 :1
C1	1 1	0 -715	7069	1	1	-	5, 6, 1	5, 6, 1	1, 2, 1	I_5, I_6, I_1	
D1	1 1	0 -34	-92	0	2	+	4, 3, 1	[4, 3, 1]	[2, 1, 1]	I_4,I_3,I_1	2 :2
D2		0 - 54		0	4	+	2, 6, 2	2, 6, 2	2, 2, 2	I_2,I_6,I_2	2:1,3,4
D3		0 - 644		0	2	+	1, 12, 1	1, 12, 1	1, 2, 1	I_1, I_{12}, I_1	2 :2
D4	1 1	$0 \qquad 216$	$5 \qquad 270$	0	2	—	1, 3, 4	1, 3, 4	1, 1, 4	I_1,I_3,I_4	2:2

	a_1	a_2	a_3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
354	4				N =	35	4 =	$2 \cdot 3$	· 59 (continued)		354
E1 E2	1 1				-1393299 -2601619	0 0	2 2			22, 9, 1 11, 18, 2	22, 1, 1 11, 2, 2		2:2 2:1
F1	1	1	1	-5	11	1	1		7, 2, 1	7, 2, 1	7, 2, 1	I_7,I_2,I_1	<u> </u>
35	5				N = 3	355	5=5	. 71	(1 iso	ogeny clas	s)		355
A1	0	1	1	5	-1		3	_	3,1	3,1	3,1	I_3,I_1	3 :2
A2	0	1	1	-95	-396	0	1	_	1,3	1,3	1,1	I_1,I_3	3 :1
350	3				N = 3	56	$=2^{\frac{1}{2}}$	$2 \cdot 8$	9 (1 is	ogeny clas	ss)		356
A1	0	-1	0	4	-8	1	1	_	8,1	0, 1	3, 1	IV^*,I_1	
35'	7				N = 35	7 =	: 3 · 7	$7 \cdot 1'$	7 (4 is	ogeny clas	sses)		357
A1	0	-1	1	3565	72914	0	1	_	17, 4, 1	17, 4, 1	1, 2, 1	I_{17}, I_4, I_1	
B1	0	-1	1	-5	-16	$\bar{1}$	1	Ī-	1,4,1	1,4,1	1,4,1	I_1,I_4,I_1	
C1	0	1	1	20	-17	0	1	Ī-	1, 2, 3	1, 2, 3	1, 2, 1	I_1,I_2,I_3	Ī
D1	0	1	1	-42	110	1	1	_	7, 2, 1	7, 2, 1	7, 2, 1	$ m I_7, I_2, I_1$	
358	3				N=35	58 =	= 2 ·	179	(2 iso	geny class	ses)		358
A1	1	1	0	55	197	0	1	_	17, 1	17, 1	1,1	I_{17}, I_1	
B1	1	0	0	-18	28	0	3	Ī-	3, 1	3,1	3,1	I_3,I_1	3 :2
B2	1	0	0	32	150	0	1	_	1,3	1,3	1,1	I_1,I_3	3 : 1
359	9				N = 3	359	= 3	59	(2 isog	eny classe	(s)		359
A1	1	0	1	-23	39	1	1	+	1	1	1	I_1	<u> </u>
B1	1	-1	1	-7	8	1	1	+	1	1	1	I_1	
360)				N = 360) =	2^3 ·	3^2 ·	5 (5 is	sogeny cla	sses)		360
A1	0	0	0	-138	-623	0	2	+	4, 8, 1	0, 2, 1	2, 2, 1	III,I_2^*,I_1	2 :2
A2	0	0	0	-183	-182	0	4	+	8, 10, 2	0, 4, 2	2, 4, 2	I_1^*, I_4^*, I_2	2:1,3,4
A3 A4	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$0 \\ 0$	$0 \\ 0$	$-1803 \\ 717$	$29302 \\ -1442$	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$\begin{array}{ c c }\hline 4\\ 2 \end{array}$		10, 8, 4 10, 14, 1	0, 2, 4 0, 8, 1	$\begin{bmatrix} 2, 4, 2 \\ 2, 4, 1 \end{bmatrix}$	$ III^*, I_2^*, I_4 III^*, I_8^*, I_1 $	$\begin{bmatrix} 2 : 2, 5, 6 \\ 2 : 2 \end{bmatrix}$
A5	0	0		-28803	1881502	0	$\frac{2}{2}$		10, 14, 1 $11, 7, 2$	$0, 0, 1 \ 0, 1, 2$	1, 2, 2	II^*, I_8, I_1 II^*, I_1^*, I_2	2:3
A6	0	0	0	-723	64078	0	2		11, 7, 8	0, 1, 8	1, 4, 2	II^*, I_1^*, I_8	2 : 3
B1	0	0	0	-3	-18	0	2	<u> </u>	10, 3, 1	[0,0,1]	2, 2, 1	III^*,III,I_1	2 :2
B2	0	0	0	-123	-522	0	$\overline{2}$		11, 3, 2	0, 0, 2	1,2,2	II^*,III,I_2	2 :1
$\overline{\text{C1}}$	0	0	0	-27	486	0	2	Ī —	10, 9, 1	[0,0,1]	[2, 2, 1]	$ $ III^*, III^*, I_1	2 :2
C2	0	0	0	-1107	14094	0	2	+	11, 9, 2	0, 0, 2	1, 2, 2	II^*,III^*,I_2	2 :1
D1	0	0	0	33	34	0	4	-	8, 7, 1	0, 1, 1	4, 4, 1	I_1^*, I_1^*, I_1	2 :2
D2	0	0	0	-147	286	0	4		10, 8, 2	0, 2, 2	2, 4, 2	III^*,I_2^*,I_2	2:1,3,4
D3 D4	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$0 \\ 0$	$0 \\ 0$	-1227 -1947	-16346 33046	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$\frac{2}{2}$		11, 7, 4 $11, 10, 1$	$0, 1, 4 \\ 0, 4, 1$	$\begin{bmatrix} 1, 2, 4 \\ 1, 4, 1 \end{bmatrix}$	$II^*, I_1^*, I_4 \ II^*, I_4^*, I_1$	2:2 2:2
	<u>-</u>					! -	<u>-</u>			!	<u></u>		<u>-</u>
E1 E2	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$0 \\ 0$	$0 \\ 0$	$-18 \\ -63$	$-27 \\ 162$	1 1	$\begin{array}{c c} 2 \\ 4 \end{array}$	+++++++++++++++++++++++++++++++++++++++	4, 6, 1 8, 6, 2	$\begin{bmatrix} 0, 0, 1 \\ 0, 0, 2 \end{bmatrix}$	$\begin{bmatrix} 2, 2, 1 \\ 4, 4, 2 \end{bmatrix}$	$ \begin{array}{c} III,I_0^*,I_1 \\ I_1^*,I_0^*,I_2 \end{array} $	$egin{array}{ c c c c c c c c c c c c c c c c c c c$
E3	0	0	0	-963	11502	1	2	+	10, 6, 1	$0, 0, 2 \\ 0, 0, 1$	$\begin{bmatrix} 4, 4, 2 \\ 2, 2, 1 \end{bmatrix}$	$I_1, I_0, I_2 \\ III^*, I_0^*, I_1$	2:1,3,4 $2:2$
E4	0	0	0	117	918	1	2	<u> </u>	10, 6, 4	0, 0, 4	2,2,2	III^*, I_0^*, I_4	2 :2

						1		1	7 (4)	- (.)			
	a_1	a_2	a_3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
361					N = 36	31 =	$= 19^{2}$	2	(2 isoger	ny classes))		361
A1	0	0	1	-38	90	1	1	_	3	0	2	III	19 :2
A2	0	0	1 		-619025	1	1	— 	9	0	2	III*	19 :1
B1	_	-1	1	241	$-17 \\ 81208$	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	1	_	7	$\begin{array}{c c} 1 \\ 3 \end{array}$	2	I ₁	3 :2
B2 B3		-1 -1	1 1	-3369 -277729	56427893	0	1 1	_	9 7	3 1	$\frac{2}{2}$	I ₃ * I ₁ *	3:1,3 3:2
362))				N = 362	·	2.19	l R1	(2 isom	eny classe	ng)	1	362
A1	1	1	0	-4	$\frac{10 - 302}{2}$	1	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$		$\frac{(2 \text{ 1SOg})}{1,1}$	1,1	1,1	I_1,I_1	
B1	1	- <u>-</u> 1		6	7	1	 1	<u>-</u> –	$-\frac{1}{7}, \frac{1}{1}$	$\begin{bmatrix} - & - & - \\ 7 & 1 \end{bmatrix}$	$\begin{bmatrix} - & -2 & -1 & -1 \\ 7, 1 & \end{bmatrix}$	$egin{array}{cccccccccccccccccccccccccccccccccccc$	<u>-</u>
363	 }				N = 363	$\mathbf{s} =$	3 · 1	1^{2}	(3 isog	eny classe	(s)		363
A1	1	1	1	-789	8130	0	4	+	$\frac{(6.608)}{3,7}$	3,1	1,4	I_3,I_1^*	2 :2
A2	1	1	1	-1394	-6874	0	4	+	6, 8	6, 2	2,4	I_6, I_2^*	2:1,3,4
A3	1	1	1	-17729	-915100	0	2	+	3, 10	3, 4	1, 4	I_3, I_4^*	2 :2
A4	1	1	1	5261	-46804	0	2	<u> </u>	12,7	12,1	$\begin{bmatrix} 2,2 \end{bmatrix}$	I_{12},I_1^*	2 :2
B1	0	-1	1	4	-1	0	1	–	3, 2	3,0	1, 1	I_3 ,II	
C1	0	$-\overline{1}$	1	444	-826	0	1	_	3,8	3,0	1,1	I_3,IV^*	
36 4	Ĺ				N = 364	= 2	$2^2 \cdot 7$	· 13	(2 iso	geny class	ses)		364
A1	0	0	0	-584	5444	1	1	_	8, 5, 1	0, 5, 1	3, 5, 1	IV^*,I_5,I_1	
B1	0	1	0	-5	7	1	1	Ī —	8, 1, 1	[0, 1, 1]	3, 1, 1	$ $ IV^*,I_1,I_1	
366	3				N = 366	= 2	2 · 3 ·	61	(7 isos	geny class	es)		366
A1	1	Λ	0	205		0	1		0 0 1				
	1	0	0	-205	-1147	0	1	_	2, 2, 1	2, 2, 1	2, 2, 1	I_2,I_2,I_1	
B1	$\begin{array}{c c} & 1 \\ \hline & 1 \end{array}$	$-\frac{0}{0}$	$-\frac{0}{0}$	-205 -5	33	<u>-</u> -	$\begin{bmatrix} 1 \\ - \end{bmatrix}$	— - —	$\begin{array}{c} 2, 2, 1 \\ \hline 5, 5, 1 \end{array}$	$\begin{bmatrix} 2, 2, 1 \\ 5, 5, 1 \end{bmatrix}$	$\begin{bmatrix} 2, 2, 1 \\ 5, 5, 1 \end{bmatrix}$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	$oxed{egin{array}{c} oldsymbol{5} : 2 \end{array}}$
B1 B2						<u>-</u> -	<u>-</u>	— — —		!	<u>'</u>	<u> </u>	5 : 2 5 : 1
	1	- 0	0	-5	33	0	5	— — —	5, 5, 1	5, 5, 1	5, 5, 1	I_5, I_5, I_1	
B2	1 1	0 0	0	-5 -515 -913	33 -5697	0 0	5	 - -	5, 5, 1 1, 1, 5	5, 5, 1	$\begin{bmatrix} 5, 5, 1 \\ 1, 1, 5 \end{bmatrix}$	$ \begin{vmatrix} I_5, I_5, I_1 \\ I_1, I_1, I_5 \end{vmatrix} $	
B2 C1	1 1	0 0	0	-5 -515 -913	33 -5697 -10780	0 0	5 1 1	 - -	5, 5, 1 1, 1, 5 19, 3, 1	$ \begin{array}{c c} 5, 5, 1 \\ 1, 1, 5 \\ \hline 19, 3, 1 \end{array} $	$\begin{bmatrix} 5, 5, 1 \\ 1, 1, 5 \\ 1, 3, 1 \end{bmatrix}$	$ \begin{vmatrix} I_5, I_5, I_1 \\ I_1, I_1, I_5 \\ I_{19}, I_3, I_1 \end{vmatrix} $	
B2 C1 D1 E1 E2	1 1 1 1 1 1	0 0 0 0 1 1 1	0 0 0 1 0 0	$ \begin{array}{r} -5 \\ -515 \\ -913 \\ -7096 \\ -1 \\ -81 \end{array} $	$ \begin{array}{r} 33 \\ -5697 \\ -10780 \\ -233095 \\ -11 \\ -315 \end{array} $		$\begin{bmatrix} 5 \\ 1 \\ \\ 1 \end{bmatrix}$		$5, 5, 1 \\ 1, 1, 5 $ $19, 3, 1$ $7, 13, 1$ $8, 1, 1$ $4, 2, 2$	$ \begin{array}{ c c c } \hline 5,5,1\\ 1,1,5\\ \hline 19,3,1\\ \hline 7,13,1\\ 8,1,1\\ 4,2,2\\ \end{array} $	$\begin{bmatrix} 5, 5, 1 \\ 1, 1, 5 \\ \hline 1, 3, 1 \\ \hline 7, 1, 1 \\ \hline 2, 1, 1 \\ 2, 2, 2 \end{bmatrix}$	$ \begin{vmatrix} I_5,I_5,I_1\\I_1,I_1,I_5 \end{vmatrix} $ $ \begin{vmatrix} I_{19},I_3,I_1\\I_{7},I_{13},I_1 \end{vmatrix} $ $ \begin{vmatrix} I_8,I_1,I_1\\I_4,I_2,I_2 \end{vmatrix} $	$\begin{bmatrix} 5 : 1 \\ \hline \\ 2 : 2 \\ 2 : 1, 3, 4 \end{bmatrix}$
B2 C1 D1 E1 E2 E3	1 1 1 1 1 1 1 1	- 0 0 - 0 - 1 - 1 1 1	0 0 0 1 1 0 0	$ \begin{array}{r} -5 \\ -515 \\ -913 \\ -7096 \\ -1 \\ -81 \\ -1301 \end{array} $	$ \begin{array}{r} 33 \\ -5697 \\ -10780 \\ -233095 \\ -11 \\ -315 \\ -18615 \end{array} $		$\begin{bmatrix} 5 \\ 1 \\ -1 \\ 1 \end{bmatrix}$	 + +	$5, 5, 1 \\ 1, 1, 5 $ $19, 3, 1$ $7, 13, 1$ $8, 1, 1$ $4, 2, 2$ $2, 4, 1$	$\begin{bmatrix} 5, 5, 1 \\ 1, 1, 5 \end{bmatrix}$ $\begin{bmatrix} 19, 3, 1 \\ 7, 13, 1 \end{bmatrix}$ $\begin{bmatrix} 8, 1, 1 \\ 4, 2, 2 \\ 2, 4, 1 \end{bmatrix}$	$\begin{bmatrix} 5, 5, 1 \\ 1, 1, 5 \\ \hline 1, 3, 1 \\ \hline 7, 1, 1 \\ \hline 2, 1, 1 \\ 2, 2, 2 \\ 2, 2, 1 \end{bmatrix}$	$ \begin{vmatrix} I_5, I_5, I_1 \\ I_1, I_1, I_5 \end{vmatrix} $ $ \begin{vmatrix} I_{19}, I_3, I_1 \\ I_{7}, I_{13}, I_1 \end{vmatrix} $ $ \begin{vmatrix} I_8, I_1, I_1 \\ I_4, I_2, I_2 \\ I_2, I_4, I_1 \end{vmatrix} $	$\begin{array}{ c c c } \hline \textbf{5} : 1 \\ \hline \\ \hline \\ \hline \\ \textbf{2} : 2 \\ \hline \\ \textbf{2} : 1, 3, 4 \\ \hline \\ \textbf{2} : 2 \\ \hline \end{array}$
B2 C1 D1 E1 E2 E3 E4	1 1 1 1 1 1 1	- 0 0 - 0 - 1 - 1 1 1 1	0 0 0 1 0 0 0		$ \begin{array}{r} 33 \\ -5697 \\ -10780 \\ -233095 \\ -11 \\ -315 \\ -18615 \\ 129 \end{array} $		$\begin{bmatrix} 5 \\ 1 \\ 1 \\ \end{bmatrix}$		5, 5, 1 $1, 1, 5$ $19, 3, 1$ $7, 13, 1$ $8, 1, 1$ $4, 2, 2$ $2, 4, 1$ $2, 1, 4$	$\begin{bmatrix} 5, 5, 1 \\ 1, 1, 5 \end{bmatrix}$ $\begin{bmatrix} 19, 3, 1 \\ 7, 13, 1 \\ 8, 1, 1 \\ 4, 2, 2 \\ 2, 4, 1 \\ 2, 1, 4 \end{bmatrix}$	$\begin{bmatrix} 5, 5, 1 \\ 1, 1, 5 \\ \hline 1, 3, 1 \\ \hline 2, 1, 1 \\ 2, 2, 2 \\ 2, 2, 1 \\ 2, 1, 4 \end{bmatrix}$	$ \begin{vmatrix} I_5,I_5,I_1\\I_1,I_1,I_5 \end{vmatrix} $ $ \begin{vmatrix} I_{19},I_3,I_1\\I_{7},I_{13},I_1\\I_{8},I_{1},I_1\\I_{4},I_{2},I_2\\I_{2},I_{4},I_1\\I_{2},I_{1},I_{4} \end{vmatrix} $	$\begin{array}{ c c c } \hline & 5 : 1 \\ \hline & \\ \hline \\ & \\ \hline & \\ \hline \\ & \\ \hline \\ & \\ \hline \\ \hline$
B2 C1 D1 E1 E2 E3 E4 F1	1 1 1 1 1 1 1 1 1	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	0 0 1 0 0 0 0		$ \begin{array}{r} 33 \\ -5697 \\ -10780 \\ -233095 \\ -11 \\ -315 \\ -18615 \\ 129 \\ 20 \end{array} $	$\begin{bmatrix} 0 \\ 0 \\ 0 \end{bmatrix}$	$ \begin{array}{ c c c c } \hline 5 & 1 \\ 1 & 1 \\ \hline 1 & 1 \\ \hline 2 & 4 \\ 2 & 4 \\ \hline 3 & 3 \end{array} $	 + +	5, 5, 1 $1, 1, 5$ $19, 3, 1$ $7, 13, 1$ $8, 1, 1$ $4, 2, 2$ $2, 4, 1$ $2, 1, 4$ $2, 6, 1$	$\begin{bmatrix} 5, 5, 1 \\ 1, 1, 5 \\ \hline 19, 3, 1 \\ \hline 7, 13, 1 \\ \hline 8, 1, 1 \\ 4, 2, 2 \\ 2, 4, 1 \\ 2, 1, 4 \\ \hline 2, 6, 1 \\ \end{bmatrix}$	$\begin{bmatrix} 5, 5, 1 \\ 1, 1, 5 \\ \hline 1, 3, 1 \\ \hline 7, 1, 1 \\ \hline 2, 1, 1 \\ 2, 2, 2 \\ 2, 2, 1 \\ 2, 1, 4 \\ \hline 2, 6, 1 \\ \end{bmatrix}$	$ \begin{vmatrix} I_5, I_5, I_1 \\ I_1, I_1, I_5 \end{vmatrix} $ $ \begin{vmatrix} I_{19}, I_3, I_1 \\ I_{7}, I_{13}, I_1 \end{vmatrix} $ $ \begin{vmatrix} I_8, I_1, I_1 \\ I_4, I_2, I_2 \\ I_2, I_4, I_1 \\ I_2, I_1, I_4 \end{vmatrix} $ $ \begin{vmatrix} I_2, I_6, I_1 \\ I_2, I_6, I_1 \end{vmatrix} $	$\begin{array}{ c c c } \hline \textbf{5} : 1 \\ \hline \hline \\ \hline \\ \hline \\ \textbf{2} : 2 \\ \hline \\ \textbf{2} : 1, 3, 4 \\ \hline \\ \textbf{2} : 2 \\ \hline \\ \hline \\ \textbf{3} : 2 \\ \hline \end{array}$
B2 C1 D1 E1 E2 E3 E4 F1 F2			0 0 1 1 0 0 0 0 0		$ \begin{array}{r} 33 \\ -5697 \\ -10780 \\ -233095 \\ -11 \\ -315 \\ -18615 \\ 129 \\ 20 \\ -538 \\ \end{array} $	$\begin{bmatrix} 0 \\ 0 \\ 0 \\ \end{bmatrix}$	$ \begin{array}{c c} & 5 \\ & 1 \\ & 1 \\ & 1 \\ & 1 \\ & 1 \\ & 2 \\ & 4 \\ & 2 \\ & 4 \\ & 2 \\ & 4 \\ & 1 \\ & 3 \\ & 1 \\ & 1 \end{array} $		$5,5,1 \\ 1,1,5 \\ 19,3,1 \\ 7,13,1 \\ 8,1,1 \\ 4,2,2 \\ 2,4,1 \\ 2,1,4 \\ 2,6,1 \\ 6,2,3$	$\begin{bmatrix} 5, 5, 1 \\ 1, 1, 5 \end{bmatrix}$ $\begin{bmatrix} 19, 3, 1 \\ 7, 13, 1 \end{bmatrix}$ $\begin{bmatrix} 8, 1, 1 \\ 4, 2, 2 \\ 2, 4, 1 \\ 2, 1, 4 \end{bmatrix}$ $\begin{bmatrix} 2, 6, 1 \\ 6, 2, 3 \end{bmatrix}$	$\begin{bmatrix} 5, 5, 1 \\ 1, 1, 5 \end{bmatrix}$ $\begin{bmatrix} 1, 3, 1 \\ 7, 1, 1 \end{bmatrix}$ $\begin{bmatrix} 2, 1, 1 \\ 2, 2, 2 \\ 2, 2, 1 \\ 2, 1, 4 \end{bmatrix}$ $\begin{bmatrix} 2, 6, 1 \\ 2, 2, 3 \end{bmatrix}$	$ \begin{vmatrix} I_5, I_5, I_1 \\ I_1, I_1, I_5 \end{vmatrix} $ $ \begin{vmatrix} I_{19}, I_3, I_1 \\ I_{7}, I_{13}, I_1 \end{vmatrix} $ $ \begin{vmatrix} I_8, I_1, I_1 \\ I_4, I_2, I_2 \\ I_2, I_4, I_1 \\ I_2, I_1, I_4 \end{vmatrix} $ $ \begin{vmatrix} I_2, I_6, I_1 \\ I_6, I_2, I_3 \end{vmatrix} $	$\begin{array}{ c c c } \hline & 5 : 1 \\ \hline & \\ \hline \\ & \\ \hline \\ \hline$
B2 C1 D1 E1 E2 E3 E4 F1 F2 G1	1 1 1 1 1 1 1 1 1 1	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	0 0 1 0 0 0 0		$ \begin{array}{r} 33 \\ -5697 \\ -10780 \\ -233095 \\ -11 \\ -315 \\ -18615 \\ 129 \\ 20 \\ -538 \\ \hline 65 \end{array} $	$\begin{bmatrix} 0 \\ 0 \\ 0 \\ \end{bmatrix}$	$\begin{bmatrix} 5 \\ 1 \\ 1 \\ \end{bmatrix}$	- - - + + + - - - - - - - - - - - - - - - - - - - - -	5, 5, 1 $1, 1, 5$ $19, 3, 1$ $7, 13, 1$ $8, 1, 1$ $4, 2, 2$ $2, 4, 1$ $2, 1, 4$ $2, 6, 1$ $6, 2, 3$ $10, 2, 1$	$ \begin{vmatrix} 5, 5, 1 \\ 1, 1, 5 \end{vmatrix} $ $ \begin{vmatrix} 19, 3, 1 \\ 7, 13, 1 \end{vmatrix} $ $ \begin{vmatrix} 8, 1, 1 \\ 4, 2, 2 \\ 2, 4, 1 \\ 2, 1, 4 \end{vmatrix} $ $ \begin{vmatrix} 2, 6, 1 \\ 6, 2, 3 \\ 10, 2, 1 \end{vmatrix} $	$\begin{bmatrix} 5, 5, 1 \\ 1, 1, 5 \end{bmatrix}$ $\begin{bmatrix} 1, 3, 1 \\ 7, 1, 1 \end{bmatrix}$ $\begin{bmatrix} 2, 1, 1 \\ 2, 2, 2 \\ 2, 2, 1 \\ 2, 1, 4 \end{bmatrix}$ $\begin{bmatrix} 2, 6, 1 \\ 2, 2, 3 \\ 10, 2, 1 \end{bmatrix}$	$ \begin{vmatrix} I_5, I_5, I_1 \\ I_1, I_1, I_5 \end{vmatrix} $ $ \begin{vmatrix} I_{19}, I_3, I_1 \\ I_{7}, I_{13}, I_1 \end{vmatrix} $ $ \begin{vmatrix} I_8, I_1, I_1 \\ I_4, I_2, I_2 \\ I_2, I_4, I_1 \\ I_2, I_1, I_4 \end{vmatrix} $ $ \begin{vmatrix} I_2, I_6, I_1 \\ I_2, I_6, I_1 \end{vmatrix} $	$\begin{array}{ c c c } \hline & 5 : 1 \\ \hline & \\ 2 : 2 \\ \hline & \\ 2 : 2 \\ \hline & \\ \hline \\ \hline$
B2 C1 D1 E1 E2 E3 E4 F1 F2 G1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		0 0 0 1 1 1 0 0 0 0 0		$ \begin{array}{r} 33 \\ -5697 \\ -10780 \\ -233095 \\ -11 \\ -315 \\ -18615 \\ 129 \\ \hline 20 \\ -538 \\ \hline 865 \\ N = 368 \\ \end{array} $	$\begin{bmatrix} 0 \\ 0 \\ 0 \\ \end{bmatrix}$	$\begin{bmatrix} 5 \\ 1 \\ 1 \\ \end{bmatrix}$		5, 5, 1 1, 1, 5 19, 3, 1 7, 13, 1 8, 1, 1 4, 2, 2 2, 4, 1 2, 1, 4 2, 6, 1 6, 2, 3 10, 2, 1 (7 isog	5,5,1 1,1,5 19,3,1 7,13,1 8,1,1 4,2,2 2,4,1 2,1,4 2,6,1 6,2,3 10,2,1 eny classe	$\begin{bmatrix} 5, 5, 1 \\ 1, 1, 5 \\ 1, 3, 1 \\ 7, 1, 1 \\ 2, 1, 1 \\ 2, 2, 2 \\ 2, 2, 1 \\ 2, 1, 4 \\ 2, 6, 1 \\ 2, 2, 3 \\ 10, 2, 1 \\ s)$	$ \begin{vmatrix} I_5, I_5, I_1 \\ I_1, I_1, I_5 \end{vmatrix} $ $ \begin{vmatrix} I_1, I_1, I_5 \\ I_{19}, I_3, I_1 \\ I_7, I_{13}, I_1 \\ I_8, I_1, I_1 \\ I_4, I_2, I_2 \\ I_2, I_4, I_1 \\ I_2, I_1, I_4 \end{vmatrix} $ $ \begin{vmatrix} I_2, I_6, I_1 \\ I_6, I_2, I_3 \\ I_{10}, I_2, I_1 \end{vmatrix} $	5:1
B2 C1 D1 E1 E2 E3 E4 F1 F2 G1	1 1 1 1 1 1 1 1 1 1		0 0 1 1 0 0 0 0 0		$ \begin{array}{r} 33 \\ -5697 \\ -10780 \\ -233095 \\ -11 \\ -315 \\ -18615 \\ 129 \\ 20 \\ -538 \\ \hline 65 \end{array} $	$\begin{bmatrix} 0 \\ 0 \\ 0 \\ \end{bmatrix}$	$\begin{bmatrix} 5 \\ 1 \\ 1 \\ \end{bmatrix}$	- - - + + + - - - - - - - - - - - - - - - - - - - - -	5, 5, 1 $1, 1, 5$ $19, 3, 1$ $7, 13, 1$ $8, 1, 1$ $4, 2, 2$ $2, 4, 1$ $2, 1, 4$ $2, 6, 1$ $6, 2, 3$ $10, 2, 1$	$ \begin{vmatrix} 5, 5, 1 \\ 1, 1, 5 \end{vmatrix} $ $ \begin{vmatrix} 19, 3, 1 \\ 7, 13, 1 \end{vmatrix} $ $ \begin{vmatrix} 8, 1, 1 \\ 4, 2, 2 \\ 2, 4, 1 \\ 2, 1, 4 \end{vmatrix} $ $ \begin{vmatrix} 2, 6, 1 \\ 6, 2, 3 \\ 10, 2, 1 \end{vmatrix} $	$\begin{bmatrix} 5, 5, 1 \\ 1, 1, 5 \end{bmatrix}$ $\begin{bmatrix} 1, 3, 1 \\ 7, 1, 1 \end{bmatrix}$ $\begin{bmatrix} 2, 1, 1 \\ 2, 2, 2 \\ 2, 2, 1 \\ 2, 1, 4 \end{bmatrix}$ $\begin{bmatrix} 2, 6, 1 \\ 2, 2, 3 \\ 10, 2, 1 \end{bmatrix}$	$ \begin{array}{c c} I_5, I_5, I_1 \\ I_1, I_1, I_5 \\ \hline \\ I_{19}, I_3, I_1 \\ \hline \\ I_7, I_{13}, I_1 \\ \hline \\ I_8, I_1, I_1 \\ I_4, I_2, I_2 \\ I_2, I_4, I_1 \\ I_2, I_1, I_4 \\ \hline \\ I_2, I_6, I_1 \\ I_6, I_2, I_3 \\ \hline \\ I_{10}, I_2, I_1 \\ \hline \\ I_2^*, I_1 \\ \hline \end{array} $	$\begin{array}{ c c c } \hline & 5 : 1 \\ \hline & \\ 2 : 2 \\ \hline & \\ 2 : 2 \\ \hline & \\ \hline \\ \hline$
B2 C1 D1 E1 E2 E3 E4 F1 F2 G1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0		0 0 0 0 0 0 0 1 1 1 1 0 0		$ \begin{array}{r} 33 \\ -5697 \\ -10780 \\ -233095 \\ -11 \\ -315 \\ -18615 \\ 129 \\ \hline 20 \\ -538 \\ \hline 65 \\ N = 368 \\ -6 \end{array} $	$ \begin{bmatrix} 0 \\ 0 \end{bmatrix} \end{bmatrix} \begin{bmatrix} 1 \\ 1 \end{bmatrix} \end{bmatrix} $	$\begin{bmatrix} 5 \\ 1 \\ 1 \\ \end{bmatrix}$ $\begin{bmatrix} 1 \\ 4 \\ 2 \\ 4 \\ \end{bmatrix}$ $\begin{bmatrix} 3 \\ 1 \\ 2^4 \cdot 2 \end{bmatrix}$		5, 5, 1 1, 1, 5 19, 3, 1 7, 13, 1 8, 1, 1 4, 2, 2 2, 4, 1 2, 1, 4 2, 6, 1 6, 2, 3 10, 2, 1 (7 isog 10, 1	5,5,1 1,1,5 19,3,1 7,13,1 8,1,1 4,2,2 2,4,1 2,1,4 2,6,1 6,2,3 10,2,1 eny classe	$ \begin{array}{c c} 5, 5, 1 \\ 1, 1, 5 \\ \hline 1, 3, 1 \\ \hline 7, 1, 1 \\ 2, 1, 1 \\ 2, 2, 2 \\ 2, 2, 1 \\ 2, 1, 4 \\ \hline 2, 6, 1 \\ 2, 2, 3 \\ \hline 10, 2, 1 \end{array} $ $ \begin{array}{c c} 6, 1 \\ 2, 2, 3 \\ \hline 10, 2, 1 \end{array} $	$ \begin{vmatrix} I_5,I_5,I_1\\I_1,I_1,I_5 \end{vmatrix} \\ \begin{vmatrix} I_{19},I_3,I_1\\I_{7},I_{13},I_1 \end{vmatrix} \\ \begin{vmatrix} I_8,I_1,I_1\\I_4,I_2,I_2\\I_2,I_4,I_1\\I_2,I_1,I_4 \end{vmatrix} \\ \begin{vmatrix} I_2,I_6,I_1\\I_6,I_2,I_3\\I_{10},I_2,I_1 \end{vmatrix} \\ \begin{vmatrix} I_2,I_1,I_1\\I_1,I_2,I_1 \end{vmatrix} \\ \begin{vmatrix} I_2,I_1,I_1\\I_1,I_2,I_1 \end{vmatrix} \\ \begin{vmatrix} I_2,I_1,I_1\\I_1,I_2,I_1 \end{vmatrix} \\ \begin{vmatrix} I_2,I_1\\I_1,I_2,I_1 \end{vmatrix} \\ \begin{vmatrix} I_2,I_1\\I_1,I_2,I_1 \end{vmatrix} \\ \begin{vmatrix} I_2,I_1\\I_1,I_2 \end{vmatrix} \\ \begin{vmatrix} I_2,I_1\\I_1,I_1 \end{vmatrix} \\ \begin{vmatrix} I_2,I_1\\I_1,I_2 \end{vmatrix} \\ \begin{vmatrix} I_2,I_1\\I_1,I_1 \end{vmatrix} \\ \begin{vmatrix} I_2,I_1\\I_1,I_2 \end{vmatrix} \\ \begin{vmatrix} I_2,I_1\\I_1,I_2 \end{vmatrix} \\ \begin{vmatrix} I_2,I_1\\I_1,I_1 \end{vmatrix} \\ \begin{vmatrix} I_2,I_1\\I_1,I_2 \end{vmatrix} \\ \begin{vmatrix} I_2,I_1\\I_1,I_1 \end{vmatrix} \\ \begin{vmatrix} I_2,I_1\\I_1,I_2 \end{vmatrix} \\ \begin{vmatrix} I_2,I_1\\I_1,I_1 \end{vmatrix} \\ \begin{vmatrix} I_2,I_1\\I_1,I_2 \end{vmatrix} \\ \begin{vmatrix} I_2,I_1\\I_1,I_2 \end{vmatrix} \\ \begin{vmatrix} I_2,I_1\\I_1,I_1 \end{vmatrix} \\ \begin{vmatrix} I_2,I_1\\I_1,I_2 $	5:1
B2 C1 D1 E1 E2 E3 E4 F1 F2 G1 A1 A2	1 1 1 1 1 1 1 1 1 1 1 1 1 0 0	0 0 0 1 1 1 1 1 1 0 0 1	0 0 0 1 1 0 0 0 0 0 1 1 1		$ \begin{array}{r} 33 \\ -5697 \\ -10780 \\ -233095 \\ -11 \\ -315 \\ -18615 \\ 129 \\ \hline 20 \\ -538 \\ \hline 65 \\ N = 368 \\ -6 \\ -62 \\ \end{array} $	$ \begin{bmatrix} 0 \\ 0 \end{bmatrix} $ $ \begin{bmatrix} 0 \\ 0 \end{bmatrix} $ $ \begin{bmatrix} 0 \\ 0 \end{bmatrix} $ $ \begin{bmatrix} 1 \\ 1 \end{bmatrix} $ $ \begin{bmatrix} 1 \\ 1 \end{bmatrix} $	$ \begin{array}{ c c c c } \hline 5 & 1 \\ 1 & 1 \\ \hline 1 & 1 \\ \hline 2 & 4 \\ 2 & 4 \\ \hline 1 & 1 \\ \hline 2^4 \cdot 2 \\ \hline 2 & 2 \\ \hline 2 & 2 \\ \hline \end{array} $		5, 5, 1 $1, 1, 5$ $19, 3, 1$ $7, 13, 1$ $8, 1, 1$ $4, 2, 2$ $2, 4, 1$ $2, 6, 1$ $6, 2, 3$ $10, 2, 1$ $(7 isog)$ $10, 1$ $11, 2$		$ \begin{array}{ c c c } \hline 5,5,1\\ 1,1,5\\ \hline 1,3,1\\ \hline 7,1,1\\ 2,1,1\\ 2,2,2\\ 2,2,1\\ 2,1,4\\ \hline 2,6,1\\ 2,2,3\\ \hline 10,2,1\\ \end{array} $ s) $ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	$ \begin{array}{c c} I_5, I_5, I_1 \\ I_1, I_1, I_5 \\ \hline \\ I_{19}, I_3, I_1 \\ \hline \\ I_7, I_{13}, I_1 \\ \hline \\ I_8, I_1, I_1 \\ I_4, I_2, I_2 \\ I_2, I_4, I_1 \\ I_2, I_1, I_4 \\ \hline \\ I_2, I_6, I_1 \\ I_6, I_2, I_3 \\ \hline \\ I_{10}, I_2, I_1 \\ \hline \\ I_2^*, I_1 \\ \hline \end{array} $	$\begin{array}{ c c c } \hline & 5 : 1 \\ \hline & \\ 2 : 2 \\ \hline & \\ 2 : 2 \\ \hline & \\ \hline \\ & \\ \hline \\ \hline$
B2 C1 D1 E1 E2 E3 E4 F1 F2 G1 A1 A2 B1	1 1 1 1 1 1 1 1 1 1 1 1 0 0				$ \begin{array}{r} 33 \\ -5697 \\ -10780 \\ -233095 \\ -11 \\ -315 \\ -18615 \\ 129 \\ -538 \\ \hline 65 \\ N = 368 \\ \hline -6 \\ -62 \\ 930 \\ \end{array} $	$ \begin{bmatrix} 0 \\ 0 \end{bmatrix} \end{bmatrix} \begin{bmatrix} 1 \\ 1 \end{bmatrix} \end{bmatrix} $	$ \begin{array}{c c} $	- - - - + + + - - -	5, 5, 1 $1, 1, 5$ $19, 3, 1$ $7, 13, 1$ $8, 1, 1$ $4, 2, 2$ $2, 4, 1$ $2, 6, 1$ $6, 2, 3$ $10, 2, 1$ $(7 isog)$ $10, 1$ $11, 2$ $22, 1$			$ \begin{array}{c c} I_5, I_5, I_1 \\ I_1, I_1, I_5 \\ \hline \\ I_{19}, I_3, I_1 \\ \hline \\ I_{7}, I_{13}, I_1 \\ \hline \\ I_{8}, I_{1}, I_{1} \\ I_{4}, I_{2}, I_{2} \\ I_{2}, I_{4}, I_{1} \\ I_{2}, I_{1}, I_{4} \\ \hline \\ I_{2}, I_{6}, I_{1} \\ I_{6}, I_{2}, I_{3} \\ \hline \\ I_{10}, I_{2}, I_{1} \\ \hline \\ I_{3}^{*}, I_{2} \\ \hline \\ I_{14}^{*}, I_{1} \\ \hline \end{array} $	$\begin{array}{ c c c } \hline & & & & \\ \hline & & & & \\ \hline & & & & \\ \hline & & & &$
B2 C1 D1 E1 E2 E3 E4 F1 F2 G1 A1 A2 B1 B2	1 1 1 1 1 1 1 1 1 1 1 0 0				$ \begin{array}{r} 33 \\ -5697 \\ -10780 \\ -233095 \\ -11 \\ -315 \\ -18615 \\ 129 \\ \hline 20 \\ -538 \\ \hline 05 \\ \hline N = 368 \\ -6 \\ -62 \\ \hline 930 \\ 54690 \\ \end{array} $	$ \begin{bmatrix} 0 \\ 0 \end{bmatrix} \end{bmatrix} \begin{bmatrix} 1 \\ 1 \end{bmatrix} \end{bmatrix} $	$ \begin{array}{c c} & 5 \\ & 1 \\ & 1 \\ & 1 \\ & 1 \\ & 2 \\ & 4 \\ & 2 \\ & 4 \\ & 2 \\ & 4 \\ & 2 \\ & 4 \\ & 2 \\ & 4 \\ & 2 \\ & 4 \\ & 2 \\ & 3 \\ & 3 \\ & 3 \\ & 4 \\ & 4 \\ & 5 \\$	- - - - + + + - - -	5,5,1 $1,1,5$ $19,3,1$ $7,13,1$ $8,1,1$ $4,2,2$ $2,4,1$ $2,6,1$ $6,2,3$ $10,2,1$ $(7 isog 10,1)$ $11,2$ $22,1$ $17,2$			$ \begin{vmatrix} I_5, I_5, I_1 \\ I_1, I_1, I_5 \end{vmatrix} $ $ \begin{vmatrix} I_1, I_1, I_5 \\ I_{19}, I_3, I_1 \end{vmatrix} $ $ \begin{vmatrix} I_8, I_1, I_1 \\ I_4, I_2, I_2 \\ I_2, I_4, I_1 \\ I_2, I_1, I_4 \end{vmatrix} $ $ \begin{vmatrix} I_2, I_6, I_1 \\ I_6, I_2, I_3 \\ I_{10}, I_2, I_1 \end{vmatrix} $ $ \begin{vmatrix} I_2^*, I_1 \\ I_3^*, I_2 \\ I_{14}^*, I_1 \\ I_9^*, I_2 \end{vmatrix} $	$\begin{array}{ c c c } \hline & & & & \\ \hline & & & & \\ \hline & & & & \\ \hline & & & &$
B2 C1 D1 E1 E2 E3 E4 F1 F2 G1 A1 A2 B1 B2 C1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				$ \begin{array}{r} 33 \\ -5697 \\ -10780 \\ -233095 \\ -11 \\ -315 \\ -18615 \\ 129 \\ \hline 20 \\ -538 \\ \hline 065 \\ \hline N = 368 \\ -6 \\ -62 \\ \hline 930 \\ 54690 \\ \hline -5 \\ \hline -5 \\ \hline -5 \\ \hline -607 \\ -62 \\ -62 \\ -63 \\ -64 \\ -62 \\ -63 \\ -64 \\ -64 \\ -65 \\ -55 \\ -65 \\ -55 \\ $	$ \begin{bmatrix} 0 \\ 0 \end{bmatrix} \begin{bmatrix} 1 \\ 1 \end{bmatrix} \begin{bmatrix} 1 \\ 0 \end{bmatrix} \begin{bmatrix} 0 \\ \\ \end{bmatrix} \begin{bmatrix} 0 \\$	$ \begin{array}{c c} $	- - - - + + + - - -	5, 5, 1 1, 1, 5 19, 3, 1 7, 13, 1 8, 1, 1 4, 2, 2 2, 4, 1 2, 1, 4 2, 6, 1 6, 2, 3 10, 2, 1 (7 isog 10, 1 11, 2 22, 1 17, 2 4, 1		$ \begin{array}{c c} 5, 5, 1 \\ 1, 1, 5 \\ \hline 1, 3, 1 \\ \hline 7, 1, 1 \\ 2, 1, 1 \\ 2, 2, 2 \\ 2, 2, 1 \\ 2, 1, 4 \\ \hline 2, 6, 1 \\ 2, 2, 3 \\ \hline 10, 2, 1 \end{array} $ $ \begin{array}{c c} 4, 1 \\ 4, 2 \\ \hline 4, 1 \\ 2, 2 \\ \hline 1, 1 \\ \hline \end{array} $	$ \begin{vmatrix} I_5, I_5, I_1 \\ I_1, I_1, I_5 \end{vmatrix} $ $ \begin{vmatrix} I_1, I_1, I_5 \\ I_{19}, I_3, I_1 \end{vmatrix} $ $ \begin{vmatrix} I_7, I_{13}, I_1 \\ I_8, I_1, I_1 \\ I_4, I_2, I_2 \\ I_2, I_4, I_1 \\ I_2, I_1, I_4 \end{vmatrix} $ $ \begin{vmatrix} I_2, I_6, I_1 \\ I_6, I_2, I_3 \\ I_{10}, I_2, I_1 \end{vmatrix} $ $ \begin{vmatrix} I_2^*, I_1 \\ I_3^*, I_2 \\ I_{14}^*, I_1 \\ I_9^*, I_2 \end{vmatrix} $ $ \begin{vmatrix} I_1, I_1 \\ I_1, I_1 \end{vmatrix} $ $ \begin{vmatrix} I_1, I_1 \\ I_1, I_1 \end{vmatrix} $	$\begin{array}{ c c c } \hline & & & & \\ \hline & & & & \\ \hline & & & & \\ \hline & & & &$

		a		T	a and(A)	and (i)		Kodaira	Igograpies
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	a_4	a_6	r	<u>' ' </u>	$s \operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
368		N=3	- 1	$= 2^4$	\	$\frac{\text{ntinued}}{\text{out}}$	T		368
F1 0 0 0	-1	-1	0	1	- 4,1 	0,1	1,1	$\prod_{-} \prod_{-} \prod_{-$	
G1 0 0 0	-55	157	1	1	-4,1	0,1	1,1	II,I_1	
369		N = 369	= 3	$3^2 \cdot 41$	1 (2 isog)	eny classe	es)		369
A1 0 0 1	6	13	1	1	-7,1	1, 1	2, 1	$_{\mathrm{I}_{1}^{st},\mathrm{I}_{1}}$	
B1 0 0 1	-93	-369	0	1	- 11,1	5,1	4,1	$ ule{I_5^*,I_1}$	5 :2
B2 0 0 1	177	24201	0	1	- 7,5	1,5	4,1	I_{1}^{*},I_{5}	5 :1
370		N = 370 =	= 2	. 5 . 3	37 (4 isos)	geny class	ses)		370
A1 1 -1 0	-5	5	1	2	+ 4,1,1	4, 1, 1	2, 1, 1	$\mathrm{I}_4,\!\mathrm{I}_1,\!\mathrm{I}_1$	2 :2
$\begin{bmatrix} A2 & 1 & -1 & 0 \\ A & 1 & 1 & 0 \end{bmatrix}$	-25	-39	1	4	+ 2, 2, 2	2, 2, 2	2, 2, 2	I_2,I_2,I_2	2:1,3,4
$\begin{bmatrix} A3 & 1 & -1 & 0 \\ A4 & 1 & 1 & 0 \end{bmatrix}$	-395	-2925	1	$\frac{2}{2}$	+ 1, 4, 1	$\begin{bmatrix} 1,4,1 \\ 1&1&4 \end{bmatrix}$	1, 2, 1	I_1,I_4,I_1	2 :2
A4 1-1 0	25		1	$\begin{bmatrix} 2 \\ \end{bmatrix}$	- 1,1,4 	$\begin{bmatrix} 1, 1, 4 \\ \end{bmatrix}$	1,1,2	$\begin{bmatrix} I_1,I_1,I_4 \\ \end{bmatrix}$	2 :2
B1 1 1 0	13	-19	0	1	-11, 1, 1	11, 1, 1	$\begin{bmatrix} 1, 1, 1 \\ \end{bmatrix}$	$\left[\begin{array}{cccccccccccccccccccccccccccccccccccc$	<u> </u>
C1 1 0 1	-19	342	0	3	-3, 3, 3	3, 3, 3	1, 1, 3	I_3,I_3,I_3	3:2,3
C2 1 0 1	166	-9204			-9, 9, 1	9, 9, 1	1,1,1	I_9,I_9,I_1	3:1
C3 1 0 1	-54	146	0	3	- 1,1,1 	$\begin{bmatrix} 1,1,1 \\ \end{bmatrix}$	$\begin{bmatrix} 1, 1, 1 \\ \end{bmatrix}$	$\left \begin{array}{cccccccccccccccccccccccccccccccccccc$	3:1
D1 1 0 0	-75	-143		6	+12, 3, 1	12, 3, 1	12, 3, 1	I_{12}, I_3, I_1	2:2;3:3
D2 1 0 0	245	-975	0	6	-6,6,2	6, 6, 2	6, 6, 2	I_6,I_6,I_2	2:1;3:4
D3 1 0 0	-5275	-147903		$\frac{2}{2}$	+4,1,3	4, 1, 3	4, 1, 3	I_4,I_1,I_3	2:4;3:1
D4 1 0 0	-5255	-149075	0	2	-2, 2, 6	2, 2, 6	2, 2, 6	I_2, I_2, I_6	2:3;3:2
371		M 971	,	7 59	(0.	1	`		27 1
911		N = 371	=	(, 99	(2 isoge)	eny classe	s)		371
A1 1 1 0	-35	N = 371 -98	1	$\frac{7 \cdot 33}{1}$	$\frac{6 (2 \text{ soge}}{-4, 1}$	eny classe 4,1	2,1	I_4,I_1	3/1
T	$ \begin{array}{r} -35 \\ -31 \end{array} $	ı	1	1	, ,	<u> </u>	T T	I_{4},I_{1} I_{3},I_{1}	371
A1 1 1 0		-98	1 0	1 1	- 4,1 - 3,1	4,1 	2,1		372
A1 1 1 0 B1 0 0 1	-31	$ \begin{array}{c c} -98 \\ -67 \end{array} $ $ N = 372 = $	1 0	$\begin{bmatrix} 1 \\ \hline 1 \end{bmatrix}$	- 4,1 - 3,1	4, 1 3, 1 geny clas	$\begin{bmatrix} 2,1\\ -3,1 \end{bmatrix}$ ses)		
A1 1 1 0 B1 0 0 1	-31	$ \begin{array}{c c} -98 \\ -67 \end{array} $ $ N = 372 = $	$ \begin{array}{c c} 1 \\ \hline 0 \\ \end{array} $ $ \begin{array}{c c} 2^2 \\ 1 \\ \end{array} $	$ \begin{array}{c c} 1 \\ \hline 1 \\ \hline 1 \end{array} $	-4,1 $-3,1$ 31 (4 iso	$ \begin{array}{ c c } \hline 4,1\\ \hline 3,1\\ \hline \text{geny clas}\\ 0,2,1\\ \hline \end{array} $	$\begin{bmatrix} 2, 1 \\ 3, 1 \end{bmatrix}$ ses) $\begin{bmatrix} 3, 2, 1 \end{bmatrix}$	I_3,I_1 IV,I_2,I_1	372
A1 1 1 0 B1 0 0 1 372 A1 0 -1 0 B1 0 1 0	-31 -6	$ \begin{array}{c c} -98 \\ -67 \end{array} $ $ N = 372 = \\ 9 \\ 12 \\ $	$ \begin{array}{c c} 1 \\ \hline 0 \\ \hline \end{array} $ $ \begin{array}{c c} 2^2 \\ \hline 1 \\ \hline 0 \\ \hline \end{array} $	$ \begin{array}{c c} 1 & \\ \hline 1 & \\ \hline 2 & \\ \end{array} $	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{ c c c c } \hline 4, 1 \\ 3, 1 \end{array} $ geny clas $ \begin{array}{ c c c c c c } \hline 0, 2, 1 \\ \hline 0, 1, 2 \end{array} $	$ \begin{array}{ c c } \hline 2,1\\ \hline 3,1\\ \hline ses)\\ \hline 3,2,1\\ \hline 1,1,2\\ \end{array} $	I_3,I_1 IV,I_2,I_1 IV,I_1,I_2	372 2:2
A1 1 1 0 B1 0 0 1 372 A1 0-1 0 B1 0 1 0 B2 0 1 0	-31 -6 -9 -164	-98 -67 $N = 372 = 9$ 12 756	$ \begin{array}{c c} 1 \\ \hline 0 \\ \hline \end{array} $ $ \begin{array}{c c} 2^2 \\ \hline 1 \\ \hline 0 \\ 0 \\ \end{array} $	$ \begin{array}{c c} 1 & \\ \hline 1 & \\ \hline 2 & \\ 2 & \\ \end{array} $	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{ c c c c } \hline 4, 1 \\ 3, 1 \end{array} $ geny clas $ \begin{array}{ c c c c } \hline 0, 2, 1 \\ \hline 0, 1, 2 \\ 0, 2, 1 \end{array} $	$ \begin{array}{ c c c } \hline 2,1\\ \hline 3,1\\ \hline ses)\\ \hline 3,2,1\\ \hline 1,1,2\\ 1,2,1\\ \hline \end{array} $	I_{3},I_{1} IV,I_{2},I_{1} IV,I_{1},I_{2} IV^{*},I_{2},I_{1}	$egin{array}{c c} & & & & & \\ & & & & & \\ \hline & & & & & \\ 2:2 & & & \\ 2:1 & & & \\ \hline \end{array}$
A1 1 1 0 B1 0 0 1 372 A1 0 -1 0 B1 0 1 0 B2 0 1 0 C1 0 1 0	$ \begin{array}{r} -31 \\ -6 \\ -9 \\ -164 \\ -3054 \end{array} $	$ \begin{array}{c c} -98 \\ -67 \end{array} $ $ N = 372 = \\ 9 \\ 12 \\ $	$ \begin{array}{c c} 1 \\ \hline 0 \\ \hline 1 \\ \hline 0 \\ 0 \\ \hline 0 \\ \hline 0 \end{array} $	$ \begin{array}{c c} 1 & \\ \hline 1 & \\ \hline 2 & \\ 2 & \\ \hline 3 & \\ \end{array} $	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{ c c c } \hline 4,1\\ \hline 3,1\\ \hline geny clas\\ \hline 0,2,1\\ \hline 0,1,2\\ 0,2,1\\ \hline 0,18,1\\ \end{array} $	$ \begin{array}{ c c } \hline 2,1\\ \hline 3,1\\ \hline ses)\\ \hline 3,2,1\\ \hline 1,1,2\\ 1,2,1\\ \hline 1,3,18,1\\ \end{array} $	I_{3},I_{1} IV,I_{2},I_{1} IV,I_{1},I_{2} IV^{*},I_{2},I_{1} IV,I_{18},I_{1}	$egin{array}{ c c c c c c c c c c c c c c c c c c c$
A1 1 1 0 B1 0 0 1 372 A1 0 -1 0 B1 0 1 0 B2 0 1 0 C1 0 1 0	-31 -6 -9 -164 -3054 -250914		$ \begin{array}{c c} 1 & \\ \hline 0 & \\ \hline 0 & \\ \hline 0 & \\ 0 & \\ 0 & \\ \hline 0 & \\ 0 & \\ \end{array} $	$ \begin{array}{c cccc} 1 & & \\ \hline 1 & & \\ \hline 2 & & \\ 2 & & \\ \hline 3 & & \\ 1 & & \\ \end{array} $	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{ c c c } \hline 4,1\\ \hline 3,1\\ \hline geny clas\\ \hline 0,2,1\\ \hline 0,1,2\\ 0,2,1\\ \hline 0,18,1\\ 0,6,3\\ \hline \end{array} $	$ \begin{array}{ c c } \hline 2,1\\ \hline 3,1\\ \hline ses)\\ \hline 3,2,1\\ \hline 1,1,2\\ 1,2,1\\ \hline 1,6,3\\ \hline \end{array} $	I_{3},I_{1} IV,I_{2},I_{1} IV,I_{1},I_{2} IV^{*},I_{2},I_{1} IV,I_{18},I_{1} IV,I_{6},I_{3}	$egin{array}{ c c c c c c c c c c c c c c c c c c c$
A1 1 1 0 B1 0 0 1 372 A1 0 -1 0 B2 0 1 0 C1 0 1 0 C2 0 1 0 D1 0 1 0 C1 0 1 0 C2 C2 C3 C4 C5 C5 C5 C5 C5 C5 C5	-31 -6 -9 -164 -3054 -250914		$ \begin{array}{c c} 1 & \\ \hline 0 & \\ \hline 0 & \\ \hline 0 & \\ 0 & \\ \hline 0 & \\ \hline 1 & \\ \hline \end{array} $	$ \begin{array}{c c} 1 & \\ \hline 1 & \\ \hline 2 & \\ 2 & \\ \hline 3 & \\ 1 & \\ \hline 1 & \\ \end{array} $	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		$ \begin{array}{ c c } \hline 2,1\\ \hline 3,1\\ \hline ses)\\ \hline 3,2,1\\ \hline 1,1,2\\ 1,2,1\\ \hline 1,6,3\\ \hline \end{array} $	I_{3},I_{1} IV,I_{2},I_{1} IV,I_{1},I_{2} IV^{*},I_{2},I_{1} IV,I_{18},I_{1} IV,I_{6},I_{3}	372 2:2 2:1 3:2 3:1
A1 1 1 0 B1 0 0 1 372 A1 0 -1 0 B2 0 1 0 C2 0 1 0 -1 0 C2 0 1 0 -1 0 C2 0 1 0 -1 0 C2 0 1 0 -1 0 C2 C2 C3 C4 C5 C5 C5 C5 C5 C5 C5	-31 -6 -9 -164 -3054 -250914	-98 -67 N = 372 = 9 12 756 -69327 -48460347 9	$ \begin{array}{c c} 1 & \\ \hline 0 & \\ \hline 0 & \\ \hline 0 & \\ 0 & \\ \hline 0 & \\ \hline 1 & \\ \hline \end{array} $	1 1 1 1 2 2 3 1 1 1 = 373	$ \begin{array}{c cccc} & & & & & & \\ & & & & & & \\ & & & & $		$ \begin{array}{ c c } \hline 2,1\\ \hline 3,1\\ \hline ses)\\ \hline 3,2,1\\ \hline 1,1,2\\ 1,2,1\\ \hline 1,6,3\\ \hline \end{array} $	I_{3},I_{1} IV,I_{2},I_{1} IV,I_{1},I_{2} IV^{*},I_{2},I_{1} IV,I_{18},I_{1} IV,I_{6},I_{3} IV,I_{4},I_{1}	372 2:2 2:1 3:2
A1 1 1 0 B1 0 0 1 372 A1 0 -1 0 B1 0 1 0 B2 0 1 0 C1 0 1 0 C2 0 1 0 D1 0 1 0 373	$ \begin{array}{r} -31 \\ -6 \\ -9 \\ -164 \\ -3054 \\ -250914 \\ -2 \end{array} $		$ \begin{array}{c c} 1 & \\ \hline 0 & \\ \hline 0 & \\ \hline 1 & \\ \hline 0 & \\ 0 & \\ \hline 1 & \\ \hline \end{array} $	$ \begin{array}{c c} 1 & \\ \hline 1 & \\ \hline 2 & \\ 2 & \\ \hline 3 & \\ 1 & \\ \hline \end{array} $	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	4, 1 3, 1 geny clas 0, 2, 1 0, 1, 2 0, 2, 1 0, 18, 1 0, 6, 3 0, 4, 1 eny class)	2,1 3,1 ses) 3,2,1 1,1,2 1,2,1 1,6,3 3,4,1	I_{3},I_{1} IV,I_{2},I_{1} IV,I_{1},I_{2} IV^{*},I_{2},I_{1} IV,I_{18},I_{1} IV,I_{6},I_{3}	372 2:2 2:1 3:2 3:1 373
A1 1 1 0 B1 0 0 1 372 A1 0 -1 0 B1 0 1 0 B2 0 1 0 C1 0 1 0 C2 0 1 0 D1 0 1 0 373 A1 0 1 1 374	$ \begin{array}{r} -31 \\ -6 \\ -9 \\ -164 \\ -3054 \\ -250914 \\ -2 \\ -2 \end{array} $	$ -98 \\ -67 \\ N = 372 = \\ 9 \\ 12 \\ 756 \\ -69327 \\ -48460347 \\ 9 \\ N = 37 \\ -2 \\ N = 374 = \\ N = 374 = \\ $	$ \begin{array}{c c} 1 & \\ \hline 0 & \\ \hline 0 & \\ 0 & \\ 0 & \\ \hline 1 & \\ \hline = 2 \end{array} $	1 1 · 3 · 3 · 3 · 3 · 3 · 3 · 3 · 3 · 3 ·	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	4,1 3,1 geny clas 0,2,1 0,1,2 0,2,1 0,18,1 0,6,3 0,4,1 eny class) 1 ogeny cla	2,1 3,1 ses) 3,2,1 1,1,2 1,2,1 3,18,1 1,6,3 3,4,1	I_{3},I_{1} IV,I_{2},I_{1} IV,I_{1},I_{2} $IV*,I_{2},I_{1}$ IV,I_{18},I_{1} IV,I_{6},I_{3} IV,I_{4},I_{1} I_{1}	372 2:2 2:1 3:2 3:1 373
A1 1 1 0 B1 0 0 1 372 A1 0 -1 0 B1 0 1 0 B2 0 1 0 C1 0 1 0 C2 0 1 0 D1 0 1 0 373	$ \begin{array}{r} -31 \\ -6 \\ -9 \\ -164 \\ -3054 \\ -250914 \\ -2 \end{array} $		$ \begin{array}{c c} 1 & 0 \\ \hline 0 & 0 \end{array} $ $ \begin{array}{c c} 2^2 \\ \hline 1 & 0 \\ 0 & 0 \end{array} $ $ \begin{array}{c c} 0 & 0 \\ \hline 1 & 1 \end{array} $ $ = 2$	$ \begin{array}{c cccc} 1 & & \\ \hline 1 & & \\ \hline 2 & & \\ 2 & & \\ \hline 3 & & \\ 1 & & \\ \hline 1 & & \\ \hline 2 & & \\ \hline 3 & & \\ 1 & & \\ \hline 2 & & \\ \hline 2 & & \\ \hline 3 & & \\ 1 & & \\ \hline 2 & & \\ \hline 2 & & \\ \hline 2 & & \\ \hline 3 & & \\ 1 & & \\ \hline 2 & & \\ \hline 3 & & \\ \hline 1 & & \\ \hline 2 & & \\ 2 & & \\ \hline 2 & & \\ 2 & & \\ \hline 2 & & \\ 2 & &$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	4,1 3,1 geny clas 0,2,1 0,1,2 0,2,1 0,18,1 0,6,3 0,4,1 eny class) 1 ogeny cla 10,2,1	2,1 3,1 ses) 3,2,1 1,1,2 1,2,1 3,18,1 1,6,3 3,4,1	I_{3},I_{1} IV,I_{2},I_{1} IV,I_{1},I_{2} IV^{*},I_{2},I_{1} IV,I_{18},I_{1} IV,I_{6},I_{3} IV,I_{4},I_{1}	372 2:2 2:1 3:2 3:1 373
A1 1 1 0 B1 0 0 1 372 A1 0 -1 0 B1 0 1 0 B2 0 1 0 C1 0 1 0 C2 0 1 0 D1 0 1 0 373 A1 0 1 1 374			$ \begin{array}{c c} 1 & 0 \\ \hline 0 & 0 \\ \hline 1 & 0 \\ 0 & 0 \\ \hline 1 & 0 \\ 1 & 0 \\ \hline 1 & 0 \\ 1 & 0 \\ \hline 1 & 0 \\ 1 & 0 \\ \hline 1 & 0 \\ 1 & 0 \\ \hline 1 & 0 \\ 1 & 0 \\ \hline 1 & 0 \\ 1 & 0 \\ \hline 1 & 0 \\ 1 & 0 \\ \hline 1 & 0 \\ \hline 1 & 0 \\ 1 & 0 \\ \hline 1 & 0 \\ 1 & 0 \\ \hline 1 & 0 \\ 1 & 0 \\ 1 & 0 \\ \hline 1 & 0 \\ 1 & 0 \\ 1 & 0 \\ 1 & 0 \\ 1 & 0 \\ 1 & 0 \\ 1 & 0 \\ 1 & 0 \\ 1 & 0 \\ 1 & 0 \\ 1 & 0 \\ 1 & 0 \\ 1 & 0 \\ 1 & 0 $	$ \begin{array}{c cccc} 1 & & \\ \hline 1 & & \\ \hline 2 & & \\ 2 & & \\ \hline 3 & & \\ 1 & & \\ \hline -1 & & \\ \hline 2 & & \\ 2 & & \\ \hline 2 & & \\ 2 & & \\ \hline 2 & & \\ 2 & & \\ \hline 2 & & \\ 2 & & \\ \hline 2 & & \\ 2 & & \\ 2 & & \\ \hline 2 & & \\ 2 & $	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	4,1 3,1 geny clas 0,2,1 0,1,2 0,2,1 0,18,1 0,6,3 0,4,1 eny class) 1 ogeny cla 10,2,1	2,1 3,1 ses) 3,2,1 1,1,2 1,2,1 3,18,1 1,6,3 3,4,1 1 ss) 2,2,1 1,2,2	I_{3},I_{1} IV,I_{2},I_{1} IV,I_{1},I_{2} IV,I_{1},I_{2} IV,I_{18},I_{1} IV,I_{6},I_{3} IV,I_{4},I_{1} I_{1} I_{1}	372 2:2 2:1 3:2 3:1 374 2:2
A1 1 1 0 B1 0 0 1 372 A1 0 -1 0 B1 0 1 0 B2 0 1 0 C1 0 1 0 C2 0 1 0 D1 0 1 0 373 A1 0 1 1 A2 1 -1 0 A2 1 -1 0 377	$ \begin{array}{r} -31 \\ -6 \\ -9 \\ -164 \\ -3054 \\ -250914 \\ -2 \\ \hline -2 \\ \hline -2 \\ \hline -32 \\ 128 \\ \end{array} $	-98 -67 N = 372 = 9 12 756 -69327 -48460347 9 N = 37 -2 N = 374 = 0 -96 N = 377	$ \begin{array}{c c} 1 & 0 \\ \hline 0 & 0 \\ \hline 1 & 0 \\ 0 & 0 \\ \hline 1 & 0 \\ 1 & 0 \\ \hline 1 & 0 \\ 1 & 0 \\ \hline 1 & 0 \\ 1 & 0 \\ \hline 1 & 0 \\ 1 & 0 \\ \hline 1 & 0 \\ 1 & 0 \\ \hline 1 & 0 \\ 1 & 0 \\ \hline 1 & 0 \\ 1 & 0 \\ \hline 1 & 0 \\ \hline 1 & 0 \\ 1 & 0 \\ \hline 1 & 0 \\ 1 & 0 \\ \hline 1 & 0 \\ 1 & 0 \\ 1 & 0 \\ \hline 1 & 0 \\ 1 & 0 \\ 1 & 0 \\ 1 & 0 \\ 1 & 0 \\ 1 & 0 \\ 1 & 0 \\ 1 & 0 \\ 1 & 0 \\ 1 & 0 \\ 1 & 0 \\ 1 & 0 \\ 1 & 0 \\ 1 & 0 $	$ \begin{array}{c cccc} 1 & & \\ \hline 1 & & \\ \hline 2 & & \\ 2 & & \\ \hline 3 & & \\ 1 & & \\ \hline 2 & & \\ \hline 3 & & \\ \hline 1 & & \\ \hline 2 & & \\ \hline 2 & & \\ \hline 3 & & \\ \hline 1 & & \\ \hline 2 & & \\ \hline 2 & & \\ \hline 3 & & \\ \hline 1 & & \\ \hline 2 & & \\ \hline 2 & & \\ \hline 3 & & \\ \hline 1 & & \\ \hline 2 & & \\ \hline 2 & & \\ \hline 3 & & \\ \hline 1 & & \\ \hline 2 & & \\ \hline 2 & & \\ \hline 3 & & \\ \hline 1 & & \\ \hline 2 & & \\ \hline 2 & & \\ \hline 3 & & \\ \hline 1 & & \\ \hline 2 & & \\ \hline 2 & & \\ \hline 3 & & \\ \hline 1 & & \\ \hline 2 & & \\ \hline 2 & & \\ \hline 3 & & \\ \hline 3 & & \\ \hline 1 & & \\ \hline 2 & & \\ \hline 2 & & \\ \hline 1 & & \\ \hline 2 & & \\ \hline 2 & & \\ \hline 1 & & \\ \hline 3 & & \\ \hline 2 & & \\ \hline 1 & & \\ \hline 2 & & \\ \hline 2 & & \\ \hline 1 & & \\ \hline 3 & & \\ \hline 2 & & \\ \hline 3 & & \\ \hline 3 & & \\ \hline 2 & & \\ \hline 3 & & \\ \hline 3 & & \\ \hline 2 & & \\ \hline 3 & & \\ \hline 4 & & \\ 4 & & \\ \hline 4 & & \\ 4 & &$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	4,1 3,1 geny clas 0,2,1 0,1,2 0,2,1 0,18,1 0,6,3 0,4,1 eny class) 1 ogeny class 10,2,1 5,4,2 geny class	2,1 3,1 ses) 3,2,1 1,1,2 1,2,1 3,18,1 1,6,3 3,4,1 1 ss) 2,2,1 1,2,2	I_{3},I_{1} IV,I_{2},I_{1} IV,I_{1},I_{2} IV,I_{1},I_{2} IV,I_{18},I_{1} IV,I_{6},I_{3} IV,I_{4},I_{1} I_{1} I_{1} I_{10},I_{2},I_{1} I_{5},I_{4},I_{2}	$egin{array}{c ccccccccccccccccccccccccccccccccccc$
A1		-98 -67 N = 372 = 9 12 756 -69327 -48460347 9 N = 37 -2 N = 374 = 0 -96 N = 377	$ \begin{array}{c c} 1 & 0 \\ \hline 0 & 0 \\ \hline 0 & 0 \\ \hline 0 & 0 \\ \hline 1 & 0 \\ \hline 1 & 0 \\ \hline = 2 \\ \hline 1 & 1 \end{array} $	$ \begin{array}{c cccc} 1 & & \\ \hline 1 & & \\ \hline 2 & & \\ 2 & & \\ \hline 3 & & \\ 1 & & \\ \hline 1 & & \\ \hline 2 & & \\ \hline 2 & & \\ \hline 2 & & \\ \hline 1 & & \\ \hline 2 & & \\ 2 & & \\ \hline 2 & & \\ \hline 2 & & \\ 2 & & \\ \hline 2 & & \\ 2 & & \\ \hline 2 & & \\ 2 & & \\ \hline 2 & & \\ 2 & & \\ \hline 2 & & \\ 2 & & \\ 2 & & \\ \hline 2 & & \\ 2 &$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	4,1 3,1 geny class 0,2,1 0,1,2 0,2,1 0,18,1 0,6,3 0,4,1 eny class) 1 ogeny class 1,1	2,1 3,1 ses) 3,2,1 1,1,2 1,2,1 3,18,1 1,6,3 3,4,1 1 ss) 2,2,1 1,2,2	I_{3},I_{1} IV,I_{2},I_{1} IV,I_{1},I_{2} IV,I_{1},I_{2} IV,I_{18},I_{1} IV,I_{6},I_{3} IV,I_{4},I_{1} I_{1} I_{1}	372 $2:2$ $2:1$ $3:3$ 373 374 $2:2$ $2:1$
A1			$ \begin{array}{c c} 1 & 2^{2} \\ \hline 1 & 0 & 0 \\ \hline 0 & 0 & 0 \\ \hline 1 & 1 & 0 \\ \hline = 2 & 1 & 1 \\ \hline 1 & 1 & 0 & 0 \\ \hline = 1 & 1 & 0 & 0 \\ \hline 1 & 1 & 0 & 0 & 0 \\ \hline = 2 & 1 & 0 & 0 & 0 \\ \hline 1 & 1 & 0 & 0 & 0 & 0 \\ \hline = 2 & 1 & 0 & 0 & 0 & 0 \\ \hline 1 & 1 & 0 & 0 & 0 & 0 \\ \hline = 3 & 0 & 0 & 0 & 0 & 0 \\ \hline = 4 & 0 & 0 & 0 & 0 & 0 & 0 \\ \hline = 5 & 0 & 0 & 0 & 0 & 0 & 0 \\ \hline = 6 & 0 & 0 & 0 & 0 & 0 & 0 \\ \hline = 7 & 0 & 0 & 0 & 0 & 0 & 0 \\ \hline = 1 & 0 & 0 $	$ \begin{array}{c cccc} 1 & & \\ \hline 1 & & \\ \hline 2 & & \\ 2 & & \\ \hline 3 & & \\ 1 & & \\ \hline 1 & & \\ \hline 2 & & \\ \hline 2 & & \\ \hline 2 & & \\ \hline 1 & & \\ \hline 2 & & \\ 2 & & \\ \hline 2 & & \\ \hline 2 & & \\ 2 & & \\ \hline 2 & & \\ 2 & & \\ \hline 2 & & \\ 2 & & \\ \hline 2 & & \\ 2 & & \\ \hline 2 & & \\ 2 & & \\ 2 & & \\ \hline 2 & & \\ 2 &$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	4,1 3,1 geny clas 0,2,1 0,1,2 0,2,1 0,18,1 0,6,3 0,4,1 eny class) 1 ogeny class 10,2,1 5,4,2 geny class	2,1 3,1 ses) 3,2,1 1,1,2 1,2,1 3,18,1 1,6,3 3,4,1 1 ss) 2,2,1 1,2,2	I_{3},I_{1} IV,I_{2},I_{1} IV,I_{1},I_{2} IV,I_{1},I_{2} IV,I_{18},I_{1} IV,I_{6},I_{3} IV,I_{4},I_{1} I_{1} I_{1} I_{10},I_{2},I_{1} I_{5},I_{4},I_{2}	372 2:2 2:1 3:2 3:1 374 2:2 2:1 377

						Iml		1(A)	1 (2)		IZ . 1. t	T
	a_1 a_2 a_3	3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
378	3			N=3	78 =	= 2 ·	3^3 ·	7 (8 is	ogeny clas	sses)		378
A1	1 - 1		10	5	0	3	_	9, 3, 1	9,0,1	9, 1, 1	I_9,II,I_1	3 :2
A2 A3		1 1 -	-110 -9560 -	-539 -357371	$0 \\ 0$	3 1	_	3, 9, 3 $1, 11, 1$	3, 0, 3 $1, 0, 1$	$\begin{bmatrix} 3, 3, 3 \\ 1, 1, 1 \end{bmatrix}$	$\begin{bmatrix} I_3, IV^*, I_3 \\ I_1, II^*, I_1 \end{bmatrix}$	3:1,3 3:2
B1		 0	-12	24	0	3	! 	3, 3, 3	$\begin{bmatrix} 1, 0, 1 \\ 3, 0, 3 \end{bmatrix}$	$\begin{bmatrix} 1, 1, 1 \\ 1, 1, 3 \end{bmatrix}$	I_3,II,I_3	$\begin{bmatrix} 3 : 2 \\ 3 : 2, 3 \end{bmatrix}$
B2		0	93	-235	0	1	_	9, 9, 1	9,0,1	1, 1, 0 $1, 1, 1$	I_9,IV^*,I_1	3 :1
B3	1 -1	0 -	-1062	13590	0	3		1, 5, 1	1,0,1	1,3,1	I_1,IV,I_1	3 :1
C1	1 - 1	1	-2	-107	0	1		2, 11, 1	[2,0,1]	[2, 1, 1]	I_2,II^*,I_1	
D1	$\begin{vmatrix} 1 & -1 \\ -1 & -1 \end{vmatrix}$	0_	0	4	1	1		2, 5, 1	[2,0,1]	[2, 3, 1]	I_2 ,IV, I_1	
E1	1 -1		-11	-37	0	3	-	6, 3, 3	6, 0, 3	6, 1, 3	I_6,II,I_3	3 :2,3
E2 E3		1 - 1	$-1271 \\ 94$	-17117 929	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$\frac{1}{3}$		2, 9, 1 $18, 5, 1$	2,0,1 $18,0,1$	$\begin{bmatrix} 2, 3, 1 \\ 18, 1, 1 \end{bmatrix}$	$\begin{array}{c c} I_2,IV^*,I_1 \\ I_{18},IV,I_1 \end{array}$	3 :1 3 :1
F1	1 -1		 -141	681	0 1	3	! 	2, 3, 1	$\begin{bmatrix} 10, 0, 1 \\ 2, 0, 1 \end{bmatrix}$	$\begin{bmatrix} 10, 1, 1 \\ 2, 1, 1 \end{bmatrix}$	$\begin{bmatrix} 1_{18}, \mathbf{I} & \mathbf{V}, \mathbf{I}_1 \\ I_2, \mathbf{II}, \mathbf{I}_1 \end{bmatrix}$	$\begin{bmatrix} {f 3} & 1 \\ {f 7} & {f 7} & {f 7} \\ {f 3} & {f :} & {f 2} \end{bmatrix}$
F2		0	-96	1088	1	3	_	6, 9, 3	$\begin{bmatrix} 2, 0, 1 \\ 6, 0, 3 \end{bmatrix}$	$\begin{bmatrix} 2, 1, 1 \\ 2, 3, 3 \end{bmatrix}$	I_{6}, IV^{*}, I_{3}	3:1,3
F3	1 -1	0	849	-25939	1	1	-	18, 11, 1	18, 0, 1	2, 1, 1	I_{18},II^*,I_1	3 :2
G1	1 -1	1	3967	38449	0	1	-	5, 11, 7	[5, 0, 7]	[5, 1, 1]	I_5,II^*,I_7	
H1	1 -1	0	441	-1571	0	1	-	5, 5, 7	[5, 0, 7]	$\begin{bmatrix} 1,1,1 \end{bmatrix}$	I_5,IV,I_7	
380)			N = 38	0 =	$=2^2$	5.	19 (2 is	sogeny cla	sses)		380
A1		0	-8	-3	1	2	+	4, 1, 2	0, 1, 2	1, 1, 2	IV,I_1,I_2	2 :2
A2	0 0	0	-103	-402	1	2	+	8, 2, 1	0, 2, 1	1, 2, 1	IV^*,I_2,I_1	2 :1
B1	_	0	-921	10346	0	2	+	4, 5, 4	0, 5, 4	3, 1, 2	IV,I_5,I_4	2 :2
B2	0 -1	0	884	44280	0	2	_	8, 10, 2	0, 10, 2	3, 2, 2	IV^*,I_{10},I_2	2 :1
381	L			N=3	881	=3	12'	7 (2 iso	geny class	ses)		381
A1	0 1	1	-11	-16	1	1	+	5,1	5,1	5,1	I_5,I_1	
B1	0 1	1	-4	-5	0	1	+	1, 1	1,1	1, 1	I_1,I_1	
384	1			N = 1	384	$=2^{'}$	$7 \cdot 3$	(8 isos	geny classe	es)		384
A1	0 1	0	-3	-3	0	2	+	8, 1	0,1	2,1	III,I_1	2 :2
A2	0 1	0_	7		0	2		13,2	0,2	2,2	I_2^*,I_2	2 :1
B1		0	2	-2	0	2	-	7, 2	0,2	1,2	II,I_2	2 :2
B2		0 -	-13 	-11 	0	2	+	14,1	0,1	2,1	$\prod_{i=1}^{n}\prod_{j=1}^{n}\prod_{i=1}^{n}\prod_{j=1}^{n}\prod_{i=1}^{n}\prod_{j=1}^{n}\prod_{i=1}^{n}\prod_{j=1}^{n}\prod_{i=1}^{n}\prod_{j=1}^{n}\prod_{i=1}^{n}\prod_{j=1}^{n}\prod_{i=1}^{n}\prod_{j=1}^{n}\prod_{i=1}^{n}\prod_{j=1}^{n}\prod_{i=1}^{n}\prod_{j=1}^{n}\prod_{i=1}^{n}\prod_{j=1}^{n}\prod_{i=1}^{n}\prod_{j=1}^{n}\prod_{i=1}^{n}\prod_{j=1}^{n}\prod_{i=1}^{n}\prod_{j=1}^{n}\prod_{i=1}^{n}\prod_{j=1}^{n}\prod_{i=1}^{n}\prod_{j=1}^{n}\prod_{i=1}^{n}\prod_{j=1}^{n}\prod_{i=1}^{n}\prod_{j=1}^{n}\prod_{i=1}^{n}\prod_{j=1}^{$	2 :1
C1 C2		$0 \\ 0$	$ \begin{array}{c} 2 \\ -13 \end{array} $	2 11	0	$\frac{2}{2}$	_	$7, 2 \\ 14, 1$	0, 2	1,2	$II,I_2 \\ III^*,I_1$	2:2 2:1
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$		 0	-13 	3	1	$\frac{1}{2}^{2}$	+ 		0,1	$\begin{bmatrix} 2,1 \\ -2,1 \end{bmatrix}$!	$egin{array}{c cccc} 2 & 1 & 1 & 1 \\ \hline 2 & 2 & 2 & 1 \\ \hline \end{array}$
D1 $D2$	_	0	-3	ა 9	1	$\frac{2}{2}$	+	$8, 1 \\ 13, 2$	$0, 1 \\ 0, 2$	$2, 1 \\ 4, 2$	$egin{array}{c} ext{III}, ext{I}_1 \ ext{I}_2, ext{I}_2 \end{array}$	2:2 2:1
E1	<u>-</u>	 0	- -6	-18	0	$\frac{1}{2}^{-}$	 -	7,6	$\begin{bmatrix} 0, 6 \end{bmatrix}$	$\frac{1}{1,6}$	$ II,I_6 $	2 :2
E2		0	-141	-693	0	2	+	14, 3	0,3	2, 3	III^*,I_3	2 :1
F1	0 -1	0	-6	18	0	2	 –	7,6	0,6	1,2	II,I ₆	2 :2
F2	0 -1	0 _	-141	693	0	2	+	14,3	0,3	2,1	III*,I ₃	2 :1
G1	_	0	-35	-69	0	2	+	8, 3	0,3	2,1	III,I_3	2 :2
G2	<u> </u>	0	-25 	-119 	0	$\begin{bmatrix} 2 \\ -\frac{1}{2} \end{bmatrix}$	-	13,6	0,6	$\frac{1}{1} - \frac{2}{2} - \frac{2}{3} = -\frac{2}{3}$	I ₂ ,I ₆	2 :1
H1 H2		$0 \\ 0$	$-35 \\ -25$	69 119	1 1	$\frac{2}{2}$	+	$8, 3 \\ 13, 6$	$0, 3 \\ 0, 6$	2, 3 $4, 6$	$III,I_3 \ I_2^*,I_6$	2:2 2:1
114	U I	U	-20	119	1	4		10,0	0,0	4 , ∪	12,16	4.1

	a_1	$a_2 a_3$	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
38	5			M 205		E	7	11 (9;		,,,,,,		385
	ı						<i>(</i> ·	`	sogeny cla	<u> </u>	1	1
A1		-1 1	-37	124		4	_	2, 1, 4	2, 1, 4	2, 1, 4	I_2,I_1,I_4	2 :2
A2			-642	6416		4		4, 2, 2	4, 2, 2	4, 2, 2	I_4,I_2,I_2	2:1,3,4
A3		-1 1	-697	5294		2	+	8, 4, 1		8, 2, 1	I_8,I_4,I_1	2 :2
A4	!		-10267	402966	- !	2	+	2, 1, 1	$\begin{bmatrix} 2, 1, 1 \\ \end{bmatrix}$	$\begin{bmatrix} 2, 1, 1 \\ \end{bmatrix}$	I_2,I_1,I_1	2 :2
B1		0 0	0	7	1	2	_	2, 1, 2	2, 1, 2	2, 1, 2	I_2,I_1,I_2	2:2
B2	1	0 0	-55	150	1	2	+	4, 2, 1	4, 2, 1	4, 2, 1	I_4,I_2,I_1	2 : 1
38	7			N = 38	7 =	$= 3^{2}$	² · 4	3 (5 is	ogeny clas	sses)		387
		0 1	-174	-887	_			$\frac{10,1}{10,1}$	4,1	2,1	I_4^*, I_1	
	'				-		 			:	[
 RI	I - 	-1 0	-15	-46	1	1 	<u> -</u> .	9, 1	0,1	$\frac{1}{2}, \frac{1}{2}$	$\prod_{i=1}^{n} \prod_{j=1}^{n} \prod_{i=1}^{n} \prod_{j=1}^{n} \prod_{j=1}^{n} \prod_{j=1}^{n} \prod_{i=1}^{n} \prod_{j=1}^{n} \prod_{i=1}^{n} \prod_{j=1}^{n} \prod_{j$	
C1	1 -	-1 1	-2	2	1	1	-	3,1	0,1	2, 1	$ $ III, I_1	
$\overline{D1}$	1 -	-1 1	-221	1316	0	$\overline{4}$	+	9, 1	3,1	4,1	I_3^*,I_1	2 :2
D2	1 -	-1 1	-266	776	0	4	+	12, 2	6, 2	4, 2	I_6^*, I_2	2:1,3,4
D3	1 -	-1 1	-2201	-38698	0	2	+	18, 1	12, 1	4, 1	I_{12}^*, I_1	2 :2
D4	1 -	-1 1	949	5150	0	2	-	9, 4	3,4	2,2	$\mathrm{I}_3^*,\!\mathrm{I}_4$	2:2
E1	0	0 1	-3	-9	0	1	-	6, 1	0,1	2,1	I_0^*, I_1	
38	9			N =	38	9 =	38	9 (1 iso	ogeny clas	s)		389
A1	0	1 1	-2	0	2	1	+	1	1	1	${ m I}_1$	
	1										l	
	0			N = 390 =	= 2	2 · 3	. 5	. 13 (7	isogeny c	lasses)		390
39		1 0	-13	N = 390 = 13				,	isogeny c		I4.I2.I1.I1	1
39 A1	1	1 0 1 0	-13 -33	13	1	2	+	4, 2, 1, 1	4, 2, 1, 1	2, 2, 1, 1	-, -, -, -	2 :2
39	1 1	1 0 1 0 1 0	-13 -33 -483		1 1	2 4	+++	4, 2, 1, 1 2, 4, 2, 2	$ \begin{array}{ c c c c } \hline 4, 2, 1, 1 \\ 2, 4, 2, 2 \end{array} $	$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	I_2,I_4,I_2,I_2	$egin{array}{c} {f 2}:2 \ {f 2}:1,3,4 \end{array}$
39 A1 A2	1 1 1	1 0	-33	13 -63	1 1 1	2 4	+++++	4, 2, 1, 1	4, 2, 1, 1		$ \begin{vmatrix} I_2, I_4, I_2, I_2 \\ I_1, I_2, I_1, I_4 \end{vmatrix} $	$egin{array}{c} {f 2}:2 \ {f 2}:1,3,4 \ {f 2}:2 \end{array}$
39 A1 A2 A3 A4	1 1 1 1	$\begin{array}{ccc} 1 & 0 \\ 1 & 0 \\ 1 & 0 \end{array}$	$ \begin{array}{r} -33 \\ -483 \\ 97 \\ \end{array} $	$ \begin{array}{r} 13 \\ -63 \\ -4293 \\ -297 \end{array} $	1 1 1 1	2 4 2 2	+ + + -	4, 2, 1, 1 2, 4, 2, 2 1, 2, 1, 4 1, 8, 4, 1	4, 2, 1, 1 2, 4, 2, 2 1, 2, 1, 4 1, 8, 4, 1	$\begin{bmatrix} 2, 2, 1, 1 \\ 2, 2, 2, 2 \\ 1, 2, 1, 2 \\ 1, 2, 2, 1 \end{bmatrix}$	$\begin{bmatrix} I_2, I_4, I_2, I_2 \\ I_1, I_2, I_1, I_4 \\ I_1, I_8, I_4, I_1 \end{bmatrix}$	2:2 2:1,3,4 2:2 2:2
39 A1 A2 A3	1 1 1	1 0 1 0 1 0 1 1	$ \begin{array}{r} -33 \\ -483 \\ 97 \\ \hline 15 \end{array} $	$ \begin{array}{r} 13 \\ -63 \\ -4293 \\ -297 \\ \hline 15 \end{array} $	1 1 1 1 0	2 4 2	+ + +	4, 2, 1, 1 2, 4, 2, 2 1, 2, 1, 4 1, 8, 4, 1 8, 1, 2, 1	4, 2, 1, 1 2, 4, 2, 2 1, 2, 1, 4 1, 8, 4, 1 8, 1, 2, 1	2, 2, 1, 1 2, 2, 2, 2 1, 2, 1, 2 1, 2, 2, 1 8, 1, 2, 1	$\begin{vmatrix} I_2,I_4,I_2,I_2\\I_1,I_2,I_1,I_4\\I_1,I_8,I_4,I_1\\I_8,I_1,I_2,I_1 \end{vmatrix}$	$\begin{vmatrix} 2 : 1, 3, 4 \\ 2 : 2 \\ 2 : 2 \end{vmatrix}$
39 A1 A2 A3 A4 B1	1 1 1 1 1	1 0 1 0 1 0 1 1	$ \begin{array}{r} -33 \\ -483 \\ 97 \\ \end{array} $	$ \begin{array}{r} 13 \\ -63 \\ -4293 \\ -297 \end{array} $	1 1 1 1 0 0	2 4 2 2 - 4	+ + + +	4, 2, 1, 1 2, 4, 2, 2 1, 2, 1, 4 1, 8, 4, 1 8, 1, 2, 1 4, 2, 4, 2	4, 2, 1, 1 2, 4, 2, 2 1, 2, 1, 4 1, 8, 4, 1	2, 2, 1, 1 2, 2, 2, 2 1, 2, 1, 2 1, 2, 2, 1 8, 1, 2, 1 4, 2, 4, 2	$\begin{vmatrix} I_2,I_4,I_2,I_2\\I_1,I_2,I_1,I_4\\I_1,I_8,I_4,I_1\\ \end{vmatrix} \begin{bmatrix} I_8,I_1,I_2,I_1\\I_4,I_2,I_4,I_2 \end{bmatrix}$	2:2 2:1,3,4 2:2 2:2 2:2
39 A1 A2 A3 A4 B1 B2	1 1 1 1 1 1 1	1 0 1 0 1 0 1 1 1 1 1 1	$ \begin{array}{r} -33 \\ -483 \\ 97 \\ \hline 15 \\ -65 \end{array} $	$ \begin{array}{r} 13 \\ -63 \\ -4293 \\ -297 \\ \hline 15 \\ 47 \end{array} $	1 1 1 1 0 0 0	2 4 2 2 -4 8	+ + + + +	4, 2, 1, 1 2, 4, 2, 2 1, 2, 1, 4 1, 8, 4, 1 8, 1, 2, 1	4, 2, 1, 1 2, 4, 2, 2 1, 2, 1, 4 1, 8, 4, 1 8, 1, 2, 1 4, 2, 4, 2	$\begin{bmatrix} 2, 2, 1, 1 \\ 2, 2, 2, 2 \\ 1, 2, 1, 2 \\ 1, 2, 2, 1 \\ \hline 8, 1, 2, 1 \\ 4, 2, 4, 2 \\ 2, 2, 2, 4 \end{bmatrix}$	$\begin{vmatrix} I_2,I_4,I_2,I_2\\I_1,I_2,I_1,I_4\\I_1,I_8,I_4,I_1\\I_8,I_1,I_2,I_1 \end{vmatrix}$	2:2 2:1,3,4 2:2 2:2 2:2
39 A1 A2 A3 A4 B1 B2 B3	$egin{array}{ c c c c c c c c c c c c c c c c c c c$	1 0 1 0 1 0 1 1 1 1 1 1	$ \begin{array}{r} -33 \\ -483 \\ 97 \\ \hline 15 \\ -65 \\ -565 \end{array} $	13 -63 -4293 -297 	1 1 1 0 0 0 0 0	2 4 2 2 	+ + + + + +	4, 2, 1, 1 2, 4, 2, 2 1, 2, 1, 4 1, 8, 4, 1 8, 1, 2, 1 4, 2, 4, 2 2, 4, 2, 4	$\begin{bmatrix} 4,2,1,1\\2,4,2,2\\1,2,1,4\\1,8,4,1\\\hline 8,1,2,1\\4,2,4,2\\2,4,2,4 \end{bmatrix}$	$\begin{bmatrix} 2, 2, 1, 1 \\ 2, 2, 2, 2 \\ 1, 2, 1, 2 \\ 1, 2, 2, 1 \end{bmatrix}$ $\begin{bmatrix} 8, 1, 2, 1 \\ 4, 2, 4, 2 \\ 2, 2, 2, 4 \\ 2, 1, 8, 1 \end{bmatrix}$	$ \begin{vmatrix} I_2,I_4,I_2,I_2\\I_1,I_2,I_1,I_4\\I_1,I_8,I_4,I_1\\\hline I_8,I_1,I_2,I_1\\I_4,I_2,I_4,I_2\\I_2,I_4,I_2,I_4 \end{vmatrix} $	2:2 2:1,3,4 2:2 2:2 2:2 2:1,3,4 2:2,5,6 2:2
39 A1 A2 A3 A4 B1 B2 B3 B4	1 1 1 1 1 1 1 1 1	1 0 1 0 1 0 1 1 1 1 1 1 1 1	$ \begin{array}{r} -33 \\ -483 \\ 97 \\ \hline 15 \\ -65 \\ -565 \\ -845 \end{array} $	13 -63 -4293 -297 	1 1 1 0 0 0 0 0	2 4 2 2 -4 8 4 4	+++++++++++++++++++++++++++++++++++++++	4, 2, 1, 1 2, 4, 2, 2 1, 2, 1, 4 1, 8, 4, 1 8, 1, 2, 1 4, 2, 4, 2 2, 4, 2, 4 2, 1, 8, 1	$\begin{bmatrix} 4,2,1,1\\2,4,2,2\\1,2,1,4\\1,8,4,1 \end{bmatrix}$ $\begin{bmatrix} 8,1,2,1\\4,2,4,2\\2,4,2,4\\2,1,8,1 \end{bmatrix}$	$\begin{bmatrix} 2, 2, 1, 1 \\ 2, 2, 2, 2 \\ 1, 2, 1, 2 \\ 1, 2, 2, 1 \end{bmatrix}$ $\begin{bmatrix} 8, 1, 2, 1 \\ 4, 2, 4, 2 \\ 2, 2, 2, 4 \\ 2, 1, 8, 1 \end{bmatrix}$	$\begin{vmatrix} I_2,I_4,I_2,I_2\\ I_1,I_2,I_1,I_4\\ I_1,I_8,I_4,I_1\\ \hline I_8,I_1,I_2,I_1\\ I_4,I_2,I_4,I_2\\ I_2,I_4,I_2,I_4\\ I_2,I_1,I_8,I_1\\ I_1,I_8,I_1,I_2 \end{vmatrix}$	2:2 2:1,3,4 2:2 2:2 2:2 2:1,3,4 2:2,5,6 2:2
39 A1 A2 A3 A4 B1 B2 B3 B4 B5	1 1 1 1 1 1 1 1 1	1 0 1 0 1 0 1 1 1 1 1 1 1 1 1 1	$ \begin{array}{r} -33 \\ -483 \\ 97 \\ \hline 15 \\ -65 \\ -565 \\ -845 \\ -9015 \end{array} $	13 -63 -4293 -297 	1 1 1 0 0 0 0 0 0	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	+++-	4, 2, 1, 1 2, 4, 2, 2 1, 2, 1, 4 1, 8, 4, 1 8, 1, 2, 1 4, 2, 4, 2 2, 4, 2, 4 2, 1, 8, 1 1, 8, 1, 2 1, 2, 1, 8	$ \begin{vmatrix} 4,2,1,1\\2,4,2,2\\1,2,1,4\\1,8,4,1\\8,1,2,1\\4,2,4,2\\2,4,2,4\\2,1,8,1\\1,8,1,2\\1,2,1,8 \end{vmatrix} $	$\begin{bmatrix} 2,2,1,1\\ 2,2,2,2\\ 1,2,1,2\\ 1,2,2,1\\ 8,1,2,1\\ 4,2,4,2\\ 2,2,2,4\\ 2,1,8,1\\ 1,2,1,2\\ 1,2,1,8\\ \end{bmatrix}$	$ \begin{vmatrix} I_2,I_4,I_2,I_2\\I_1,I_2,I_1,I_4\\I_1,I_8,I_4,I_1 \end{vmatrix} $ $ \begin{vmatrix} I_8,I_1,I_2,I_1\\I_4,I_2,I_4,I_2\\I_2,I_4,I_2,I_4\\I_2,I_1,I_8,I_1\\I_1,I_8,I_1,I_2\\I_1,I_2,I_1,I_8 \end{vmatrix} $	2:2 2:1,3,4 2:2 2:2 2:2 2:1,3,4 2:2,5,6 2:2 2:3 2:3
39 A1 A2 A3 A4 B1 B2 B3 B4 B5 B6	1 1 1 1 1 1 1 1 1 1	1 0 1 0 1 0 1 1 1 1 1 1 1 1 1 1 1 1	$ \begin{array}{r} -33 \\ -483 \\ 97 \\ \hline 15 \\ -65 \\ -845 \\ -9015 \\ -115 \\ \end{array} $	13 -63 -4293 -297 -15 47 -5353 9095 -333213 -13093	1 1 1 0 0 0 0 0 0 0	2 4 2 2 -4 8 4 4 2 2	+++	4, 2, 1, 1 2, 4, 2, 2 1, 2, 1, 4 1, 8, 4, 1 8, 1, 2, 1 4, 2, 4, 2 2, 4, 2, 4 2, 1, 8, 1 1, 8, 1, 2	$ \begin{vmatrix} 4,2,1,1\\2,4,2,2\\1,2,1,4\\1,8,4,1\\\hline 8,1,2,1\\4,2,4,2\\2,4,2,4\\2,1,8,1\\1,8,1,2\\ \end{vmatrix} $	$\begin{bmatrix} 2,2,1,1\\ 2,2,2,2\\ 1,2,1,2\\ 1,2,2,1\\ \hline \\ 8,1,2,1\\ 4,2,4,2\\ 2,2,2,4\\ 2,1,8,1\\ 1,2,1,2\\ 1,2,1,8\\ \hline \\ 6,3,2,1\\ \end{bmatrix}$	$ \begin{vmatrix} I_2,I_4,I_2,I_2\\I_1,I_2,I_1,I_4\\I_1,I_8,I_4,I_1 \end{vmatrix} $ $ \begin{vmatrix} I_8,I_1,I_2,I_1\\I_4,I_2,I_4,I_2\\I_2,I_4,I_2,I_4\\I_2,I_1,I_8,I_1\\I_1,I_8,I_1,I_2\\I_1,I_2,I_1,I_8 \end{vmatrix} $	2:2 2:1,3,4 2:2 2:2 2:2 2:1,3,4 2:2,5,6 2:2 2:3 2:3
39 A1 A2 A3 A4 B1 B2 B3 B4 B5 B6 C1	1 1 1 1 1 1 1 1 1 1 1	1 0 1 0 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1	$ \begin{array}{r} -33 \\ -483 \\ 97 \\ -565 \\ -565 \\ -845 \\ -9015 \\ -115 \\ -6 \end{array} $	13 -63 -4293 -297 -15 47 -5353 9095 -333213 -13093	1 1 1 1 0 0 0 0 0 0 0	2 4 2 2 4 8 4 4 2 2 6 6	+++++++	4, 2, 1, 1 2, 4, 2, 2 1, 2, 1, 4 1, 8, 4, 1 8, 1, 2, 1 4, 2, 4, 2 2, 4, 2, 4 2, 1, 8, 1 1, 8, 1, 2 1, 2, 1, 8 6, 3, 2, 1	$\begin{bmatrix} 4,2,1,1\\2,4,2,2\\1,2,1,4\\1,8,4,1\\\hline 1,8,4,2\\2,4,2,4\\2,1,8,1\\1,8,1,2\\1,2,1,8\\\hline 1,2,1,8\\3,6,1,2\\ \end{bmatrix}$	$\begin{bmatrix} 2,2,1,1\\ 2,2,2,2\\ 1,2,1,2\\ 1,2,2,1 \end{bmatrix} \\ 8,1,2,1\\ 4,2,4,2\\ 2,2,2,4\\ 2,1,8,1\\ 1,2,1,2\\ 1,2,1,8 \end{bmatrix} \\ 6,3,2,1\\ 3,6,1,2 \\ \end{bmatrix}$	$ \begin{vmatrix} I_2,I_4,I_2,I_2\\I_1,I_2,I_1,I_4\\I_1,I_8,I_4,I_1\\ $	2:2 $2:1,3,4$ $2:2$ $2:2$ $2:3$ $2:2,5,6$ $2:2$ $2:3$ $2:3$ $2:1;3:4$
39 A1 A2 A3 A4 B1 B2 B3 B4 B5 B6 C1 C2	1 1 1 1 1 1 1 1 1 1 1 1 1	1 0 1 0 1 0 1 1 1 1 1 1 1 1 1 1 1 1 0 0 0 0	$ \begin{array}{r} -33 \\ -483 \\ 97 \\ -565 \\ -65 \\ -845 \\ -9015 \\ -115 \\ -6 \\ -206 \end{array} $	13 -63 -4293 -297 -15 47 -5353 9095 -333213 -13093 36 1116	1 1 1 0 0 0 0 0 0 0 0 0	2 4 2 2 4 8 4 4 2 2 6 6	+++++	4, 2, 1, 1 2, 4, 2, 2 1, 2, 1, 4 1, 8, 4, 1 8, 1, 2, 1 4, 2, 4, 2 2, 4, 2, 4 2, 1, 8, 1 1, 8, 1, 2 1, 2, 1, 8 6, 3, 2, 1 3, 6, 1, 2	$\begin{bmatrix} 4,2,1,1\\2,4,2,2\\1,2,1,4\\1,8,4,1\\\hline 1,8,4,2\\2,4,2,4\\2,1,8,1\\1,8,1,2\\1,2,1,8\\\hline 1,2,1,8\\3,6,1,2\\ \end{bmatrix}$	$\begin{bmatrix} 2,2,1,1\\ 2,2,2,2\\ 1,2,1,2\\ 1,2,2,1 \end{bmatrix} \\ 8,1,2,1\\ 4,2,4,2\\ 2,2,2,4\\ 2,1,8,1\\ 1,2,1,2\\ 1,2,1,8 \end{bmatrix} \\ 6,3,2,1\\ 3,6,1,2 \\ \end{bmatrix}$	$ \begin{vmatrix} I_2,I_4,I_2,I_2\\I_1,I_2,I_1,I_4\\I_1,I_8,I_4,I_1\\I_8,I_1,I_2,I_1\\I_4,I_2,I_4,I_2\\I_2,I_4,I_2,I_4\\I_2,I_1,I_8,I_1\\I_1,I_8,I_1,I_2\\I_1,I_2,I_1,I_8\\I_6,I_3,I_2,I_1\\I_3,I_6,I_1,I_2\\I_2,I_1,I_6,I_3 \end{vmatrix} $	2:2 $2:1,3,4$ $2:2$ $2:2$ $2:3$ $2:2,5,6$ $2:2$ $2:3$ $2:3$ $2:1;3:4$
39 A1 A2 A3 A4 B1 B2 B3 B4 B5 C1 C2 C3	1 1 1 1 1 1 1 1 1 1 1 1 1	1 0 1 0 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1	$ \begin{array}{r} -33 \\ -483 \\ 97 \\ \hline -15 \\ -65 \\ -845 \\ -9015 \\ -115 \\ \hline -6 \\ -206 \\ 54 \end{array} $	$ \begin{array}{r} 13 \\ -63 \\ -4293 \\ -297 \\ \hline 15 \\ 47 \\ -5353 \\ 9095 \\ -333213 \\ -13093 \\ \hline 36 \\ 1116 \\ -960 \end{array} $	1 1 1 0 0 0 0 0 0 0 0 0 0	2 4 2 2 2 4 8 4 4 4 2 2 2 6 6 6 2 2	+++	4, 2, 1, 1 2, 4, 2, 2 1, 2, 1, 4 1, 8, 4, 1 8, 1, 2, 1 4, 2, 4, 2 2, 4, 2, 4 2, 1, 8, 1 1, 8, 1, 2 1, 2, 1, 8 6, 3, 2, 1 3, 6, 1, 2 2, 1, 6, 3 1, 2, 3, 6	$ \begin{vmatrix} 4,2,1,1\\2,4,2,2\\1,2,1,4\\1,8,4,1\\ 8,1,2,1\\4,2,4,2\\2,4,2,4\\2,1,8,1\\1,8,1,2\\1,2,1,8\\ 6,3,2,1\\3,6,1,2\\2,1,6,3\\1,2,3,6\\ \end{vmatrix} $	$\begin{bmatrix} 2,2,1,1\\ 2,2,2,2\\ 1,2,1,2\\ 1,2,2,1\\ 8,1,2,1\\ 4,2,4,2\\ 2,2,2,4\\ 2,1,8,1\\ 1,2,1,2\\ 1,2,1,8\\ 6,3,2,1\\ 3,6,1,2\\ 2,1,2,3\\ 1,2,1,6\\ \end{bmatrix}$	$ \begin{vmatrix} I_2,I_4,I_2,I_2\\I_1,I_2,I_1,I_4\\I_1,I_8,I_4,I_1 \end{vmatrix} \\ \begin{vmatrix} I_8,I_1,I_2,I_1\\I_4,I_2,I_4,I_2\\I_2,I_4,I_2,I_4\\I_2,I_1,I_8,I_1\\I_1,I_8,I_1,I_2\\I_1,I_2,I_1,I_8 \end{vmatrix} \\ \begin{vmatrix} I_6,I_3,I_2,I_1\\I_3,I_6,I_1,I_2\\I_2,I_1,I_6,I_3\\I_1,I_2,I_3,I_6 \end{vmatrix}$	2:2 2:1,3,4 2:2 2:2 2:1,3,4 2:2,5,6 2:2 2:3 2:3 2:1;3:4 2:4;3:1 2:3;3:2
39 A1 A2 A3 A4 B1 B2 B3 B4 B5 B6 C1 C2 C3 C4		1 0 1 0 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1	$ \begin{array}{r} -33 \\ -483 \\ 97 \\ \hline 15 \\ -65 \\ -845 \\ -9015 \\ -115 \\ \hline -6 \\ -206 \\ 54 \\ -1196 \\ \hline \end{array} $	$ \begin{array}{r} 13 \\ -63 \\ -4293 \\ -297 \\ \hline 15 \\ 47 \\ -5353 \\ 9095 \\ -333213 \\ -13093 \\ \hline -136 \\ 1116 \\ -960 \\ -15210 \\ \end{array} $	1 1 1 0 0 0 0 0 0 0 0 0 0 0	2 4 2 2 2 4 8 4 4 4 2 2 6 6 6 2 2	+++-	4, 2, 1, 1 2, 4, 2, 2 1, 2, 1, 4 1, 8, 4, 1 8, 1, 2, 1 4, 2, 4, 2 2, 4, 2, 4 2, 1, 8, 1 1, 8, 1, 2 1, 2, 1, 8 6, 3, 2, 1 3, 6, 1, 2 2, 1, 6, 3 1, 2, 3, 6 10, 9, 6, 1	$\begin{bmatrix} 4,2,1,1\\2,4,2,2\\1,2,1,4\\1,8,4,1\\\hline 8,1,2,1\\4,2,4,2\\2,4,2,4\\2,1,8,1\\1,8,1,2\\1,2,1,8\\\hline 6,3,2,1\\3,6,1,2\\2,1,6,3\\ \end{bmatrix}$	$ \begin{vmatrix} 2,2,1,1\\2,2,2,2\\1,2,1,2\\1,2,2,1 \end{vmatrix} $	$ \begin{vmatrix} I_2,I_4,I_2,I_2\\I_1,I_2,I_1,I_4\\I_1,I_8,I_4,I_1\\I_8,I_1,I_2,I_1\\I_4,I_2,I_4,I_2\\I_2,I_4,I_2,I_4\\I_2,I_1,I_8,I_1\\I_1,I_8,I_1,I_2\\I_1,I_2,I_1,I_8\\I_6,I_3,I_2,I_1\\I_3,I_6,I_1,I_2\\I_2,I_1,I_6,I_3 \end{vmatrix} $	2:2 $2:1,3,4$ $2:2$ $2:2$ $2:3$ $2:2,5,6$ $2:2$ $2:3$ $2:3$ $2:4;3:1$ $2:4;3:1$ $2:3;3:2$
A1 A2 A3 A4 B1 B2 B3 B4 B5 C1 C2 C3 C4 D1		1 0 1 0 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1	$ \begin{array}{r} -33 \\ -483 \\ 97 \\ -565 \\ -65 \\ -845 \\ -9015 \\ -115 \\ -66 \\ -206 \\ 54 \\ -1196 \\ -3997 \end{array} $	13 -63 -4293 -297 15 47 -5353 9095 -333213 -13093 36 1116 -960 -15210 3998	1 1 1 0 0 0 0 0 0 0 0 0 0 0 0	2 4 2 2 2 4 8 4 4 4 2 2 2 6 6 6 6 2	++++++	4, 2, 1, 1 2, 4, 2, 2 1, 2, 1, 4 1, 8, 4, 1 8, 1, 2, 1 4, 2, 4, 2 2, 4, 2, 4 2, 1, 8, 1 1, 8, 1, 2 1, 2, 1, 8 6, 3, 2, 1 3, 6, 1, 2 2, 1, 6, 3 1, 2, 3, 6 10, 9, 6, 1 5, 18, 3, 2	$\begin{bmatrix} 4,2,1,1\\2,4,2,2\\1,2,1,4\\1,8,4,1\\\hline 1,8,4,2\\2,4,2,4\\2,1,8,1\\1,8,1,2\\1,2,1,8\\\hline 1,2,1,8\\2,1,6,3\\1,2,3,6\\\hline 10,9,6,1\\ \end{bmatrix}$	$\begin{bmatrix} 2,2,1,1\\ 2,2,2,2\\ 1,2,1,2\\ 1,2,2,1\\ \end{bmatrix} \\ 8,1,2,1\\ 4,2,4,2\\ 2,2,2,4\\ 2,1,8,1\\ 1,2,1,2\\ 1,2,1,8\\ \end{bmatrix} \\ 6,3,2,1\\ 3,6,1,2\\ 2,1,2,3\\ 1,2,1,6\\ \end{bmatrix} \\ 2,9,6,1\\ 1,18,3,2$	$ \begin{vmatrix} I_2,I_4,I_2,I_2\\I_1,I_2,I_1,I_4\\I_1,I_8,I_4,I_1\\I_8,I_1,I_2,I_1\\I_4,I_2,I_4,I_2\\I_2,I_4,I_2,I_4\\I_2,I_1,I_8,I_1\\I_1,I_2,I_1,I_8\\I_1,I_2,I_1,I_8\\I_1,I_2,I_1,I_8\\I_1,I_2,I_1,I_6\\I_3,I_2,I_1\\I_3,I_6,I_3\\I_1,I_2,I_3,I_6\\I_{10},I_9,I_6,I_1\\ \end{vmatrix} $	2:2 $2:1,3,4$ $2:2$ $2:2$ $2:3$ $2:3$ $2:3$ $2:3$ $2:4;3:4$ $2:4;3:1$ $2:3;3:4$ $2:1;3:4$
39 A1 A2 A3 A4 B1 B2 B3 B4 B5 B6 C1 C2 C3 C4 D1 D2		1 0 1 0 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1	$ \begin{array}{r} -33 \\ -483 \\ 97 \\ \hline -15 \\ -65 \\ -845 \\ -9015 \\ -115 \\ \hline -6 \\ -206 \\ 54 \\ -1196 \\ \hline -3997 \\ -16003 \\ -53378 \\ \end{array} $	$ \begin{array}{r} 13\\ -63\\ -4293\\ -297\\ \hline 00000000000000000000000000000000000$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	2 4 2 2 2 4 8 4 4 2 2 2 6 6 6 6 2 2 2 6 6 6 6 2	+++	4, 2, 1, 1 2, 4, 2, 2 1, 2, 1, 4 1, 8, 4, 1 8, 1, 2, 1 4, 2, 4, 2 2, 4, 2, 4 2, 1, 8, 1 1, 8, 1, 2 1, 2, 1, 8 6, 3, 2, 1 3, 6, 1, 2 2, 1, 6, 3 1, 2, 3, 6 10, 9, 6, 1 5, 18, 3, 2 30, 3, 2, 3	$\begin{bmatrix} 4,2,1,1\\2,4,2,2\\1,2,1,4\\1,8,4,1\\ \hline 1,8,1,2,1\\4,2,4,2\\2,4,2,4\\2,1,8,1\\1,8,1,2\\1,2,1,8\\\hline 1,3,6,1,2\\2,1,6,3\\1,2,3,6\\\hline 10,9,6,1\\5,18,3,2\\ \end{bmatrix}$	$\begin{bmatrix} 2,2,1,1\\ 2,2,2,2\\ 1,2,1,2\\ 1,2,2,1\\ \hline \\ 8,1,2,1\\ 4,2,4,2\\ 2,2,2,4\\ 2,1,8,1\\ 1,2,1,2\\ 1,2,1,8\\ \hline \\ 6,3,2,1\\ 3,6,1,2\\ 2,1,2,3\\ 1,2,1,6\\ \hline \\ 2,9,6,1\\ 1,18,3,2\\ 2,3,2,3\\ \end{bmatrix}$	$\begin{vmatrix} I_2,I_4,I_2,I_2\\I_1,I_2,I_1,I_4\\I_1,I_8,I_4,I_1 \end{vmatrix}$ $\begin{vmatrix} I_8,I_1,I_2,I_1\\I_4,I_2,I_4,I_2\\I_2,I_4,I_2,I_4\\I_2,I_1,I_8,I_1\\I_1,I_8,I_1,I_2\\I_1,I_2,I_1,I_8 \end{vmatrix}$ $\begin{vmatrix} I_6,I_3,I_2,I_1\\I_3,I_6,I_1,I_2\\I_2,I_1,I_6,I_3\\I_1,I_2,I_3,I_6 \end{vmatrix}$ $\begin{vmatrix} I_1,I_2,I_3,I_6\\I_1,I_2,I_3,I_6\\I_1,I_2,I_3,I_6\\I_1,I_2,I_3,I_6 \end{vmatrix}$ $\begin{vmatrix} I_1,I_2,I_3,I_6\\I_1,I_2,I_3,I_6\\I_1,I_2,I_3,I_6 \end{vmatrix}$	2:2 $2:1,3,4$ $2:2$ $2:2$ $2:3$ $2:2,5,6$ $2:2$ $2:3$ $2:3$ $2:3$ $2:4;3:1$ $2:4;3:1$ $2:4;3:4$ $2:4;3:1$
39 A1 A2 A3 A4 B1 B2 B3 B4 B5 C1 C2 C3 C4 D1 D2 D3		1 0 1 0 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1	$ \begin{array}{r} -33 \\ -483 \\ 97 \\ \hline -15 \\ -65 \\ -845 \\ -9015 \\ -115 \\ \hline -6 \\ -206 \\ 54 \\ -1196 \\ \hline -3997 \\ -16003 \\ -53378 \\ \end{array} $	$ \begin{array}{r} 13 \\ -63 \\ -4293 \\ -297 \\ \hline 15 \\ 47 \\ -5353 \\ 9095 \\ -333213 \\ -13093 \\ \hline 36 \\ 1116 \\ -960 \\ -15210 \\ \hline -3998 \\ 27998 \\ -5124652 \end{array} $	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	2 4 2 2 2 4 8 4 4 2 2 2 6 6 6 6 2 2 2 6 6 6 6 2	++++	4, 2, 1, 1 2, 4, 2, 2 1, 2, 1, 4 1, 8, 4, 1 8, 1, 2, 1 4, 2, 4, 2 2, 4, 2, 4 2, 1, 8, 1 1, 8, 1, 2 1, 2, 1, 8 6, 3, 2, 1 3, 6, 1, 2 2, 1, 6, 3 1, 2, 3, 6 10, 9, 6, 1 5, 18, 3, 2 30, 3, 2, 3 15, 6, 1, 6	$ \begin{vmatrix} 4,2,1,1\\2,4,2,2\\1,2,1,4\\1,8,4,1 \end{vmatrix} $	$\begin{bmatrix} 2,2,1,1\\2,2,2,2\\1,2,1,2\\1,2,2,1 \end{bmatrix}\\ 8,1,2,1\\4,2,4,2\\2,2,2,4\\2,1,8,1\\1,2,1,2\\1,2,1,8 \end{bmatrix}\\ 6,3,2,1\\3,6,1,2\\2,1,2,3\\1,2,1,6\\2,9,6,1\\1,18,3,2\\2,3,2,3\\1,6,1,6 \end{bmatrix}$	$ \begin{vmatrix} I_2,I_4,I_2,I_2\\I_1,I_2,I_1,I_4\\I_1,I_8,I_4,I_1\\ \hline I_8,I_1,I_2,I_1\\I_4,I_2,I_4,I_2\\I_2,I_4,I_2,I_4\\I_2,I_1,I_8,I_1\\I_1,I_8,I_1,I_2\\I_1,I_2,I_1,I_8\\\hline I_6,I_3,I_2,I_1\\I_3,I_6,I_1,I_2\\I_2,I_1,I_6,I_3\\I_1,I_2,I_3,I_6\\\hline I_{10},I_9,I_6,I_1\\I_5,I_{18},I_3,I_2\\I_{30},I_3,I_2,I_3\\I_{15},I_6,I_1,I_6\\\hline I_{15},I_6,I_1,I_6\\\hline I_{15},I_6,I_6\\\hline I_{15},I_6\\\hline I_{15},I_6,I_6\\\hline I_{15},I_6\\\hline I_{15},I_6\\\hline I_{15},I_6\\\hline I_{15},I_6\\\hline I_{15$	2:2 $2:1,3,4$ $2:2$ $2:2$ $2:3$ $2:3$ $2:3$ $2:3$ $2:4;3:1$ $2:4;3:1$ $2:4;3:4$ $2:4;3:1$ $2:4;3:4$ $2:4;3:1$ $2:3;3:4$
39 A1 A2 A3 A4 B1 B2 B3 B4 B5 C1 C2 C3 C4 D1 D2 D3 D4		1 0 1 0 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1	$ \begin{array}{r} -33 \\ -483 \\ 97 \\ \hline -15 \\ -65 \\ -845 \\ -9015 \\ -115 \\ \hline -6 \\ -206 \\ 54 \\ -1196 \\ \hline -3997 \\ -16003 \\ -53378 \\ -872578 \\ \hline -872578 \\ \hline$	$ \begin{array}{r} 13 \\ -63 \\ -4293 \\ -297 \\ \hline 15 \\ 47 \\ -5353 \\ 9095 \\ -333213 \\ -13093 \\ \hline 36 \\ 1116 \\ -960 \\ -15210 \\ \hline 3998 \\ 27998 \\ -5124652 \\ -313799212 \\ \hline $	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	2 4 2 2 2 4 8 4 4 2 2 2 6 6 6 6 2 2 2 2	+++	4, 2, 1, 1 2, 4, 2, 2 1, 2, 1, 4 1, 8, 4, 1 8, 1, 2, 1 4, 2, 4, 2 2, 4, 2, 4 2, 1, 8, 1 1, 8, 1, 2 1, 2, 1, 8 6, 3, 2, 1 3, 6, 1, 2 2, 1, 6, 3 1, 2, 3, 6 10, 9, 6, 1 5, 18, 3, 2 30, 3, 2, 3	$\begin{bmatrix} 4,2,1,1\\2,4,2,2\\1,2,1,4\\1,8,4,1\\ \hline \\ 8,1,2,1\\4,2,4,2\\2,4,2,4\\2,1,8,1\\1,8,1,2\\1,2,1,8\\\hline \\ 6,3,2,1\\3,6,1,2\\2,1,6,3\\1,2,3,6\\\hline \\ 10,9,6,1\\5,18,3,2\\30,3,2,3\\15,6,1,6\\\hline \\ 2,3,2,1\\\hline \end{bmatrix}$	$ \begin{vmatrix} 2,2,1,1\\2,2,2,2\\1,2,1,2\\1,2,2,1 \end{vmatrix} $	$ \begin{vmatrix} I_2,I_4,I_2,I_2\\I_1,I_2,I_1,I_4\\I_1,I_8,I_4,I_1\\I_8,I_1,I_2,I_1\\I_4,I_2,I_4,I_2\\I_2,I_4,I_2,I_4\\I_2,I_1,I_8,I_1\\I_1,I_8,I_1,I_2\\I_1,I_2,I_1,I_8\\\hline I_6,I_3,I_2,I_1\\I_3,I_6,I_1,I_2\\I_2,I_1,I_6,I_3\\I_1,I_2,I_3,I_6\\\hline I_{10},I_9,I_6,I_1\\I_{5},I_{18},I_{3},I_2\\I_{30},I_3,I_2,I_3\\ \end{vmatrix} $	2:2 $2:1,3,4$ $2:2$ $2:2$ $2:3$ $2:2,5,6$ $2:2$ $2:3$ $2:3$ $2:4;3:1$ $2:4;3:1$ $2:4;3:1$ $2:4;3:1$ $2:4;3:1$ $2:4;3:1$ $2:2;3:3$
A1 A2 A3 A4 B1 B2 B3 B4 B5 C1 C2 C3 C4 D1 D2 D3 D4 E1		1 0 1 0 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1	$ \begin{array}{r} -33 \\ -483 \\ 97 \\ -565 \\ -65 \\ -845 \\ -9015 \\ -115 \\ -6 \\ -206 \\ 54 \\ -1196 \\ -3997 \\ -16003 \\ -53378 \\ -872578 \\ -4 \end{array} $	$ \begin{array}{r} 13 \\ -63 \\ -4293 \\ -297 \\ \hline 15 \\ 47 \\ -5353 \\ 9095 \\ -333213 \\ -13093 \\ \hline 36 \\ 1116 \\ -960 \\ -15210 \\ \hline 3998 \\ 27998 \\ -5124652 \\ -313799212 \\ \hline -7 \end{array} $	1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2 4 2 2 2 4 8 8 4 4 4 2 2 2 6 6 6 6 2 2 2 2 2 2 2 2 2 2	+++	4, 2, 1, 1 2, 4, 2, 2 1, 2, 1, 4 1, 8, 4, 1 8, 1, 2, 1 4, 2, 4, 2 2, 4, 2, 4 2, 1, 8, 1 1, 8, 1, 2 1, 2, 1, 8 6, 3, 2, 1 3, 6, 1, 2 2, 1, 6, 3 1, 2, 3, 6 10, 9, 6, 1 5, 18, 3, 2 30, 3, 2, 3 15, 6, 1, 6 2, 3, 2, 1 1, 6, 1, 2	$\begin{bmatrix} 4,2,1,1\\2,4,2,2\\1,2,1,4\\1,8,4,1\\ \hline \\ 8,1,2,1\\4,2,4,2\\2,4,2,4\\2,1,8,1\\1,8,1,2\\1,2,1,8\\ \hline \\ 6,3,2,1\\3,6,1,2\\2,1,6,3\\1,2,3,6\\ \hline \\ 10,9,6,1\\5,18,3,2\\30,3,2,3\\15,6,1,6\\ \hline \\ 2,3,2,1\\1,6,1,2\\ \hline \end{bmatrix}$	$\begin{bmatrix} 2,2,1,1\\ 2,2,2,2\\ 1,2,1,2\\ 1,2,2,1\\ \end{bmatrix} \\ \begin{bmatrix} 8,1,2,1\\ 4,2,4,2\\ 2,2,2,4\\ 2,1,8,1\\ 1,2,1,2\\ 1,2,1,8\\ \end{bmatrix} \\ \begin{bmatrix} 6,3,2,1\\ 3,6,1,2\\ 2,1,2,3\\ 1,2,1,6\\ \end{bmatrix} \\ \begin{bmatrix} 2,9,6,1\\ 1,18,3,2\\ 2,3,2,3\\ 1,6,1,6\\ \end{bmatrix} \\ \begin{bmatrix} 2,9,6,1\\ 1,18,3,2\\ 2,3,2,3\\ 1,6,1,6\\ \end{bmatrix} \\ \begin{bmatrix} 2,1,2,1\\ 1,2,1,2\\ \end{bmatrix}$	$ \begin{vmatrix} I_2,I_4,I_2,I_2\\I_1,I_2,I_1,I_4\\I_1,I_8,I_4,I_1\\I_4,I_2,I_4,I_2\\I_2,I_4,I_2,I_4\\I_2,I_1,I_8,I_1\\I_1,I_8,I_1,I_2\\I_1,I_2,I_1,I_8\\ \end{vmatrix} $	2:2 2:1,3,4 2:2 2:2 2:2 2:1,3,4 2:2,5,6 2:2 2:3 2:3 2:1;3:4 2:4;3:1 2:3;3:2 [2:2;3:3 2:1;3:4 2:4;3:1 2:3;3:2

100	TABLE 1. ELLIII TIC CORVES 550G-555C												
	a_1	a_2	a_3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
390)				N =	: 39	90 =	2 ·	$3 \cdot 5 \cdot 13$	(continue	ed)		390
G1	1	0	1	-289	3092	0	2	_	20, 1, 1, 2	20, 1, 1, 2	[2, 1, 1, 2]	I_{20},I_1,I_1,I_2	2 :2
G2	1	0	1	-5409	152596	0	4	+	10, 2, 2, 4	10, 2, 2, 4	2, 2, 2, 2	I_{10}, I_2, I_2, I_4	2:1,3,4
G3	1	0	1	-6209	104276	0	2	+	5, 4, 1, 8	5, 4, 1, 8	1, 4, 1, 2	I_5, I_4, I_1, I_8	2 :2
G4	1	0	1	-86529	9789652	0	2	+	5, 1, 4, 2	5, 1, 4, 2	1, 1, 2, 2	I_5, I_1, I_4, I_2	2 :2
392	2				N = 1	392	2 = 2	2^3 .	7^2 (6 is	ogeny clas	ses)		392
A1	0	0	0	49	-686	1	4	_	8,7	0, 1	4,4	I_1^*, I_1^*	2 :2
A2	0	0	0	-931	-10290	1	4	+	10, 8	0, 2	2,4	${ m III^*,I_2^*}$	2:1,3,4
A3	0	0	0	-14651	-682570	1	2	+	11, 7	0, 1	1,2	$\mathrm{II}^*,\!\mathrm{I}_1^*$	2 :2
A4	0	0	0	-2891	47334	1	2	+	11, 10	0,4	1,4	II^*,I_4^*	2 :2
B1	0	1	0	-800	-8359	0	1	+	4, 10	0,0	$\begin{vmatrix} 2,1 \end{vmatrix}$	III,II*	
$\overline{\text{C1}}$	0 -	-1	0	-16	29	1	1	+	4, 4	0,0	[2, 3]	III,IV	
D1	0	1	0	-16	1392	0	2	 _	10,7	0, 1	[2, 2]	III^*,I_1^*	2 :2
D2	0	1	0	-1976	32752	0	2	+	11,8	0, 2	1,4	II^*, I_2^*	2 :1
E1	0	0	0	-343	-2401	0	1	+	4,8	0,0	[-2, 1]	III,IV*	:
F1	0	0	0	-7 - 7	7	1	1	 +	$\frac{1}{4}, \frac{1}{2}$	[0,0]	[2,1]		<u> </u>
395					N =	30	5 —	5 . '	70 (3 iso	ogeny class	roe)		395
A1		 -1	1	-7	$\frac{1}{14}$	0	4	_	$\frac{13}{4,1}$	4,1	4,1	I_4,I_1	2 : 2
A1		$-1 \\ -1$	1	-132	614		4	+	2, 2	2, 1	2, 2	$egin{array}{c} I_4,I_1 \ I_2,I_2 \end{array}$	$egin{array}{c} {f 2} : 2 \\ {f 2} : 1, 3, 4 \end{array}$
A3		$-1 \\ -1$	1	-152 -157	384	0	2	+	1, 4	1, 4	1, 2	$egin{array}{c} ext{I}_2, ext{I}_2 \ ext{I}_1, ext{I}_4 \end{array}$	2:1,3,4 $2:2$
A4		-1	1	-2107	37744	0	$\frac{2}{2}$	+	$1, \frac{1}{4}$ $1, 1$	$1, \frac{1}{4}$ $1, 1$	1, 2 $1, 1$	$egin{array}{c} I_1,I_4 \ I_1,I_1 \end{array}$	2:2 2:2
B1	 1	- 1	 1	-40	-128	'	$\frac{1}{2}^{-}$	_'_ 	6, 1	$\begin{bmatrix} -5 & -5 & -5 & -5 & -5 & -5 & -5 & -5 $!	<u> </u>	2 :2
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	1	1	1	-40 -665	-6878	0	$\frac{2}{2}$	+	3, 2	3, 2	$6, 1 \\ 3, 2$	$\begin{matrix} \mathrm{I}_6, \mathrm{I}_1 \\ \mathrm{I}_3, \mathrm{I}_2 \end{matrix}$	2 : 2 2 : 1
C1		 -1	 1	 -50	156	'	- - - 5		5, 1	$\begin{bmatrix} -5, 2 \\ 5, 1 \end{bmatrix}$	$\begin{bmatrix} -5, 2 \\ 5, 1 \end{bmatrix}$	$\left \begin{array}{cccccccccccccccccccccccccccccccccccc$	$oxed{oldsymbol{5}:2}$
C2		-1		300	-5724		1	_	1,5	1,5	1, 1	I_1,I_5	5 :1
396	3				N = 39	6 =	= 22	$\cdot 3^2$	· 11 (3	isogeny cl	asses)		396
A1	0	0	0	-696	-8215	0	2		4, 16, 1	0, 10, 1	3, 4, 1	IV,I_{10}^*,I_1	2 :2
A2	0				-482794		2	+	8, 11, 2	0, 5, 2	3, 2, 2	IV^*, I_5^*, I_2	2:1
B1	 0	0	0	24	25			 -	4, 8, 1	$\begin{bmatrix} 0, 2, 1 \end{bmatrix}$	$\begin{bmatrix} -3 & 2 & 2 & 2 & 2 & 2 & 2 & 2 & 2 & 2 & $	$ IV, I_2^*, I_1 $	2:2
B2	0	0	0	-111	214		$\frac{2}{2}$	+	8, 7, 2	$0, 2, 1 \\ 0, 1, 2$	3, 4, 1 $3, 4, 2$	$[V, I_2, I_1]$ $[V, I_1, I_2]$	2:1
$\bar{C1}$	0	0	0	24	52	'	 1	' _	8, 6, 1	$\begin{bmatrix} 0, 0, 1 \end{bmatrix}$	[-1, 1, 1]	$\mid \text{IV*}, \text{I}_0^*, \text{I}_1 \mid$	3 : 2
C2	0		0	-696	7108		3	_	8, 6, 3	$0, 0, 1 \\ 0, 0, 3$	$\begin{bmatrix} 1, 1, 1 \\ 3, 1, 3 \end{bmatrix}$	$[V, I_0, I_1]$ $[V, I_0, I_3]$	3:1
398	3				N =	39	8 =	2 ·	199 (1 i	sogeny cla	ss)		398
A1	1	1	0	-6	20	0	2	<u>-</u> 	$\frac{100}{10,1}$	10, 1	2,1	I_{10}, I_{1}	2 :2
A2	1		0	-166	756		2	+	5, 2	5, 2	1, 2	I_5,I_2	2 :1
399)				N=3	99	= 3	. 7	· 19 (3 i	sogeny cla	sses)		399
A1	1	1	0	-210		1	2	+	$\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $	5, 6, 1	1,2,1	I_5, I_6, I_1	2 :2
A2	1	1	0	-1925	31458		2	+	10, 3, 2	10, 3, 2	2, 1, 2	I_{10}, I_3, I_2	2 : 1
B1	1	1	1	-13	-22	1	2	 +	3, 2, 1	3, 2, 1	1, 2, 1	I_3,I_2,I_1	2:2
B2	1	1	1	-48	90		$\frac{1}{2}$	+	6, 1, 2	6, 1, 2		I_6, I_1, I_2	2 :1
$\bar{C1}$	 1	0	0	-431	3408	0	2	' +	1, 2, 3	$\begin{bmatrix} 1 & 2 & 2 & 2 & 2 & 2 & 2 & 2 & 2 & 2 &$	$\begin{bmatrix} 1 & 1 & 2 & 1 \\ 1 & 1 & 2 & 1 \end{bmatrix}$	$ I_1, I_2, I_3 $	2 :2
C2	1	0		-466	2813		$\frac{2}{2}$	+	2, 1, 6	2, 1, 6	2, 1, 2	$I_1, I_2, I_3 $ I_2, I_1, I_6	2 : 2 2 : 1
								<u> L</u>	, , -	, , -	, ,	-, -, 0	

							Imi		1(A)	1 (1)		IZ . l. t	т
	a_1	a_2 a	3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
400)				N = 40	0 =	2^4 ·	5^2	(8 isog	eny classe	s)		400
A1	0	0	0	-50	-125	1	2	+	4,7	0, 1	1,4	II,I_1^*	2 :2
A2	0		0	-175	750	1	4	+	8,8	0,2	2,4	I_0^*, I_2^*	2:1,3,4
A3	0		0	-2675	53250	1	4	+	10,7	0,1	4,4	I_2^*, I_1^*	2 :2
A4	0	0	0	325	4250	1 	2		10, 10	0,4	2,4	I_2^*, I_4^*	2 :2
B1	0		0	-48	-172	0	1	_	17, 2	5,0	2, 1	$\mathrm{I}_{9}^{st},\!\mathrm{II}$	3:2;5:3
B2	0		0	352	1268	0	1	_	27, 2	15, 0	2, 1	I_{19}^{*},II	3 : 1; 5 : 4 $ $
B3	0		0	-208	13588	0	1	_	13, 10	1,0	2, 1	I_{5}^{*},II^{*}	3 : 4; 5 : 1
B4	0	1 	U -	-50208 	4313588	0	1		15, 10	3,0	2,1	I ₇ ,II*	3 :3; 5 :2
C1	0 -	_	0	-8	112	1	1	_	13, 4	1,0	4,3	I_5^* ,IV	3 :2; 5 :3
C2	0 -		0	-2008	35312	1	1	_	15, 4	3,0	4,1	I*,IV	3:1;5:4
C3	0 -		0	-1208	-19088	$\frac{1}{1}$	1	_	17, 8	5,0	4,3	I ₉ ,IV*	[3:4;5:1]
C4	0 -	-1 	0	8792	140912	1	1		27,8	15,0	4,1	I_{19}^* , IV^*	3 :3; 5 :2
D1	0 -		0	-3	2	0	2	+	4,3	0,0	1, 2	II,III	2 :2
D2	0 -	-1 	0	-28	-48	0	2	+	8,3	0,0	2,2	$\left egin{array}{c} ext{I}_0^*, ext{III} \ ext{$	2 :1
E1	0	1	0	-33	-62	0	2	+	4,7	0,1	1, 2	II,I_1^*	2:2;3:3
E2	0	1	0	92	-312	0	2	_	8, 8	0, 2	1, 4	$\mathrm{I}_0^*,\!\mathrm{I}_2^*$	2:1;3:4
E3	0		0	-1033	12438	0	2	+	4,9	0,3	1, 2	II,I_3^*	2:4;3:1
E4	0	1	0_	-908	15688	0	$\frac{2}{2}$		8, 12	0,6	1,4	I_0^*, I_6^*	2 :3; 3 :2
F1	0	1	0	-83	88	0	2	+	4,9	0, 0	1, 2	$_{\rm II,III^*}$	2 :2
F2	0	1	0	-708	-7412	0	2	+	8,9	0,0	2, 2	$\mathrm{I}_{0}^{st},\!\mathrm{III}^{st}$	2 :1
G1	0	0	0	125	1250	0	1		11,8	0,0	[2, 1]	I_3^*,IV^*	
H1	<u>-</u>	0	0	5	10	 1	' 1	' —	$\frac{11,2}{1}$	0,0	4,1	I_3^* ,II	!
400										, , , , , , , , , , , , , , , , , , ,		07	400
402	<u>. </u>				N = 402		$2 \cdot 3$	67		geny class	·		402
A1	1	1 	0_		-12 	1	1		8, 1, 1	8, 1, 1	[2, 1, 1]	$\left[\begin{smallmatrix} I_8,I_1,I_1 \\ - & - & - \end{smallmatrix} \right]$	
B1	1	0	1	-10	-4	0	2	+	8, 1, 1	8, 1, 1	2, 1, 1	I_8,I_1,I_1	2 :2
B2	1		1	-90	316	0	4	+	4, 2, 2	4, 2, 2	2, 2, 2	I_4,I_2,I_2	2:1,3,4
B3	1		1	-1430	20684	0	4	+	2, 4, 1	2, 4, 1	2, 4, 1	I_2,I_4,I_1	2 :2
B4	1	0	1	-30	748	0	2		$\frac{2,1,4}{2}$	[2, 1, 4]	[2, 1, 2]	I_2,I_1,I_4	2 :2
C1	1	1	1	-37	71	0	2	+	2, 3, 1	2, 3, 1	2, 1, 1	I_2,I_3,I_1	2 :2
C2	1	1	1_	-27	123	0	2		1, 6, 2	1, 6, 2	1, 2, 2	I_1,I_6,I_2	2 :1
D1	1	0	1	-145	692	1	3	Ī-	4, 9, 1	[4, 9, 1]	[2, 9, 1]	I_4,I_9,I_1	3 :2
D2	1	0	1	800	1070	1	3	_	12, 3, 3	12, 3, 3	2, 3, 3	I_{12}, I_3, I_3	3:1,3
D3	1	0	1	-10255	-438718	1	1	_	36, 1, 1	36, 1, 1	2, 1, 1	I_{36}, I_1, I_1	3 :2
40 4	1				N = 404	1 =	$2^2 \cdot 1$	101	(2 isos	geny classe	es)		404
A1	0	0	0	-8	4	1	1	+	8,1	0,1	3,1	$\mathrm{IV}^*,\!\mathrm{I}_1$	
B1	0		 0	 -69	199	0	3	-	 	$\begin{bmatrix} 0, 1 \\ 0, 1 \end{bmatrix}$	$\begin{bmatrix} 3, 1 \\ 3, 1 \end{bmatrix}$	$ \text{IV}^*, \text{I}_1 $	3 :2
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	0		0	$-09 \\ -229$	-1161	0	1	+	8, 3	$0, 1 \\ 0, 3$	1, 1	IV , I_1 IV^* , I_3	3:2 3:1
405	<u> </u>				N = 40)E _	_ 94		<u> </u>	<u> </u>		, 0	405
A1	0	0	1	-12	$\frac{N = 40}{15}$) 0	3	$\frac{3}{+}$	$\frac{6 \text{ isoge}}{4,3}$	0,3	1,3	II,I_3	3 :2
A1 $A2$	0		1	-12 -162	-790	0	3 1	+	$\frac{4}{12}, \frac{3}{1}$	0, 3 0, 1	1, 3 $1, 1$	$\mathrm{II},\mathrm{I}_3 \ \mathrm{II}^*,\mathrm{I}_1$	3:2 3:1
	<u> </u>					!	!	<u>'</u>		!	<u>'</u>		{
B1	0		1	-18	29 412	1	3	+	6, 1	0,1	3,1	IV,I_1	3 :2
B2	0	0	1	-108	-412	1	1	+	10, 3	0,3	3, 1	IV^*,I_3	3 :1

100			TABLE	ı. <u>ı</u>	,,,,,,,,,,,	110 0010	LD 400C 41	171		
a_1	$a_1 \ a_2 \ a_3$	a_4	a_6	r	T	$s \operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
405			N = 4	405	5 = 3	$8^4 \cdot 5$ (co.	ntinued)			405
	1 - 1 0	0	1 1250	1	1	- 4,1	0,1	1,1	II,I_1	7 :2
	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{r} -225 \\ -2 \\ -2 \end{array} $	$ \begin{array}{c c} -1250 \\ -26 \end{array} $		1 	$\begin{vmatrix} - & 4,7 \\ - & -10,1 \end{vmatrix}$	$\begin{array}{c c} 0,7 \\ \hline 0,1 \end{array}$	$\begin{bmatrix} 1,1\\ -3,1 \end{bmatrix}$	$\begin{array}{c c} & \text{II,I}_7 \\ \hline \\ & \text{IV*,I}_1 \end{array}$	7 : 1 7 : 2
	1 - 1 1 1 1 - 1 1 1 1 1 1 1 1 1 1 1 1 1	-2027	$\frac{-20}{35776}$		1	$\begin{bmatrix} - & 10, 1 \\ - & 10, 7 \end{bmatrix}$	$0, 1 \\ 0, 7$	3, 1 $3, 7$	IV^*,I_7	7:1
E1 0	0 0 1	-27	47	0	1	+ 10,1	0, 1	1,1	$\overline{ }$ $\overline{IV^*,I_1}$	
F1 (0 0 1	-3	-2	1	1	+ 4,1	0,1	1,1	II,I_1	
406			N = 406 =	= 2	. 7 .	29 (4 isc	geny class	ses)		406
	1 - 1 0	-302	2260		2	-10,3,2	1 1	2, 1, 2	I_{10},I_{3},I_{2}	2 :2
	1 - 1 0	-4942	134964		2	+5,6,1	-!	1, 2, 1	I_5,I_6,I_1	2 :1
	1 0 1	-15	210		3	-4,2,3		2, 2, 3	I_4,I_2,I_3	3 :2
!	1 0 1	130		1	1	-12,6,1	-!	2,6,1	I_{12}, I_{6}, I_{1}	3 :1
!	1 1 1	-102	355		1	-8,2,1	-!	8, 2, 1	I_8,I_2,I_1	
	1 1 0	-2124			2	-16, 5, 2	1 1	2, 5, 2	I_{16}, I_5, I_2	2 :2
D2	1 1 0	-39244	-3007920	0	2	+ 8, 10, 1	8, 10, 1	2, 10, 1	I_8, I_{10}, I_1	2 :1
408			N = 408 =	: 23	• 3 •	17 (4 iso	ogeny clas	ses)		408
	$\begin{pmatrix} 0 & 1 & 0 \\ 0 & 1 & 0 \end{pmatrix}$	-48			2	+10, 2, 1		2, 2, 1	III^*,I_2,I_1	2 :2
	0 1 0	-8 -	-336		2	-11,4,2	-!	$\frac{1}{1}, 4, 2$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	2 : 1
	$\begin{array}{cccc} 0 & 1 & 0 \\ 0 & 1 & 0 \end{array}$	$-52 \\ -72$	$ \begin{array}{c c} 128 \\ 0 \end{array} $	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$\frac{4}{4}$	$\begin{vmatrix} + & 8, 2, 1 \\ + & 10, 4, 2 \end{vmatrix}$		$\begin{bmatrix} 4, 2, 1 \\ 2, 4, 2 \end{bmatrix}$	$ I_1^*,I_2,I_1 $ $ III^*,I_4,I_2 $	$egin{array}{ c c c c c c c c c c c c c c c c c c c$
	0 1 0	-752	-8160	0	2	$\begin{vmatrix} + & 10, 4, 2 \\ + & 11, 8, 1 \end{vmatrix}$		$\begin{bmatrix} 2, 4, 2 \\ 1, 8, 1 \end{bmatrix}$	$ III^*,I_4,I_2 $ $ II^*,I_8,I_1 $	2:1,5,4 2:2
B4 (0 1 0	288		0	2	-11, 2, 4		1, 2, 4	II^*, I_2, I_4	2 :2
C1 0	0 - 1 0	511	-1899	0	1	[-8, 3, 5]	0, 3, 5	[2, 1, 1]	I_1^*, I_3, I_5	
D1 0	0 1 0	-17	51	$\overline{1}$	1	-8, 5, 1	0, 5, 1	4, 5, 1	I_1^*, I_5, I_1	
410			N = 410 =	= 2	. 5 .	41 (4 isc	geny class	ses)		410
A1 :	1 - 1 0	-14	20	1	2	+6,2,1	6, 2, 1	2, 2, 1	I_6, I_2, I_1	2 :2
A2 1	1 - 1 0	-214	1260	1	2	+ 3, 1, 2	3, 1, 2	1, 1, 2	I_3,I_1,I_2	2 :1
	1 - 1 1	-1387	-18501	0	4	+24,2,1	/ /	24, 2, 1	I_{24},I_{2},I_{1}	2 :2
I I	1 - 1 1	-21867	-1239109	0	4	+12,4,2	, ,	12, 4, 2	I_{12},I_4,I_2	2:1,3,4
I I			-79565509 -1277381	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$\frac{2}{4}$	$\begin{vmatrix} + & 6, 2, 1 \\ - & 6, 8, 4 \end{vmatrix}$	$\begin{bmatrix} 6, 2, 1 \\ 6, 8, 4 \end{bmatrix}$	$\begin{bmatrix} 6, 2, 1 \\ 6, 8, 4 \end{bmatrix}$	$\begin{bmatrix} I_6, I_2, I_1 \\ I_6, I_8, I_4 \end{bmatrix}$	2:2 2:2
!	1 0 1			0	6	:	-!	:		<u>'</u>
	1 0 1 $1 0 1$	$-168 \\ -2668$	806 52806	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	6	$\begin{vmatrix} + & 4, 6, 1 \\ + & 2, 3, 2 \end{vmatrix}$	4, 6, 1 2, 3, 2	$\begin{bmatrix} 2, 6, 1 \\ 2, 3, 2 \end{bmatrix}$	$I_4,I_6,I_1 I_2,I_3,I_2$	$egin{array}{ c c c c c c c c c c c c c c c c c c c$
	1 0 1	-1543	-23094	0	2	$\begin{vmatrix} +2, 3, 2\\ +12, 2, 3 \end{vmatrix}$		$\begin{bmatrix} 2, 3, 2 \\ 2, 2, 1 \end{bmatrix}$	I_{12},I_{3},I_{2} I_{12},I_{2},I_{3}	2 : 1, 3 : 4 2 : 4; 3 : 1
C4	1 0 1	-3143	32586	0	2	+6,1,6	6, 1, 6	2, 1, 2	I_6, I_1, I_6	2:3;3:2
D1	1 0 0	-16	0	$\overline{1}$	2	+8,2,1	8, 2, 1	8, 2, 1	I_8, I_2, I_1	2 :2
D2	1 0 0	64	16	1	2	-4,4,2	4, 4, 2	4, 2, 2	I_4,I_4,I_2	2 :1
414			N = 414 =	2 -	3^2	23 (4 iso	ogeny clas	ses)		414
A1	1 - 1 1	-320	-2221	0	2	-4, 12, 1	4, 6, 1	4, 4, 1	I_4,I_6^*,I_1	2:2;3:3
	1 - 1 1	-5180	-142189	0	2	+ 2, 9, 2	2, 3, 2	2, 4, 2	I_2,I_3^*,I_2	2:1;3:4
	1 - 1 1	1705	-5137	0	6	-12,8,3	1 1	12, 4, 3	I_{12},I_2^*,I_3	2:4;3:1
A4 1	1 - 1 1	-6935	-36241	0	6	+6,7,6	6, 1, 6	6, 4, 6	I_6, I_1^*, I_6	2:3;3:2

								0110125 4141			101
	a_1 a_2 a_3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
414	4		I	V =	= 41	4 =	$2 \cdot 3^2 \cdot 23$	(contin	ued)		414
B1	1 - 1	${1}$ -14	-39	0	2	_	2, 8, 1	2, 2, 1	2, 4, 1	I_2,I_2^*,I_1	2 :2
B2	1 - 1	1 - 284	-1767	0	2	+	1, 7, 2	1, 1, 2	1, 4, 2	I_1, I_1^*, I_2	2 : 1
$\overline{C1}$	1 - 1	$\frac{1}{27}$	-59	1	2	Ī — T	4, 8, 1	4, 2, 1	[2, 4, 1]	I_4,I_2^*,I_1	2 :2
C2	1 - 1 (0 - 153	-455	1	4	+	2, 10, 2	2, 4, 2	2, 4, 2	I_2, I_4^*, I_2	2:1,3,4
C3	1 - 1 (0 - 2223	-39785	1	2	+	1, 14, 1	1, 8, 1	1, 4, 1	$\mathrm{I}_1,\!\mathrm{I}_8^*,\!\mathrm{I}_1$	2 :2
C4	1 - 1	0 - 963	11371	1	2	+	1, 8, 4	1, 2, 4	1, 2, 4	$\mathrm{I}_1, \mathrm{I}_2^*, \mathrm{I}_4$	2 :2
D1	1 - 1	1 -92	415	1	2	Ī — T	10, 6, 1	10, 0, 1	10, 4, 1	I_{10},I_0^*,I_1	2 :2
D2	1 –1	1 - 1532	23455	1	2	+	, ,	5, 0, 2	5, 2, 2	I_5, I_0^*, I_2	2 :1
41	5		Λ	7 =	: 415	5 = 3	$5 \cdot 83$ (1	l isogeny c	class)		415
A1	1 - 1	0 - 109	-412	0	1	_	4, 1	4,1	4,1	I_4,I_1	
								,	,	1, 1	
416	3		N	= 4		$= 2^{5}$	$5 \cdot 13$ (2)	isogeny c	lasses)		416
A1	0 1 (0 0	-4	0	1	_	9, 1	0, 1	1, 1	$\mathrm{I}_{0}^{st},\!\mathrm{I}_{1}$	
B1	0 - 1	0 0	4	1	1	Ī — T	9, 1	0,1	2,1	$oxed{I_0^*,I_1}$	
										07 =	
41'	7		N	=	417	= 3	3·139 (1 isogeny	class)		417
A1	1 1 (0 26	73	0	1	_	9,1	9, 1	1, 1	I_9,I_1	
418	3		N =	41	.8 =	$2 \cdot 1$	$11 \cdot 19$	(3 isogeny	classes)		418
A1	1 - 1	1 -4	3	0	2	+	2, 1, 1	2, 1, 1	2, 1, 1	$\mathrm{I}_2,\!\mathrm{I}_1,\!\mathrm{I}_1$	2 :2
A2	1 - 1	1 6	11	0	2	_	1, 2, 2	1, 2, 2	1, 2, 2	$\mathrm{I}_1,\!\mathrm{I}_2,\!\mathrm{I}_2$	2 :1
B1	1 1	1 66	-5	1	1	Ī-	13, 2, 1	13, 2, 1	13, 2, 1	$oxed{I_{13},I_2,I_1}$	
$\bar{C}1$	1 –1	1 - 6	-5	0	1	<u>-</u>	1, 2, 1	1, 2, 1	1, 2, 1	I_1,I_2,I_1	·
420)		N =	420)=	$2^2 \cdot 1$	$3 \cdot 5 \cdot 7$	(4 isogeny	classes)		420
A1		0 - 4061	67590		2			·	<u> </u>	IV, I_7, I_{10}, I_1	2 :2
A2		0 11564			$\frac{1}{2}$					IV^*, I_{14}, I_5, I_2	
B1	'	0 -565	5362		2	<u>-</u>	4, 5, 2, 1	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$		$ \text{IV}, \text{I}_5, \text{I}_2, \text{I}_1 $	2 : 2
B2		0 -540	5832		$\frac{2}{2}$					$[V^*,I_{10},I_{1},I_{2}]$	
C1	$\begin{bmatrix} 0 & 1 & 0 \\ 0 & 1 & 0 \end{bmatrix}$		 164		6	<u>-</u>	4, 3, 2, 1	:		$ \text{IV}, \text{I}_3, \text{I}_2, \text{I}_1 $	2:2;3:3
C1	$\begin{bmatrix} 0 & 1 & 0 \\ 0 & 1 & 0 \end{bmatrix}$		324		6		4, 5, 2, 1 8, 6, 1, 2			V_{13}, I_{2}, I_{1} V_{13}, I_{2}, I_{1}	,
C3	$\begin{bmatrix} 0 & 1 & 0 \\ 0 & 1 & 0 \end{bmatrix}$		-1960		2		4, 1, 6, 3			IV, I_{1}, I_{6}, I_{3} IV, I_{1}, I_{6}, I_{3}	2 : 1, 3 : 4 2 : 4; 3 : 1
C4	0 1		-8460		2					IV^*, I_2, I_3, I_6	· ·
D1	$\begin{bmatrix} 0 & 1 & 0 \end{bmatrix}$		0		2		4, 1, 2, 1	:	1,1,2,1		2 : 2
D2	0 1		20		2		8, 2, 1, 2	$0, 1, 2, 1 \ 0, 2, 1, 2$		IV^*, I_1, I_2, I_1	2 :1
422	2		N	=	422	= 2	2·211 (1 isogeny	class)		422
A1	1 -1	0 1	-3		1		4, 1	4,1	2,1	I_4,I_1	
			<u> </u>	_		<u> </u>	-, -	_, -, -	_, -, -	-4)- 1	
423	3		N	= 4	123 =	$= 3^2$	$2 \cdot 47$ (7)	isogeny c	lasses)		423
A1	0 0	1 - 12	4	1	1	+	7,1	1,1	4,1	$\mathrm{I}_{1}^{st},\!\mathrm{I}_{1}$	
B1	1-1 (0 - 72	355	0	2	<u> </u>	12, 1	6,1	4,1	I_6^*,I_1	2 :2
B2	1 - 1	0 - 1287	18094		2	+	9,2	3, 2	2, 2	I_3^*, I_2	2 :1
1											

a_1	a_2 α	a_3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
423				N =	= 42	23 = 3	3^2 .	47 (co	ntinued)			423
C1 1	-1	0	-18	-81	1	2	_	10, 1	4, 1	4, 1	I_4^*,I_1	2 :2
		0	-423	-3240	1	4	+	8, 2	2, 2	4, 2	I_2^*, I_2	2:1,3,4
	-1	0		-212625	1	2	+	7, 1	1,1	2, 1	I_1^*, I_1	2 :2
		0	-558	-891	1	4	+	7,4	1,4	$\begin{bmatrix} 4,4 \\ \end{bmatrix}$	I_1^*, I_4	2 :2
$D1 \mid 0$	0	1	-81	-277	0	1	+	9,1	0,1	$\begin{bmatrix} 2, 1 \\ \end{bmatrix}$	$ $ III^*,I_1	
E1 0	0	1	-111 	-171 	0	1	+	13,1	7,1	[2, 1]	I_7^*,I_1	
F1 0	0	1	-237	1404	1	1	+	7, 1	1,1	$\begin{bmatrix} 2, 1 \\ \end{bmatrix}$	I_1^*,I_1	
G1 0	0	1	-9	10	1	1	+	3,1	0,1	2,1	III,I_1	
425				N = 42	5 =	$5^2 \cdot$	17	(4 isog	geny classe	es)		425
	-1		-17	16	1	2	+	6, 1	0,1	2, 1	I_0^*, I_1	2 :2
		0	-142	-609	1	4	+	6, 2	0, 2	4,2	I_0^*, I_2	2:1,3,4
	-1	0	-2267	-40984	1	2	+	6, 1	0,1	2,1	I_0^*, I_1	2 :2
		0	-17	-1734	1	2	<u> </u>	6,4	0,4	4,2	I_0^*, I_4	2 :2
B1 1	1	0	-75	250	1	1		8,1	0, 1	$\begin{bmatrix} 3,1 \\ \end{bmatrix}$	IV^*,I_1	
C1 1	0	0	-3	2	1	1		2,1	0,1	$\begin{bmatrix} 1,1 \end{bmatrix}$	II,I_1	
D1 1	0	0	-213	-1208	1	2	+	8, 1	2, 1	2, 1	I_2^*,I_1	2 :2
D2 1	0	0	-88	-2583	1	2	_	10, 2	4, 2	4,2	I_4^*, I_2	2 :1
426				N = 426	i =	$2 \cdot 3$	· 71	(3 iso	geny class	es)		426
A1 1	0	0	-20	48	0	5	_	5, 5, 1	5, 5, 1	5, 5, 1	I_5, I_5, I_1	5 :2
A2 1	0	0	-230	-5202	0	1		1, 1, 5	1,1,5	$\begin{bmatrix} 1,1,5 \end{bmatrix}$	I_1,I_1,I_5	5 :1
B1 1	1	0	-286	1780	1	2	—	10, 6, 1	10, 6, 1	2, 2, 1	I_{10},I_{6},I_{1}	2 :2
B2 1	1	0	-4606	118420	1	2	_+	5, 3, 2	5, 3, 2	$\begin{bmatrix} 1,1,2 \end{bmatrix}$	I_5,I_3,I_2	2 :1
C1 1	•			1341682					9, 15, 1			3 :2
C2 1	0	1	14658	5154352	0	1	_	27, 5, 3	27, 5, 3	1, 5, 1	I_{27}, I_5, I_3	3 :1
427				N = 42	27 =	= 7 · 6	31	(3 isoge	eny classes	s)		427
A1 0	-1	1	-1	-1	0	1	_	1,1	1,1	1, 1	I_1,I_1	
B1 1	0	1		7	1	1	+	1,1	1,1	1, 1	$ I_1,I_1$	
C1 1	0	0	-28	-59	1	1	+	3, 1	3,1	1,1	I_3,I_1	
$\overline{428}$				N = 428	3 =	$2^2 \cdot 1$	107	(2 isos	geny class	es)		428
A1 0	1	0	-157	-812	0	1	_	4,1	0, 1	3,1	IV,I_1	
B1 0	-1	0	3	-2	1	1	_	4,1	0,1	3,1	$ $ IV,I_1	<u>-</u>
429				N = 420	_ '	2 . 11	. 19	2 (2 ige	geny clas	ana)		429
	1	1				1	. I e	`			T T T	
A1 1 A2 1		1 1	$\begin{array}{c} 2 \\ -13 \end{array}$	2 8	1 1	$\begin{array}{c c} 2 \\ 2 \end{array}$	+	2, 1, 1 $1, 2, 2$	$2, 1, 1 \\ 1, 2, 2$		$egin{array}{c} I_2, I_1, I_1 \ I_1, I_2, I_2 \end{array}$	2:2 2:1
B1 1		0	 -24	 -		- - - 4	!_		$\begin{bmatrix} 1 & 1 & 2 & 2 \\ 1 & 2 & 2 & 2 \\ 1 & 8 & 1 & 1 \end{bmatrix}$	$\begin{bmatrix} 1, 2, 2 \\ 2, -1 \end{bmatrix}$	I_{8},I_{1},I_{1}	$\begin{array}{c c} 2 & 1 \\ 2 & 2 \end{array}$
$\begin{bmatrix} B1 & 1 \\ B2 & 1 \end{bmatrix}$		0	-24 -429	3384		8	+		4, 2, 2	, ,		2:2 $2:1,3,4$
B3 1		0	-474	2619	1	4			2, 4, 4			2 : 1, 5, 1 $2: 2, 5, 6$
B4 1	-	0	-6864	218313	1	4			2, 1, 1	2, 1, 1	I_2, I_1, I_1	2 :2
B5 1	•	0	-3009	-61770	1	2	+	1, 8, 2	, ,	1, 2, 2	I_1, I_8, I_2	2 :3
B6 1	0	0	1341	18228	1	2	_	1, 2, 8	1, 2, 8	1, 2, 8	I_1, I_2, I_8	2 :3

					17101					ES 430A-43	IL.		103
	a_1	a_2	a_3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
430)				N = 43	0 = 0	$2 \cdot 5$. 43	(4 iso	geny class	ses)		430
A1	1 -	-1	0	-20	40	1	1	_	3, 1, 1	3, 1, 1	1, 1, 1	I_3,I_1,I_1	
B1	1	 -1	0	16	-10	1	1	' · 	1, 5, 1	1, 5, 1	1, 5, 1	I_1,I_5,I_1	<u>-</u>
$\overline{C1}$	<u>-</u>		0	4	16	1	3	_	9, 1, 1	9,1,1	9,1,1	I_9,I_1,I_1	3 :2
C2	1	0	0	-36	-440	1	3	_	3, 3, 3	3, 3, 3	3, 1, 3	I_3, I_3, I_3	3 :1,3
C3	1	0	0	-5626	-162894	1	1	<u> </u>	1,9,1	1,9,1	1,1,1	I_1,I_9,I_1	3 :2
D1	1	0	0	-1415	20617	1	1	_	15, 5, 1	15, 5, 1	15, 5, 1	I_{15}, I_5, I_1	
431	-				N = 1	431	= 43	31	(2 isoge	eny classes)		431
A1	1	0	0	0	-1	1	1	_	1	1	1	I_1	
B1	1 -	 -1	1	-9	-8	0	1	 _	1	1	1	I_1	<u> </u>
499					3.7	20	24	23	(0.1	1	`		429
$\frac{432}{432}$	ı				N=43			$\frac{3^{3}}{1}$,	geny classe		TT* TT	432
A1 A2	0	$0 \\ 0$	$0 \\ 0$	$0 \\ -480$	-16 -4048	$\begin{array}{c} 0 \\ 0 \end{array}$	1 1		12, 3 $12, 5$	$0,0 \\ 0,0$	1,1 $1,3$	II^*,II II^*,IV	3:2,3 3:1
$\begin{array}{ c c }\hline A2\\A3\end{array}$	0	0	0	0	432	$0 \\ 0$	1	_	12, 9 $12, 9$	0,0	1, 3 $1, 1$	II^*,IV^*	3:1,4
A4	0	0	0	-4320	109296	0	1	_	12, 11	0,0	1,1	II^*,II^*	3:3
B1	0	0	0	0	-4	1	1	Ī —	8, 3	0,0	[2, 1]	I_0^* ,II	3 :2
B2	0	0	0	0	108	1	1	_	8,9	0,0	2,3	I_0^* , IV^*	3 :1
C1	0	0	0	-27	-918	0	1	-	11, 11	0,0	2, 1	$\mathrm{I}_3^*,\!\mathrm{II}^*$	
D1	0	0	0	-3	34	1	1	Ī —	11, 5	0,0	[4, 3]	I_3^* ,IV	
E1	0	0	0	-51	-142	0	1	Ī —	13,3	1,0	2,1	I_5^* ,II	3 :2
E2	0	0	0	189	-702	0	1	_	15,9	3,0	2, 1	I_7^*, IV^*	3 :1,3
E3	0	0		-1971 	44658	0	1	<u> </u>	21, 11	9,0	2,1	I ₁₃ ,II*	3 :2
F1 F2	0	0	0	21	26 1654	1	1	_	15, 3	$\frac{3,0}{0,0}$	4, 1	I*,II	3:2,3
F3	$\begin{array}{c} 0 \\ 0 \end{array}$	$0 \\ 0$	$0 \\ 0$	$-219 \\ -459$	-1654 3834	1 1	$1 \\ 1$	_	21, 5 $13, 9$	$9,0 \\ 1,0$	4,1 $4,3$	$I_{13}^*,IV I_{5}^*,IV^*$	3:1 3:1
G1	0	- - -	0	-108	540	0	 1	<u> </u>	8,11	0,0	$\begin{bmatrix} 1, 5 \\ 1, 1 \end{bmatrix}$	$\begin{bmatrix} 1_0^{-1}, 1_0^{-1} \end{bmatrix}$	
H1		- - -	0	 -12	-20	0	1	l_	8,5	$\begin{bmatrix} 0, 0 \\ 0, 0 \end{bmatrix}$	$\begin{bmatrix} 1, 1 \\ 1, 1 \end{bmatrix}$	$ I_0^{\bullet, II} $	<u> </u>
111	0	0	0	12	20	U	1		0,0	0,0	1,1	10,1 4	
433	}				N =	433	3 = 4	:33	(1 isog	geny class)		T	433
A1	1	0	0	0	1	2	1	_	1	1	1	I_1	
434	Ļ				N = 43	4 =	$2 \cdot 7$. 31	(5 isc	geny class	ses)		434
A1	1 -	-1	0	-7	-3	1	2	+	6, 1, 1	6, 1, 1	2, 1, 1	I_6,I_1,I_1	2 :2
A2	1 -	-1	0	-47	133	1	2	+	3, 2, 2	3, 2, 2	1, 2, 2	I_3,I_2,I_2	2 :1
B1	1	0	0	-4	16	0	3	-	9, 1, 1	9, 1, 1	9, 1, 1	I_9,I_1,I_1	3 :2
B2 B3	$\begin{array}{c c} 1 \\ 1 \end{array}$	$0 \\ 0$	0	$ \begin{array}{r} 36 \\ -3374 \end{array} $	-424 -75754	0	$\frac{3}{1}$	_	3, 3, 3 $1, 9, 1$	3, 3, 3 1, 9, 1	3, 3, 3 $1, 9, 1$	$I_3,I_3,I_3 I_1,I_9,I_1$	3:1,3 3:2
C1	<u> </u>	 1	1	-32	61	0	$\frac{1}{2}$:	2, 4, 1	$\begin{bmatrix} 2, 4, 1 \\ 2, 4, 1 \end{bmatrix}$	$\begin{bmatrix} 2, 0, 1 \\ 2, 2, 1 \end{bmatrix}$	$ I_2, I_4, I_1 $	$\begin{bmatrix} 2 & 2 \\ 2 & 2 \end{bmatrix}$
C2	1	1	1	-522	4373	0	$\frac{2}{2}$	+	1, 2, 2	1, 2, 2	1, 2, 2	I_1, I_2, I_2	2:1 2:1
D1	1	0	0	21	49	1	2	·	10, 2, 1	10, 2, 1	10, 2, 1	$ I_{10}, I_2, I_1 $	2 :2
D2	1	0	0	-139	465	1	2	+	5, 4, 2	5,4,2	5, 4, 2	I_5,I_4,I_2	2 :1
E1	1	-1	1	-2364	-43641	0	1	_	3, 1, 1	[3, 1, 1]	3, 1, 1	I_3,I_1,I_1	

	a_1	a_2	a_3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
495	•									_			495
435)				N = 435	=	$3 \cdot 5$	· 29	(4 iso	geny class	ses)	1	435
A1	0	1	1	-11	11	0	3	_	3, 1, 1	3, 1, 1	3, 1, 1	I_3, I_1, I_1	3 :2
A2	0	1	1	49	80	0	1	_	1, 3, 3	1, 3, 3	1, 1, 1	I_1,I_3,I_3	3 :1
B1	0	-1^{-1}	1	79	-1123	0	1	-	5, 7, 1	[5, 7, 1]	1, 1, 1	I_5, I_7, I_1	
$\bar{C1}$	1	0	1	-28	53	0	$\frac{1}{2}$	+	2, 1, 1	[2, 1, 1]	[2, 1, 1]	I_2,I_1,I_1	2 :2
C2	1	0	1	-33	31	0	4	+	4, 2, 2	4, 2, 2	4, 2, 2	I_4,I_2,I_2	2:1,3,4
C3	1	0	1	-258	-1589	0	2	+	2, 1, 4	2, 1, 4	2, 1, 4	I_2, I_1, I_4	2 :2
C4	1	0	1	112	263	0	4	_	8, 4, 1	8, 4, 1	8, 4, 1	I_{8}, I_{4}, I_{1}	2 :2
D1	1	0	0	-30	-45	0	4	1+	8, 1, 1	8, 1, 1	8, 1, 1	I_8, I_1, I_1	2 :2
D2	1	0	0	-435	-3528	0	4		4, 2, 2	4, 2, 2	4, 2, 2	I_4, I_2, I_2	2:1,3,4
D3	1	0	0	-6960	-224073	0	2	+	2, 1, 1	2, 1, 1	2, 1, 1	I_2,I_1,I_1	2 :2
D4	1	0	0	-390	-4275	0	4	_	2,4,4	2, 4, 4	2, 4, 4	I_2, I_4, I_4	2 :2
437	7				N = 43'	7 =	19 ·	23	(2 isog	geny classe	es)		437
A1	0	-1	1	19	100	1	1	_	1,4	1,4	1,4	I_1,I_4	
B1	0	-1 - 1	1	0	 -5	0	1	i	1,2	1, 2	1,2	$oxed{I_1,I_2}$	
									,	_, _,	_,_	-1)-2	
438	3				N = 438	=	$2 \cdot 3$	· 73	(7 iso	geny class	ses)		438
A1	1	0	0	-938	-9564	0	6		18, 6, 1	18, 6, 1	18, 6, 1	I_{18}, I_{6}, I_{1}	2 :2; 3 :3
A1 A2	1	0	0	-938 1622	-52060	0	6	_	9, 12, 2	9, 12, 2	9, 12, 2	I_{18},I_{6},I_{1} I_{9},I_{12},I_{2}	$egin{array}{ c c c c c c c c c c c c c c c c c c c$
A3	1	0			-7587996	0	2		6, 2, 3	6, 2, 3	6, 2, 3	I_6, I_2, I_3	$egin{array}{ c c c c c c c c c c c c c c c c c c c$
A4	1	0			-7596724		2	_	3, 4, 6	3, 4, 6	3, 4, 6	I_{3},I_{4},I_{6}	2:3;3:2
B1	1	0	0	-13	-19	<u>'</u>	!	<u>'</u>	2, 2, 1	:	$\begin{vmatrix} 2 & 2 & 2 & 2 \\ 2 & 2 & 2 & 1 \end{vmatrix}$:	2 :2
B1 B2	1	-			-19 -45				1, 4, 2	2, 2, 1 $1, 4, 2$	$\begin{bmatrix} 2, 2, 1 \\ 1, 4, 2 \end{bmatrix}$	$egin{array}{c} I_2, I_2, I_1 \ I_1, I_4, I_2 \end{array}$	
						. – –	:	:		:	[-	[
C1	1	1	0	-5	-3				4, 2, 1		2, 2, 1	-, -, -	2 :2
C2	1	1	0	-65	-231	1	2	+	2, 1, 2	$\frac{1}{2}, \frac{1}{2}, \frac{2}{2}$	[2, 1, 2]	I_2,I_1,I_2	2 :1
D1	1	-	1		32780	1	6		6, 12, 1	6, 12, 1	2, 12, 1	I_6, I_{12}, I_1	2:2;3:3
D2	1	0		-31106	2108972	1	6		3, 6, 2	, ,	1, 6, 2	I_3, I_6, I_2	
D3	1	0	1	-9641	-337876		2		18, 4, 3		2, 4, 3		2:4;3:1
D4	1	0	1	-32681	1883180	1_{-}	$\begin{vmatrix} 2 \end{vmatrix}$	+	9, 2, 6	9, 2, 6	1, 2, 6	I_9,I_2,I_6	2 :3; 3 :2
E1	1	0	1	-130	-556	0	2	+	14, 2, 1	14, 2, 1	2, 2, 1	I_{14}, I_2, I_1	2 :2
E2	1	0	1	-2050	-35884	0	2	+	7, 1, 2	7, 1, 2	1, 1, 2	I_7,I_1,I_2	2 :1
$\overline{F1}$	1	1	1	-19	17	1	4	+	8, 2, 1	8, 2, 1	8, 2, 1	I_8,I_2,I_1	2 :2
F2	1	1	1	-99	-399	1	$\overline{4}$		4, 4, 2	, ,	4, 2, 2	I_4, I_4, I_2	2 : 1, 3, 4
F3	1		1	-1559	-24343	1	2		2, 8, 1				2 :2
F4	1	1		81	-1479	1	4	_	2, 2, 4		2, 2, 4		2 :2
$\overline{G1}$	1		1	-8	2	1	$\frac{1}{2}$	+	2, 4, 1	:	[2, 4, 1]	I_2,I_4,I_1	2 :2
G2	1		1	-98	362	1			1, 2, 2	1, 2, 2	1, 2, 2	I_1, I_2, I_2	2:1
						<u> </u>	<u> </u>		. ,	<u> </u>	<u> </u>	1 / -	<u> </u>
440)				N = 440	= 2	$2^3 \cdot 5$. 11	(4 iso	ogeny clas	ses)		440
A1	0	0	0	-38	-87	1	2		4, 3, 2	0, 3, 2	2, 1, 2	III,I_3,I_2	2 :2
A2	0		0	17					8, 6, 1	0, 6, 1	2, 2, 1	I_1^*, I_6, I_1	2 :1
B1	0		0	2	-3			' _	4, 2, 1	[0, 2, 1]	$\begin{bmatrix} 2 & 2 & 2 & 2 \\ 2 & 2 & 2 & 1 \end{bmatrix}$	$ \mathbf{III},\mathbf{I}_2,\mathbf{I}_1 $	2 : 2
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	0		0	-23	-38	1			4, 2, 1 8, 1, 2	$0, 2, 1 \\ 0, 1, 2$	$\begin{bmatrix} 2, 2, 1 \\ 4, 1, 2 \end{bmatrix}$	$I_1^{11,12,11}$ I_1^*,I_1,I_2	$\begin{bmatrix} 2 & 2 \\ 2 & 1 \end{bmatrix}$
		0	J	20	•	*	ı ~	1 '	\sim, \pm, ω	0, 1, 4	, -, -	,,	

$a_1 \ a_2 \ a_3$	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies		
440		N = 44	0 =	$= 2^3$	• 5	· 11 (c	ontinued))		440		
$\begin{bmatrix} C1 & 0 & 0 \end{bmatrix}$		137801		4	+	4, 3, 2	0, 3, 2	2, 3, 2	III,I_3,I_2	2 :2		
	0 -5047	137514		4	+	8, 6, 4	0, 6, 4	2, 6, 2	I_1^*, I_6, I_4	2:1,3,4		
	$ \begin{array}{rrr} 0 & -7547 \\ 0 & -2627 \end{array} $	-12986		2	+	10, 3, 8	0, 3, 8	$\begin{bmatrix} 2, 3, 2 \\ 2, 12, 2 \end{bmatrix}$	III^*, I_3, I_8	2 :2		
		269646		4		10, 12, 2	0, 12, 2	:	$ III^*,I_{12},I_2 $	2 : 2 		
D1 0 0	$\frac{0}{}$ -67	-226	0	1	_	11, 3, 1	0, 3, 1	1, 3, 1	II^*,I_3,I_1			
441		N = 441	= :	$3^2 \cdot '$	7^{2}	(6 isog	eny classe	es)		441		
A1 0 0	1 0			1		3, 10	0,0	2,1	III,II*	3 :2		
$\begin{vmatrix} A1 \\ A2 \end{vmatrix} \begin{vmatrix} 0 & 0 \end{vmatrix}$				1	_	9, 10	0,0	2,1	III^*,II^*	3 :1		
B1 0 0	1 0	12	1	3	<u>-</u> -	3, 4	0,0	2,3	III,IV	3:2		
	1 0	-331		1	_	9, 4	0, 0	2,3	III*,IV	3 :1		
C1 1 -1	0 432	-869	1	2	<u> </u>	8,7	[2, 1]	2,4	I_2^*,I_1^*	2 :2		
C2 1-1	0 -1773	-5720	1	4	+	10,8	4, 2	4, 4	$\bar{\mathrm{I}_{4}^{*}},\!\bar{\mathrm{I}_{2}^{*}}$	2:1,3,4		
	0 -21618			4	+	8, 10	2,4	4,4	I_2^*, I_4^*	2:2,5,6		
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$		867901		2	+	14,7	8,1	4,2	I_{8}^{*},I_{1}^{*}	2 :2		
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		-78165914 -1979636	1 1	$\frac{2}{2}$	+	7,8 $7,14$	$1, 2 \\ 1, 8$	$2, 2 \\ 4, 4$	$egin{array}{c} \mathrm{I}_1^*, \mathrm{I}_2^* \ \mathrm{I}^*, \mathrm{I}_2^* \end{array}$	2:3 2:3		
!			'		 - 		¦	!	I ₁ *,I ₈	<u> </u>		
$\begin{array}{ c c c c c } D1 & 1 & -1 \\ D2 & 1 & -1 \\ \end{array}$		46 2440	1 1	$\frac{2}{2}$	+	6, 3 6, 3	$0, 0 \\ 0, 0$	2, 2 $4, 2$	I_0^* ,III I_0^* ,III	$egin{array}{ c c c c c c c c c c c c c c c c c c c$		
	$ \begin{array}{rr} -355 \\ 1 & -965 \end{array} $	-13940	1	$\frac{2}{2}$	_	6, 9	$0,0 \\ 0,0$	2,2	$I_0^{,111}$ I_0^{*},III^{*}	$\begin{bmatrix} {f 2} & . & 1 & , & 7 & . & 4 \\ {f 2} & . & 4 & , & 7 & . & 1 \end{bmatrix}$		
D4 1-1			1	$\frac{1}{2}$	+	6, 9	0,0	4,2	I_0^*, III^*	2:3;7:2		
E1 0 0	1 -1029	-13806	0	1	Ī-	7,8	1,0	[2, 1]	I_1^*,IV^*	13:2		
E2 0 0	1 -402339	98307144	0	1	_	19, 8	13, 0	2,1	I_{13}^* , IV^*	13 : 1		
F1 0 0	1 -21	40	1	1	_	7, 2	1,0	[-4,1]	I_1^*,II	13 :2		
$\begin{array}{ c c c c c } F2 & 0 & 0 \end{array}$	1 - 8211	-286610	1	1	_	19, 2	13,0	4,1	I_{13}^* , II	13 : 1		
442		N = 442 =	2	· 13	• 17	(5 iso	geny clas	ses)		442		
A1 1 -1						2, 2, 3			I_2, I_2, I_3	2 :2		
$A2 \mid 1-1$			'			1,1,6	'	:	I_1,I_1,I_6	2:1		
	1 -172					8, 2, 3			- / / -	2 :2		
B2 1 -1			'					. – – – –	I_4,I_1,I_6	2 :1		
C1 1 1						8, 2, 1		, ,	0, =, =	2 :2		
C2 1 1 1		-540	'	<u> </u>	<u>'</u> –		'	:	I_4,I_4,I_2	2 :1		
D1 1 1									I_2,I_2,I_1	2 :2		
D2 1 1			'						'	2:1		
	1 -144951								I_{22},I_4,I_5			
E2 1 1	$\frac{1 - 1875511}{}$	987017101	U	2	+	11, 2, 10	11, 2, 10	11, 2, 2	I_{11},I_2,I_{10}	2:1		
443 $N = 443 = 443$ (3 isogeny classes) 443												
A1 0 1	1 1		1		_	$\frac{(3 \text{ isoger})}{1}$	1 1	1	I_1	110		
	1 L	1	<u> </u>		<u> </u>		<u> </u>	<u> </u>	<u> </u>	I		

1 -----1

1

1 | 1 | 1 I_1 I_1

 $\begin{array}{cccc}
1 & 0 & 0 \\
\hline
1 & 0 & 1
\end{array}$

C1

-3 -84

$a_1 a_2 a_3 \qquad \qquad a_4$	$a_6 \mid r \mid T \mid s \operatorname{ord}(\Delta) \mid \operatorname{ord}_{-}(j)$	c_p Kodaira	Isogenies
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44	4		N	V = 444 =	2	$2 \cdot 3$	· 37 (2 iso	ogeny cla	sses)			444
A1	0 - 1	0	-13	-14	0	2	+4,2,1	0, 2, 1	1, 2, 1	IV,I_2,I_1	2 :2	
A2	0 - 1	0	-28	40	0	2	+8,1,2	0, 1, 2	1, 1, 2	IV^*,I_1,I_2	2 : 1	
B1	0 1	0	_9	0	$\overline{1}$	2	+4,4,1	0, 4, 1	[3, 4, 1]	IV,I ₄ ,I ₁	2 :2	
B2	0 1	0	36	36	1	2	-8,2,2	0, 2, 2	3, 2, 2	$IV^*.I_2.I_2$	2:1	

446	3				N = 446	=	$2 \cdot 2$	23	(4 isog	geny class	ses)			446
A1	1	1	0	-30	52	1	1	+	6, 1	6, 1	2,1	I_6,I_1		
B1	1	1	1	-39	-35	1	1	+	14, 1	14, 1	[14,1]	I_{14},I_1]	
C1	1	1	1	2	-5	0	2	Ī-	6, 1	[6, 1]	6,1	0 / 1	2 :2	
C2	1	1_	1	-38	-101	0	2	+	3, 2	3,2	3,2	I_3,I_2	2 :1	
D1	1 -	1	0	-4	4	2	1	+	2, 1	2, 1	2, 1	I_2,I_1		

448	3				N = 448	3 =	2^6 .	7	(8 isog	eny classe	es)		448
A1	0	0	0	4	16	1	2	_	14, 1	0,1	4, 1	I_4^*,I_1	2 :2
A2	0	0	0	-76	240	1	4	+	16, 2	0, 2	4, 2	I_6^*, I_2	2:1,3,4
A3	0	0	0	-236	-1104	1	2	+	17, 4	0, 4	4, 2	$ ext{I}_7^*, ext{I}_4$	2 :2
A4	0	0	0	-1196	15920	1	4	+	17, 1	0, 1	4, 1	$ m I_7^*, m I_1$	2 :2
B1	0	0	0	4	-16	1	2	Ī-	14,1	[0,1]	[4, 1]	$\mathrm{I}_{4}^{st},\!\mathrm{I}_{1}$	2 :2
B2	0	0	0	-76	-240	1	4	+	16, 2	0, 2	4, 2	$\mathrm{I}_{6}^{st},\!\mathrm{I}_{2}$	2:1,3,4
В3	0	0	0	-1196	-15920	1	2	+	17, 1	0, 1	2, 1	$\mathrm{I}_{7}^{st},\!\mathrm{I}_{1}$	2 :2
B4	0	0	0	-236	1104	1	4	+	17, 4	0, 4	4,4	$\mathrm{I}_{7}^{st},\!\mathrm{I}_{4}$	2 :2
C1	0	-1	0	-33	161	0	2	[-	20, 1	$\begin{bmatrix} 2,1 \end{bmatrix}$	[4,1]	I_{10}^*, I_1	2 :2; 3 :3
C2	0	-1	0	-673	6945	0	2	+	19, 2	1, 2	2, 2	I_9^*, I_2	2:1;3:4
C3	0	-1	0	287	-3231	0	2	_	24, 3	6, 3	4, 3	I_{14}^*,I_3	2:4;3:1,5
C4	0	-1	0	-2273	-33439	0	2	+	21, 6	3, 6	2, 6	I_{11}^*, I_6	2:3;3:2,6
C5	0	-1	0	-10913	-436447	0	2	_	36, 1	18, 1	4, 1	I_{26}^*, I_1	2 :6; 3 :3
C6	0	-1	0	-174753	-28059871	0	2	+	27, 2	9, 2	2,2	I_{17}^{*},I_{2}	2:5; 3:4
D1	0	-1	0	7	-7	0	2	Ī-	12, 1	0,1	[4,1]	$\mathrm{I}_{2}^{st},\!\mathrm{I}_{1}$	2 :2
D2	0	-1	0	-33	-31	0	2	+	15, 2	0, 2	2,2	$ar{\mathrm{I}_5^*}, ar{\mathrm{I}_2}$	2 :1
E1	0	-1	0	-1	33	0	2	Ī-	16, 1	[0,1]	[4,1]	I_6^*, I_1	2 :2
E2	0	-1	0	-161	833	0	2	+	17, 2	0, 2	2,2	$\mathrm{I}_{7}^{*},\!\mathrm{I}_{2}$	2 :1
F1	0	1	0	-33	-161	0	2	[-	20, 1	$\begin{bmatrix} 2,1 \end{bmatrix}$	4,1	I_{10}^*, I_1	2 :2; 3 :3
F2	0	1	0	-673	-6945	0	2	+	19, 2	1, 2	2,2	I_9^*, I_2	2:1;3:4
F3	0	1	0	287	3231	0	2	_	24, 3	6,3	4, 1	I_{14}^*, I_3	2:4;3:1,5
F4	0	1	0	-2273	33439	0	2	+	21, 6	3,6	2,2	I_{11}^*, I_6	2:3;3:2,6
F5	0	1	0	-10913	436447	0	2	_	36, 1	18, 1	4, 1	I_{26}^*, I_1	2:6;3:3
F6	0	1	0	-174753	28059871	0	2	+	27, 2	9, 2	2,2	I_{17}^{*},I_{2}	2:5; 3:4
G1	0	1	0	7	7	1	2	Ī-	12, 1	[0,1]	[4, 1]	$\mathrm{I}_{2}^{st},\!\mathrm{I}_{1}$	2 :2
G2	0	1	0	-33	31	1	2	+	15, 2	0, 2	4,2	$ar{\mathrm{I}_5^*}, ar{\mathrm{I}_2}$	2 :1
H1	0	1	0	-1	-33	0	2	Ī-	16, 1	[0,1]	[4, 1]	I_6^*, I_1	2 :2
H2	0	1	0	-161	-833	0	2	+	17, 2	0, 2	2,2	$ m I_7^*, m I_2$	2 :1

$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$						ITEL		and(A)	and (i)		Vodoino	Igamonias
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		$a_1 \ a_2 \ a_3$	a_4	a_6	T	T	s	$ord(\Delta)$	$ord_{-}(j)$	c_p	Kodaira	Isogenies
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	4 P	0					- 0	-0 (-	_	- \		450
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	45	1		N = 450	=		3 ² ·	\	isogeny o		Τ	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$							-			, ,	, 1,	· · · · · · · · · · · · · · · · · · ·
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$, ,		, , ,		· · · · · · · · · · · · · · · · · · ·
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $												
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	A4	1-1 1	-186305	-30804303	0	2	+	5, 16, 9	[5, 10, 0]	5,4,2	$ 1_5,1_{10}^*,111^* $	[2 : 3; 5 : 2
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	B1	1 - 1 1	-5	47	0	1	-	1, 6, 4	1, 0, 0	1, 1, 1	I_1,I_0^*,IV	3:2;5:3
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	B2	1 - 1 1	-1130	14897	0	3	_	3, 6, 4	3, 0, 0	3, 1, 3	I_3,I_0^*,IV	3:1;5:4
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	В3	1 - 1 1	-680	-8053	0	1	-	5, 6, 8	5, 0, 0	5, 1, 1	I_5,I_0^*,IV^*	3:4;5:1
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	B4	1 - 1 1	4945	59447	0	3	_	15, 6, 8	15, 0, 0	15, 1, 3	I_{15}, I_0^*, IV^*	3:3;5:2
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	$\bar{C}1$	1 - 1 0	-27	81	1	$\overline{2}$	<u>-</u>	2, 7, 3	2, 1, 0	2, 4, 2	$I_2.I_1^*.III$	2 : 2: 5 : 3
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $, ,		<i>'</i>
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $, ,			_	′
$\begin{array}{c c c c c c c c c c c c c c c c c c c $												
$\begin{array}{c c c c c c c c c c c c c c c c c c c $!			-		¦- :		!	:		<u> </u>
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$, ,		<i>'</i>
$\begin{array}{c c c c c c c c c c c c c c c c c c c $, ,			-	· · · · · · · · · · · · · · · · · · ·
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$, ,			-	· · · · · · · · · · · · · · · · · · ·
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$!			- :	<u>-</u>	<u></u>		'			<u>-</u>
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$							-	, ,				<i>'</i>
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $, ,				· · · · · · · · · · · · · · · · · · ·
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$												· ·
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	E4	1 –1 1	-28730	-1867103	0	2	+ -	3,9,8	[3, 0, 2]	[3, 2, 4]	$ 1_3,111^+,1_2^+ $	[2 : 3; 3 : 2
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	F1	1 - 1 0	-192	1216	1	2	-	6, 3, 7	6, 0, 1	2, 2, 4	I_6 , III , I_1^*	2:2;3:3
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	F2	1 - 1 0	-3192	70216	1	2	+	3, 3, 8	3, 0, 2	1, 2, 4	I_3 , III , I_2^*	2:1;3:4
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	F3	1 - 1 0	1308	-5284	1		-	2, 9, 9	2, 0, 3	2, 2, 4		<i>'</i>
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	F4	1 - 1 0	-5442	-39034	1	2	+	1, 9, 12	1, 0, 6	1, 2, 4	I_1 , III^* , I_6^*	2:3;3:2
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\overline{G1}$	1 - 1 0	333	-7259	0	$\frac{1}{2}$	_	4, 9, 7	[4, 3, 1]	[2, 2, 2]	I_4, I_3^*, I_1^*	$ {\bf 2}:2;{\bf 3}:3$
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	G2		-4167	-92759	0						~ -	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	G3	1 - 1 0	-3042								_	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	G4	1 - 1 0	-64917				+	1, 9, 10				
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	G5	1 - 1 0	-15417				+	1, 18, 7		1, 4, 2		2:2;3:8
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	G6	1 - 1 0	-75042	7916116	0	4	+	6, 8, 12	6, 2, 6	2, 4, 4		2 :3,7,8; 3 :2
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	G7						+	3, 7, 18		1, 4, 4		2:6;3:4
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	G8	$1 - 1 \ 0$	-1200042	506291116	0	2	+	3, 10, 9	3, 4, 3	1, 4, 2		2:6;3:5
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		I								I.		
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	45	1		N = 45	51	= 1	1 ·	41 (1	isogenv o	class)		451
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	_	1	3				_ 	`		·	I ₁ , I ₂	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		V 1 1		•	_	_	<u> </u>	-, -			-1,-2	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	1 P	-		3 F		_	_	40 (= :				4
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	_	1					1				T	1
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$												
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$												l l
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$											- / /	1
$ \begin{vmatrix} B2 & 1 - 1 & 1 & & -72 & & 194 & 1 & 4 & + & 2, 4, 2 & 2, 4, 2 & 2, 2, 2 & I_2, I_4, I_2 & 2 : 1, 3, 4 \\ B3 & 1 - 1 & 1 & & -397 & & -2796 & 1 & 2 & + & 1, 8, 1 & 1, 8, 1 & 1, 2, 1 & I_1, I_8, I_1 & 2 : 2 \end{vmatrix} $	A4	$\begin{bmatrix} 1-1 & 0 \end{bmatrix}$	160	-7169	1	2	<u> </u> _	12, 1, 1	12, 1, 1	2, 1, 1	I_{12},I_1,I_1	2 :2
$ \begin{vmatrix} B2 & 1-1 & 1 & & -72 & & 194 & 1 & 4 & + & 2, 4, 2 & 2, 4, 2 & 2, 2, 2 & I_2, I_4, I_2 & 2:1, 3, 4 \\ B3 & 1-1 & 1 & & -397 & & -2796 & 1 & 2 & + & 1, 8, 1 & 1, 8, 1 & 1, 2, 1 & I_1, I_8, I_1 & 2:2 \\ \end{vmatrix} $	В1	1 - 1 1	-67	226	1	4	+	$1, 2, \overline{1}$	1, 2, 1	$1, 2, \bar{1}$	I_1,I_2,I_1	2 :2
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	B2	1 - 1 1	-72	194	1	4	+	2, 4, 2		2, 2, 2	$\mathrm{I}_2,\!\mathrm{I}_4,\!\mathrm{I}_2$	2 :1,3,4
B4 1-1 1	В3	1 - 1 1	-397	-2796	1	2	+	1, 8, 1	1, 8, 1			2:2
	B4	1 - 1 1	173	1076	1	4	-	4, 2, 4	4, 2, 4	4, 2, 4	I_4, I_2, I_4	2 :2

	$a_1 \ a_2 \ a_3$	a_4	$a_6 r$	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
$\overline{45}$	6		N = 456	$= 2^{3}$	$3 \cdot 3$. 19 (4	isogeny cla	sses)		456
A1	0 - 1 0	-16	28 0	2	+	10, 1, 1	0, 1, 1	2, 1, 1	III^*, I_1, I_1	2 :2
A2	0 - 1 0	24	108 0	2	_	11, 2, 2	0, 2, 2	1, 2, 2	II^*,I_2,I_2	2:1
B1	0 1 0	-172	-928 0	$\frac{1}{2}$	+	8, 3, 1	0, 3, 1	[2, 3, 1]	I_1^*, I_3, I_1	2 :2
B2	0 1 0	-192	-720 0		+	10, 6, 2	0, 6, 2	2, 6, 2	III^*, I_6, I_2	2:1,3,4
B3	$\begin{bmatrix} 0 & 1 & 0 \\ 0 & 1 & 0 \end{bmatrix}$	-1272	16560 0		+	11, 3, 4	0, 3, 4	1, 3, 2	II^*,I_3,I_4	2:2
$\begin{bmatrix} B4 \\ \overline{-1} \end{bmatrix}$!	568	-4368 0		- 	11, 12, 1	$\begin{bmatrix} 0, 12, 1 \\ \end{bmatrix}$	1,12,1	\mid II*,I $_{12}$,I $_{1}$	2 :2
C1	$\begin{bmatrix} 0 & 1 & 0 \\ & 0 & 1 \end{bmatrix}$	-57 	171 1	1 	-	8, 6, 1	$\begin{bmatrix} 0, 6, 1 \\ -2, 2 \end{bmatrix}$	$\frac{ 4,6,1 }{ 3,3 }$	$\begin{bmatrix} I_1^*, I_6, I_1 \\ \end{bmatrix}$	 -
		55	93 1	1		8, 2, 3	0, 2, 3	2,2,3	I_1^*, I_2, I_3	450
45	1	1.0	N = 458	1	1		ogeny class		T T	458
	$\begin{bmatrix} 1 - 1 & 0 \\ - & - & - \end{bmatrix}$		37 1	1 	+ 	4,1	4,1	2,1	I_4,I_1	 -,
B1	1 1 1	-16	$-15 \mid 1$	1	+	10, 1	10, 1	10, 1	I_{10} , I_1	
45	9		N = 459) =	3^3 ·	17 (8 is	ogeny class	ses)		$\phantom{00000000000000000000000000000000000$
A1	1-1 0	0	-1 1	1	-	3,1	0,1	1,1	II,I_1	
B1	0 0 1	3	$-4 \mid 1$	1	-	3, 2	0, 2	1,2	$_{ m II,I_2}$	
C1	0 0 1	-6	$-6 \mid 0$	$\begin{bmatrix} 1 \\ 1 \end{bmatrix}$		3, 1	0,1	1,1	$ $ II,I $_1$	3:2
C2	0 0 1	24	$-27 \mid 0$	3	<u> -</u>	5,3	0,3	3,3	$_{\rm IV,I_3}$	3 :1
D1	0 0 1	-351	2531 0	1	-	9, 1	0, 1	1, 1	$\mathrm{IV}^*,\!\mathrm{I}_1$	
E1	0 0 1	27	101 0	1	-	9, 2	0, 2	1,2	$ $ IV^*,I_2	
$\overline{F1}$	0 0 1	-54	$155 \mid 0$	3		9, 1	0,1	3,1	$ $ IV^*,I_1	$ {f 3}:2$
F2	0 0 1	216	722 0	1	<u> -</u>	11,3	0,3	1,1	II^*,I_3	3 :1
G1	0 0 1	-39	-94 0	1	-	3, 1	0,1	1, 1	II,I_1	
H1	1-1 1	-2	28 1	1	-	9, 1	0, 1	3,1	$ \text{IV*,I}_1$	
46	0		N = 460	$= 2^{\frac{1}{2}}$	$2 \cdot 5$. 23 (4	isogeny cla	sses)		460
A1	0 0 0	-8	-12 0	1	_	8, 1, 1	0, 1, 1	1, 1, 1	IV^*,I_1,I_1	
B1	0 0 0	-73	2453 0	1	 	4, 2, 5	0, 2, 5	[1, 2, 1]	IV,I_2,I_5	
$\overline{C1}$	0 1 0	-46	529 1	3		4, 4, 3	0, 4, 3	3, 2, 3	IV,I_4,I_3	$ {\bf 3}:2$
C2	0 1 0	414	-13915 1	1	_	4, 12, 1	0, 12, 1	1, 2, 1	IV,I_{12},I_1	3 :1
D1	$0 - 1 \ 0$	-10	17 1	1	-	4, 2, 1	0, 2, 1	[3, 2, 1]	IV,I_2,I_1	
$\overline{46}$	$\overline{2}$		N = 462 =	= 2 ·	3 ·	$7 \cdot 11 (7$	isogeny cla	asses)		462
A1	1 1 0	5	-23 1	2	_	2, 4, 1, 2	2, 4, 1, 2	2, 2, 1, 2	I_2, I_4, I_1, I_2	2 :2
A2	1 1 0	-105	-441 1	2	+	1, 8, 2, 1	1, 8, 2, 1	1, 2, 2, 1	I_1, I_8, I_2, I_1	2 :1
B1	1 1 0	-644	-2352 0			20, 3, 2, 1	20, 3, 2, 1	2, 1, 2, 1	I_{20}, I_3, I_2, I_1	2:2
B2	1 1 0	-5764	164560 0			10, 6, 4, 2	10, 6, 4, 2	[2, 2, 2, 2]	I_{10},I_{6},I_{4},I_{2}	2 :1,3,4
B3 B4	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$-92004 \\ -1444$	$\begin{array}{c c} 10703088 & 0 \\ 410800 & 0 \end{array}$		+	5, 12, 2, 1 5, 3, 8, 4	$\begin{bmatrix} 5, 12, 2, 1 \\ 5, 3, 8, 4 \end{bmatrix}$	$\begin{vmatrix} 1, 2, 2, 1 \\ 1, 1, 2, 4 \end{vmatrix}$		2:2 2:2
C1	$\begin{bmatrix} 1 & 1 & 0 \\ -1 & -1 & 0 \\ 1 & 1 & 0 \end{bmatrix}$	4	0 1		! 	4, 1, 1, 1	$\begin{bmatrix} 3, 3, 3, 4 \\ 4, 1, 1, 1 \end{bmatrix}$	$\begin{bmatrix} 1, 1, 2, 4 \\ 2, 1, 1, 1 \end{bmatrix}$	$\left \begin{array}{cccccccccccccccccccccccccccccccccccc$	$ {f 2}:2 \ {f 2}:2$
C1	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	-16	-2011	$\frac{2}{4}$	+		$\begin{bmatrix} 4, 1, 1, 1 \\ 2, 2, 2, 2 \end{bmatrix}$	$\begin{bmatrix} 2, 1, 1, 1 \\ 2, 2, 2, 2 \end{bmatrix}$	I_{2},I_{2},I_{2},I_{2}	$\begin{bmatrix} 2 : 2 \\ 2 : 1, 3, 4 \end{bmatrix}$
C3	1 1 0	-226	-1406 1	2			1, 1, 1, 4			2:2
C4	1 1 0	-126	486 1	2	+	1,4,4,1	1, 4, 4, 1	1, 2, 4, 1	I_1,I_4,I_4,I_1	2 :2
D1		-1676	5058506 0			26, 4, 5, 2			-0, 1, 0, -	2 :2
D2	1 0 1 -	-452236	115355594 0	2	+	13, 8, 10, 1	13, 8, 10, 1	[1, 8, 2, 1]	$I_{13}, I_{8}, I_{10}, I_{1}$	2:1

	\overline{u}_1	$a_2 \epsilon$	$\overline{a_3}$	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
462						- 4	<u> </u>	= 2	$\cdot 3 \cdot 7 \cdot 11$	(0)	_		462
E1	1	1	1	-405		1	2		$\frac{3}{14,2,3,2}$	14, 2, 3, 2	· /	I_{14}, I_2, I_3, I_2	2:2
E2	1	1	1	-7445		1	$\frac{1}{2}$		7, 4, 6, 1	7, 4, 6, 1	7, 2, 6, 1	I_7, I_4, I_6, I_1	2 :1
F1	1	0	0	-97	1337	0	4	 	4, 2, 3, 4	[4, 2, 3, 4]	[4, 2, 1, 4]	I_4, I_2, I_3, I_4	2 :2
	1		0	-2517		0	4		2, 4, 6, 2	2, 4, 6, 2	2, 4, 2, 2	I_2, I_4, I_6, I_2	2:1,3,4
F3	1		0	-3507		0	2		1, 2, 12, 1	$\begin{bmatrix} 1, 2, 12, 1 \\ 1, 2, 2, 1 \end{bmatrix}$	1, 2, 2, 1	I_1, I_2, I_{12}, I_1	$\begin{bmatrix} 2 : 2 \\ 2 : 2 \end{bmatrix}$
F4	1			-40247 	!	$\frac{0}{2}$	2		1,8,3,1	$\begin{bmatrix} 1, 8, 3, 1 \\ -1, -1, -1 \end{bmatrix}$	1,8,1,1	$\begin{bmatrix} I_1,I_8,I_3,I_1 \\ I_4,I_5,I_5 \end{bmatrix}$	2 : 2
_	1 1	$0 \\ 0$	0	77 - 363	161 1305	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	6 6		6, 6, 1, 2 3, 12, 2, 1	$\begin{bmatrix} 6, 6, 1, 2 \\ 3, 12, 2, 1 \end{bmatrix}$	$\begin{bmatrix} 6, 6, 1, 2 \\ 3, 12, 2, 1 \end{bmatrix}$	$egin{array}{c} I_6,I_6,I_1,I_2 \ I_3,I_{12},I_2,I_1 \end{array}$	$egin{array}{ c c c c c c c c c c c c c c c c c c c$
	1	0	0	-823		$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	2		2, 2, 3, 6	$\begin{bmatrix} 3, 12, 2, 1 \\ 2, 2, 3, 6 \end{bmatrix}$	$\begin{bmatrix} 3, 12, 2, 1 \\ 2, 2, 3, 2 \end{bmatrix}$	I_2,I_2,I_3,I_6	$egin{bmatrix} {f 2} : 1, {f 3} : 4 \ {f 2} : 4; {f 3} : 1 \ \end{bmatrix}$
G4	1	0				0	2		1, 4, 6, 3	1, 4, 6, 3	1, 4, 6, 1	I_1, I_4, I_6, I_3	2:3;3:2
464					N =	46	4 =	2^{4}	· 29 (7	isogeny cla	asses)		464
A1	0	1	0	8	4	1	1	_	10, 1	0,1	2, 1	I_2^*, I_1	
B1	0	-1	0	-80	304	1	1	_	10, 1	0,1	[2,1]	$oxed{I_2^*,I_1}$:
$\overline{C1}$	0	1	0	80	-428	0	1	' —	22, 1	$\begin{bmatrix} 10,1 \end{bmatrix}$	[2,1]	$oxed{I^*_{14},I_1}$	$ {f 5}:2$
C2	0	1	0	-7280		0	1	-	14, 5	2,5	2, 1	I_6^*, I_5	5 :1
D1	0	-1	0	-4	-4	0	1	Ī-	8,1	[0,1]	1,1	I_0^*,I_1	3 :2
D2	0	-1	0_	36	76	0	1	_	8,3	0,3	1,1	I_0^*, I_3	3 :1
	0		0	-4	-24		2	-	8, 2	0,2	1, 2	I_0^*, I_2	2 :2
:-	0		0	_9 	-14	- ÷	2	+	4,1	0,1	1,1	$\prod_{i=1}^{n} II_{i}I_{1}$	2 : 1
!-	0	0	0	-4831	129242	0	1		8,1	0,1	1,1	I_0^*, I_1	
G1	0	0	0	-19	-46	0	1	_	14, 1	2,1	2,1	I_6^*, I_1	
465					N = 4	65	5 = 3	3 · {	$5 \cdot 31$ (2)	isogeny c	lasses)		465
	1	1		-7	16		2	_	3, 1, 2	3, 1, 2	1, 1, 2	I_3,I_1,I_2	2 :2
'-	1	1	0	-162	729		2	+	6, 2, 1	[6, 2, 1]	2,2,1	I_6,I_2,I_1	2:1
	1	0		-10	-13		2	+	1, 1, 1	1,1,1	1, 1, 1	I_1,I_1,I_1	2 :2
	1 1		0	$-15 \\ -170$	$\begin{bmatrix} 0 \\ 837 \end{bmatrix}$	1	$\frac{4}{4}$	++	2, 2, 2 $4, 4, 1$	2, 2, 2 $4, 4, 1$	2, 2, 2 $4, 4, 1$	$egin{array}{c} { m I}_2, { m I}_2, { m I}_2 \ { m I}_4, { m I}_4, { m I}_1 \end{array}$	$egin{array}{ c c c c c c c c c c c c c c c c c c c$
	1	0		60	15		2	_	1, 1, 4	1, 1, 4	1, 1, 2	I_1, I_1, I_4	2 :2
466					N =	46	6 =	$2 \cdot$	233 (2	isogeny cla	asses)		466
	1	1	0	-5	-7		2	+	$\frac{2,1}{2,1}$	2,1	2,1	I_2,I_1	2 :2
A2	1	1	0	-15	11	0	2	+	1,2	1,2	1,2	I_1, I_2	2 :1
	1	0		-23	41		3	Ī-	6, 1	6,1	6,1	I_6,I_1	3 :2
B2	1	0	0	77	229	0	1	_	2,3	2,3	2,1	I_2,I_3	3 :1
467					N	=	467	=	467 (1 i	sogeny cla	uss)		467
A1	0	0	1	-4	3	1	1		1	1	1	I_1	
468	_				N = 46	i8	$= 2^{\frac{1}{2}}$	· · :	$-\frac{-}{3^2 \cdot 13}$ (5 isogeny	classes)		468
	0	0		-168	-855		2	_	4, 3, 4	0, 0, 4	, ,	IV,III,I_4	2 :2
A2	0	0	0	-2703	-54090	0	2	+	8,3,2	0,0,2	3, 2, 2	IV^* , III , I_2	2 :1
	0			-1512	23085		2	Ī-		0, 0, 4	1, 2, 2	IV,III^*,I_4	2 :2
B2	0	0	0 -	-24327	1460430	0	2	+	8, 9, 2	0, 0, 2	1, 2, 2	IV^*,III^*,I_2	2 :1

				1	ı					ı	
a_1	$a_2 \ a_3$	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
468			N = 4	68	$= 2^2$	$\cdot 3^2$	$2 \cdot 13$ (continued	1)		468
C1 0	0 0	-36	81	1	2	+	4, 6, 1	0, 0, 1	3, 4, 1	IV,I_0^*,I_1	2 :2
$C2 \mid 0$	0 0	9	270	1	2	_	8, 6, 2	0, 0, 2	3, 2, 2	IV^*, I_0^*, I_2	2 :1
D1 0	0 0	-120	-11	0	$\frac{1}{2}$	+	4, 12, 1	0, 6, 1	1, 4, 1	$ V,I_6^*,I_1 $	2:2;3:3
$D2 \mid 0$	0 0	-1335	-18722	0	2	+	8, 9, 2	0, 3, 2	1, 4, 2	IV^*,I_3^*,I_2	2:1;3:4
D3 0	0 0	-6600	206377	0	6	+	4, 8, 3	0, 2, 3	3, 4, 3	IV,I_2^*,I_3	2:4;3:1
$D4 \mid 0$	0 0	-6735	197494	0	6	+	8, 7, 6	[0, 1, 6]	[3, 4, 6]	$ \text{IV}^*, \text{I}_1^*, \text{I}_6 $	2 :3; 3 :2
E1 0	0 0	-48	-115	0	2	+	4, 8, 1	0, 2, 1	1, 4, 1	IV,I_2^*,I_1	2 :2
$E2 \mid 0$	0 0	-183	830	0	2	+	8, 7, 2	0, 1, 2	1, 2, 2	IV^*,I_1^*,I_2	2 :1
469			N = 46	i 9 =	= 7 · 0	67	(2 isog	eny classe	es)		469
A1 1	0 1	-80	-275	1	1	+	5, 1	5, 1	1, 1	I_5,I_1	
B1 1	-1 1	-12	18	1	1	+	1,1	$\begin{bmatrix} 1,1 \end{bmatrix}$	1,1	$ $ I_1,I_1	
470			N T 450		0 -	4	(0:	1	\		470
470			N = 470		1			geny clas			470
A1 1	0 1	44	106	1	1	+	8, 1, 1	8, 1, 1	[2, 1, 1]	I_8,I_1,I_1	<u> </u>
B1 1	0 1	-5773	168328	0	3		8, 3, 1	8, 3, 1	2, 3, 1	I_8, I_3, I_1	3 :2
B2 1	0 1	-6348	132618	0	1	+	24, 1, 3	24, 1, 3	$\begin{bmatrix} 2,1,1 \\ \end{bmatrix}$	I_{24},I_1,I_3	3 :1
C1 1	1 0	-97	281	1	1	+	2, 7, 1	2, 7, 1	2, 7, 1	I_2,I_7,I_1	
D1 1	0 0	-36	80	0	3	+	6, 1, 1	6, 1, 1	6, 1, 1	I_6, I_1, I_1	3 :2
D2 1	0 0	-176	-844	0	1	+	2, 3, 3	2, 3, 3	2, 1, 1	I_2,I_3,I_3	3 :1
E1 1	1 1	-11	9	1	1	+	4, 1, 1	[4, 1, 1]	[4, 1, 1]	$ I_4, I_1, I_1 $	
F1 1	-1 1	-117	141	1	1	+	14, 3, 1	14, 3, 1	14, 3, 1	I_{14}, I_{3}, I_{1}	
471			N = 47	71 :	= 3 ·	157	(1 iso	geny clas	s)		471
A1 1	1 1	1	2	1	1	_	2, 1	2, 1	2, 1	I_2,I_1	
472			N = 472	2 =	$=2^3$.	59	(5 isos	geny class	es)		472
A1 0	0 0	2	1	_		_	•	0,1	2, 1	III,I_1	
'			-1676	'	'	' —		$\begin{bmatrix} - & - \\ 0 & 1 \end{bmatrix}$!	'
:			12		!	¦		$\begin{bmatrix} - & - \\ 0 & 1 \end{bmatrix}$;	'
'			$ \begin{array}{c c} -34 \end{array} $	'	·	!		$\begin{bmatrix} 0, 1 \\ 0, 1 \end{bmatrix}$		$ III^*, I_1 $	'
'					¦	¦				!	
EI 0	-1 0	4	4	1	1	_	8, 1	0, 1	4,1	I_1^*, I_1	
473			N = 47	73 =	= 11	• 43	(1 iso	geny clas	s)		473
A1 0	1 1	-1006	11952	1	1	_	3, 2	3, 2	1, 2	I_3,I_2	
474			N = 474	=	$2 \cdot 3$. 79	(2 iso	geny clas	ses)		474
A1 1	1 0	81	-27	1	1	_	14, 3, 1	14, 3, 1	2, 1, 1	I_{14}, I_{3}, I_{1}	
B1 1	0 1	-7	14	1	1	-	2, 5, 1	2, 5, 1	2, 5, 1	I_2,I_5,I_1	
475			N = 47	5 =	$=5^2$.	19	(3 isog	geny class	es)		475
A1 0	-1 1	17	-7			_	6, 1	0, 1	1, 1	I_0^*, I_1	3 :2
			-1382			_	6, 3	0, 3	1,3	I_0^*, I_3	3 :1,3
A3 0	$-1 \ 1$	-19233	-1020257	0	1	_	6, 1	0, 1	1, 1	I_0^*, I_1	3 :2

										7		
	a_1 a_2	a_3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
475				N	= 4	175 =	5^2	· 19 (ce	ontinued)			475
B1	1 -1	0	8	291	1	2	_	9,1	0,1	2,1	III^*,I_1	2 :2
B2	1 - 1	0	-617	5916	1	2	+	9, 2	0, 2	2,2	$\mathrm{III}^*, \mathrm{I}_2$	2 :1
C1	1 - 1	1	0	2	 1	2	; _	3,1	0, 1	[2, 1]	III,I_1	2 :2
C2	1 -1	1	-25	52	1	2	+	3, 2	0, 2	2,2	III,I_2	2 :1
477	•			N =	477	$' = 3^2$	· 5	3 (1 iso	ogeny clas	s)		477
A1	1 -1	0	3	-10	1	1	_	6,1	0,1	1,1	I_0^*, I_1	
						I			l		I	
480				N = 48	80 =	$=2^5$ ·	$3 \cdot 5$	5 (8 isc	ogeny class	ses)	T	480
A1	0 - 1	0	-6	0	1	4	+	6, 2, 2	0, 2, 2	2, 2, 2	III,I_2,I_2	2:2,3,4
A2	0 - 1	0	-81	-255	1	2	+	12, 1, 1	0, 1, 1	2, 1, 1	I_3^*, I_1, I_1	2 :1
A3	0 - 1	0	-56	180	1	2	+	9, 4, 1	0, 4, 1	2, 2, 1	I_0^*, I_4, I_1	2:1
A4	0 - 1	0	24	-24	1	2	-	9, 1, 4	[0, 1, 4]	$\begin{bmatrix} 1, 1, 2 \\ \end{bmatrix}$	I_0^*, I_1, I_4	2 :1
B1	0 - 1	0	-10	-8	0	4	+	6, 2, 2	0, 2, 2	2, 2, 2	III,I_2,I_2	2:2,3,4
B2	0 - 1	0	-160	-728	0	2	+	9, 1, 1	0, 1, 1	1, 1, 1	I_0^*, I_1, I_1	2 :1
B3	0 - 1	0	-40	100	0	4	+	9, 1, 4	0, 1, 4	2, 1, 4	I_0^*, I_1, I_4	2:1
B4	$\begin{bmatrix} 0 & -1 \\ - & - & - \end{bmatrix}$	0	15	-63	0	2		12,4,1	[0,4,1]	[2, 2, 1]	$ I_3^*, I_4, I_1 $	2 :1
C1	0 1	0	-6	0	0	4	+	6, 2, 2	0, 2, 2	2, 2, 2	III,I_2,I_2	2:2,3,4
C2	0 1	0	-56	-180	0	2	+	9, 4, 1	0, 4, 1	1, 4, 1	I_0^*, I_4, I_1	2 :1
C_4	$\begin{bmatrix} 0 & 1 \\ 0 & 1 \end{bmatrix}$	0	-81	255	0	2	+	12, 1, 1	0, 1, 1	2, 1, 1	I_3^*, I_1, I_1	2:1
C4	0 1	0	24	24	0	2	-	9, 1, 4	[0, 1, 4]	[2,1,2]	$ I_0^*, I_1, I_4 $	2 :1
D1	0 1	0	-226	-1360	0	4	+	6, 6, 4	0, 6, 4	2, 6, 2	III,I_6,I_4	2:2,3,4
D2	0 1			-84385	0	2	+	12, 3, 2	0, 3, 2	2, 3, 2	I_3^*, I_3, I_2	2 :1
D3	$\begin{bmatrix} 0 & 1 \\ 0 & 1 \end{bmatrix}$	0	-496	2204	0	2	+	9, 3, 8	0, 3, 8	1, 3, 2	I_0^*, I_3, I_8	2:1
D4	0 1	0	24	-3960	0	4	!	9, 12, 2	0, 12, 2	[2, 12, 2]	$ I_0^*,I_{12},I_2 $	2 :1
E1	0 - 1		-226	1360	0	4		6, 6, 4		2, 2, 2	III,I_6,I_4	2:2,3,4
E2	0 - 1	0	-496	-2204	0	2		9, 3, 8		2, 1, 2	I_0^*, I_3, I_8	2 :1
E3	0 - 1		-3601	84385	0	$\frac{4}{2}$		12, 3, 2	0, 3, 2	4, 1, 2	I_3^*, I_3, I_2	2:1
E4	0 -1		24	3960	0	<u> </u>	. – –	9, 12, 2	:	1,2,2	$ I_0^*,I_{12},I_2 $	2:1
F1	0 - 1	0	-30	72	1	4		6, 4, 2	0, 4, 2	2, 2, 2	III,I_4,I_2	2:2,3,4
F2	0 - 1		-80	-168	1	2		9, 8, 1		1, 2, 1	I_0^*, I_8, I_1	2 :1
F3	0 - 1	0	-480	4212	1	4		9, 2, 1		2, 2, 1	I_0^*, I_2, I_1	2:1
F4	0 -1		15	225	1	4	. – –	12, 2, 4	:	$\begin{bmatrix} 4, 2, 4 \\ -2, -2, -2 \end{bmatrix}$	$ I_3^*, I_2, I_4 $	2:1
G1	$\begin{bmatrix} 0 & 1 \\ 0 & 1 \end{bmatrix}$	0	-10	8	0	4		6, 2, 2		2, 2, 2	III,I_2,I_2	2:2,3,4
G2	$\begin{bmatrix} 0 & 1 \\ 0 & 1 \end{bmatrix}$	0	-40	-100	0	2		9, 1, 4		1, 1, 4	I_0^*, I_1, I_4	2:1
G3	$\begin{bmatrix} 0 & 1 \\ 0 & 1 \end{bmatrix}$	0	-160	728	0	2		9, 1, 1		$\begin{bmatrix} 2, 1, 1 \\ 4, 4, 1 \end{bmatrix}$	I_0^*, I_1, I_1	2:1
G4	0 1	0	15	63	0	4	. – –	12, 4, 1	$\begin{bmatrix} 0, 4, 1 \\ \end{bmatrix}$	$\begin{vmatrix} 4,4,1 \\ -2,-2 \end{vmatrix}$	$ I_3^*, I_4, I_1 $	2:1
H1	0 1	0	-30	-72	0	4		6, 4, 2	, , , , , , , , , , , , , , , , , , ,	2, 4, 2	III,I_4,I_2	2:2,3,4
H2	$\begin{array}{ccc} 0 & 1 \\ 0 & 1 \end{array}$	0	-480	-4212	0	2		9, 2, 1	0, 2, 1	1, 2, 1	I_0^*, I_2, I_1	2 :1
H3	$\begin{bmatrix} 0 & 1 \\ 0 & 1 \end{bmatrix}$	0	-80	168	0	4	+	, ,		2, 8, 1	I_0^*, I_8, I_1	2:1
H4	0 1	0	15	-225	0	4	_	12, 2, 4	0, 2, 4	4, 2, 4	I_3^*, I_2, I_4	2 :1
481				N =	481	= 13	3 · 3′	7 (1 is	ogeny clas	s)		481
A1	1 -1	0	-1693	27240	1	2	+	3, 1	3,1	1,1	I_3,I_1	2 :2
A 2	1 _1	Ω	1688	27405	1	2		6 2	6.2	2 2	I _c I _o	$2 \cdot 1$

6, 2

2

6, 2

27405

A2

 $1 - 1 \quad 0 \quad -1688$

2, 2

 I_6,I_2

2:1

				11122				10 0010,		.000		
	a_1 a_2 a_3	3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
482	2			N = 4	182	$= 2 \cdot$	24	1 (1 is	ogeny clas	ss)		482
A1	1 0	1	-44	-150	1	1	_	14, 1	14, 1	2,1	I_{14} , I_1	
483	3			N = 483	3 =	$3 \cdot 7$. 25	3 (2 iso	ogeny clas	ses)		483
A1	0 1	1	-96	-457	0	1	_	5, 1, 3	5, 1, 3	5, 1, 1	I_5, I_1, I_3	
B1	0 1	1	2	1	0	1	Ī —	1, 1, 1	1,1,1	1, 1, 1	I_1,I_1,I_1	
484	Į.			N = 4	84 :	$= 2^2$. 11	1^2 (1 is	sogeny cla	ss)		484
A1	0 1		323	2671	1	1	_	8,7	0,1	1,4	IV^*,I_1^*	3 :2
A2	0 1	0 -	-9357	347279	1	1	_	8,9	0,3	3,4	IV^*,I_3^*	3 :1
485	Ó			N = 4	85	$=5\cdot$	97	(2 isog	geny class	es)		485
A1		1	-121	-64	0	3	+	3,3	3,3	1,3	I_3,I_3	3:2,3
A2 A3		1 - 1	$-6911 \\ -81$	-223455 255	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$\begin{array}{ c c }\hline 1\\ 3 \end{array}$	+++++++++++++++++++++++++++++++++++++++	$9, 1 \\ 1, 1$	9, 1 $1, 1$	$egin{array}{c} 1,1 \ 1,1 \end{array}$	$egin{array}{c} \mathrm{I}_{9}, \!\! \mathrm{I}_{1} \ \mathrm{I}_{1}, \!\! \mathrm{I}_{1} \end{array}$	3 :1 3 :1
B1	0 0	 1	-2	0	1	1	<u> </u>	1,1	1,1	$\begin{bmatrix} -1 & 1 & 1 \\ 1 & 1 & 1 \end{bmatrix}$	I_1,I_1	
486				N = 4	86	$= 2 \cdot$	3^{5}	(6 isog	geny classe	es)	I	486
A1	1 -1	0	3	5	1	1	_	6,5	6,0	2,1	I_6 , II	3 :2
A2	1 - 1	0 _	-177	953	1	3	<u> </u>	2,11	2,0	2,3	I ₂ ,IV*	3 :1
B1	1 - 1		-6	-4	1	1	+	3,5	3,0	1,1	I_3,II	3 :2
B2 C1	1 -1 1 -1 1 -1		-96 -123	386 557	$\begin{bmatrix} 1 \\ \hline 0 \end{bmatrix}$	3	+ 	1,11	1,0	$\begin{bmatrix} 1, 3 \\ \\ 1 \end{bmatrix}$	I ₁ ,IV*	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$
C1	1 - 1 $1 - 1$		-123 -258	-748	0	3 1	+++++++++++++++++++++++++++++++++++++++	3, 7 $9, 13$	$ \begin{array}{c} 3,0 \\ 9,0 \end{array} $	1,3 $1,1$	I_3,IV I_9,II^*	3:2 3:1
D1	1 - 1	 1	-20	-29	0	1	<u> </u>	2,5	2,0	2,1	I_2,II	3 :2
D2	1 - 1	1 _	25	-161	0	3	<u> </u>	6, 11	6,0	6,3	I ₆ ,IV*	3 :1
E1	1 - 1		-11	-11		1	+	1,5	1,0	1,1	I_1,II	3 :2
E2	1 –1		-56 	163	0	3	+ 	3, 11	3,0	3,3	I ₃ ,IV*	3:1
F1 F2	$ \begin{array}{c c} 1 & -1 \\ 1 & -1 \end{array} $		-29 -1109	37 -13931	1 1	3	+++++++++++++++++++++++++++++++++++++++	$9,7 \\ 3,13$	$9,0 \\ 3,0$	9, 3 3, 1	$egin{array}{c} ext{I}_9, ext{IV} \ ext{I}_3, ext{II}^* \end{array}$	3:2 3:1
											-3,	
490 A1		1	121	$\frac{N = 490}{46}$	0 = 1	$\frac{2 \cdot 5}{3}$		$\frac{(11 \text{ is}}{2, 1, 8}$	sogeny cla	(2,1,3)	I_2,I_1,IV^*	490 3 :2
A1 A2			-1594	-26708	1	1	_	6, 3, 8	2, 1, 0 $6, 3, 0$	2, 1, 3 2, 1, 3	$oxed{I_{6},I_{3},IV^{*}}$	3:1
B1	1 1	 0	17	-27	0	1	<u>:</u> —	7, 3, 2	7, 3, 0	$\begin{bmatrix} 1 & 1 & 1 & 1 \\ 1 & 1 & 1 & 1 \end{bmatrix}$	I_7,I_3,II	3 :2
B2	1 1	0	-158	1268	0	1	<u> </u>	21, 1, 2	21, 1, 0	1,1,1	I_{21},I_1,II	3 :1
C1		1	807	11708	0	3		7, 3, 8	7, 3, 0	1, 3, 3	I_7,I_3,IV^*	3 :2
C2			-7768 	-458202	0	1	— 	21, 1, 8	21, 1, 0	1,1,3	$ I_{21},I_1,IV^* $	3 :1
D1 D2	$egin{array}{ccc} 1 & 1 \ 1 & 1 \end{array}$	$0 \\ 0$	$\begin{array}{c} 3 \\ -32 \end{array}$	1 64	1 1	1 1	_	2, 1, 2 $6, 3, 2$	2, 1, 0 $6, 3, 0$	2, 1, 1 2, 3, 1	$\begin{matrix} I_2,I_1,II\\I_6,I_3,II \end{matrix}$	3:2 3:1
E1		- 0	-32 -1	 -15	0	$\begin{bmatrix} 1 \\ 3 \end{bmatrix}$:	$\frac{0, 3, 2}{3, 1, 4}$	$\begin{bmatrix} 0, 3, 0 \\ -3, 1, 0 \end{bmatrix}$	$\begin{bmatrix} 2, 3, 1 \\ \\ 3, 1, 3 \end{bmatrix}$	$\begin{bmatrix} I_{6}, I_{3}, I_{1} \\ I_{3}, I_{1}, IV \end{bmatrix}$	$\begin{bmatrix} {\bf 3} & 1 \\ {\bf 7} & {\bf 7} & {\bf 7} \\ {\bf 3} & {\bf 2} \end{bmatrix}$
E2		0	-491	-4229	0	1		1, 3, 4	1, 3, 0	1, 1, 3	I_1,I_3,IV	3 :2
F1			-6453	201121	0	1		2, 1, 8	[2, 1, 0]	[2, 1, 1]	I_2,I_1,IV^*	7:2
F2				-1904213	0	1	<u> </u>	14, 7, 8	14, 7, 0	14, 1, 1	'	7 :1
G1			-71	$\begin{array}{c} 265 \\ 15721 \end{array}$	1	$\begin{bmatrix} 2 \\ 2 \end{bmatrix}$		10, 2, 3	10, 2, 0	10, 2, 2	I_{10},I_2,III	2:2 2:1
G2	1 0	U -	-1191	15721	1		+	5, 4, 3	5, 4, 0	5, 2, 2	I_5,I_4,III	2:1

			TABLE	1:	ELLI	PHC	CURV	ES 490H-49	90E		173
	a_1 a_2 a_3	a_4	a_6	r	T	s or	$\mathrm{d}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
490)		N =	490	0 = 2	$\cdot 5 \cdot 7$	·2 (c	continued)			490
H1 H2 H3 H4	$\begin{array}{c cccc} 1 & -1 & 1 \\ 1 & -1 & 1 \\ 1 & -1 & 1 \\ 1 & -1 & 1 \end{array}$	$ \begin{array}{r} 113 \\ -867 \\ -4297 \\ -13117 \end{array} $	711 8159 -100229 581459	0 0 0 0	4 4 2 2	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$, 4, 8 , 8, 7	4, 2, 1 2, 4, 2 1, 8, 1 1, 2, 4	4, 2, 4 2, 4, 4 1, 8, 2 1, 2, 4	$\begin{matrix} I_4,I_2,I_1^* \\ I_2,I_4,I_2^* \\ I_1,I_8,I_1^* \\ I_1,I_2,I_4^* \end{matrix}$	2:2 2:1,3,4 2:2 2:2
I1 I2 J1		-50 -24060 -3480	5095 1426487 -94375	$\begin{bmatrix} 0 \\ 0 \\ 0 \end{bmatrix}$	$\begin{array}{c c} 1 \\ 1 \\ -\frac{1}{2} \end{array}$	$\begin{vmatrix} -1, \\ -10 \end{vmatrix}$	1,10 $3,10$ $0,2,9$, ,	$ \begin{array}{c c} 3, 1, 1 \\ 1, 3, 1 \\ \hline 10, 2, 2 \end{array} $	$ \begin{vmatrix} I_{3},I_{1},II^{*} \\ I_{1},I_{3},II^{*} \\ I_{10},I_{2},III^{*} \end{vmatrix} $	$egin{array}{ c c c c c c c c c c c c c c c c c c c$
J2 K1 K2	$ \begin{array}{c ccccc} & 1 & 1 & 1 \\ \hline & 1 & -1 & 1 \\ & 1 & -1 & 1 \end{array} $	-58360 -132 918	-5450663 -549 5289	$\begin{bmatrix} 0 \\ 0 \\ 0 \end{bmatrix}$	$\frac{2}{1}$ 7		$ \begin{array}{c} 4,9 \\ 7,1,2 \\ 4,7,2 \\ \end{array} $	$ \begin{array}{c c} 5,4,0 \\ 2,1,0 \\ 14,7,0 \end{array} $	$ \begin{array}{c c} 5,4,2 \\ \hline 2,1,1 \\ 14,7,1 \end{array} $	$ \begin{array}{c c} I_{5}, I_{4}, III^{*} \\ I_{2}, I_{1}, II \\ I_{14}, I_{7}, II \end{array} $	$egin{array}{ c c c c c c c c c c c c c c c c c c c$
492	2		N = 492	= 2	$2^2 \cdot 3$	• 41	(2 is	ogeny clas	sses)		492
A1 B1	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	-13 -11	25 695	1	1 1	$\begin{vmatrix} - & 8 \\ - & 8 \end{vmatrix}$	$\frac{1}{1}$, $\frac{1}{1}$, $\frac{1}{1}$, $\frac{1}{1}$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	$\frac{3,1,1}{3,9,1}$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	
49:	3		N = 49	3 =	: 17 ·	29	(2 isos	geny class	es)		493
A1	1 -1 1	_7741 	801682	0	1		1,9	1,9	1,1	I_1,I_9	
B1	1 -1 1	-57	222	1	1	<u> </u>	2,3	2,3	2,3	I_2,I_3	
494	4		N = 494	= 2	$2 \cdot 13$. 19	(4 is	ogeny clas	sses)		494
A1	1 1 0	13	13	1	1	- 5	, 1, 2	5, 1, 2	1,1,2	I_5, I_1, I_2	
B1 B2 B3 B4 C1 D1	$ \begin{array}{c cccc} & 1 & -1 & 0 \\ & 1 & -1 & 0 \\ & 1 & -1 & 0 \\ & 1 & -1 & 0 \\ \hline & 1 & 1 & 1 \end{array} $	$ \begin{array}{r} 4 \\ -16 \\ -146 \\ -206 \\ -61 \\ -1001 \end{array} $	$ \begin{array}{r} 0 \\ 12 \\ -638 \\ 1190 \\ -169 \\ 12375 \end{array} $	$\begin{bmatrix} 0 \\ 0 \\ 0 \\ \end{bmatrix}$	$ \begin{array}{c} 2 \\ 4 \\ 2 \\ \\ 1 \end{array} $	+ 2 + 1 + 1 - 1		$\begin{bmatrix} 4,1,1\\ 2,2,2\\ 1,1,4\\ 1,4,1\\ \hline 1,1,2\\ \hline 13,3,2\\ \end{bmatrix}$	$ \begin{array}{c} 2, 1, 1 \\ 2, 2, 2 \\ 1, 1, 4 \\ 1, 2, 1 \\ \hline 1, 1, 2 \\ 13, 3, 2 \end{array} $	$ \begin{bmatrix} I_4,I_1,I_1 \\ I_2,I_2,I_2 \\ I_1,I_1,I_4 \\ I_1,I_4,I_1 \\ I_1,I_1,I_2 \\ I_{13},I_{3},I_{2} \end{bmatrix} $	2:2 2:1,3,4 2:2 2:2
		1001					<u>, , , </u>			113)13)12	405
A1 A2 A3 A4	1 -1 1 1 -1 1 1 -1 1 1 -1 1	7 -38 -533 -263		1 1 1	$ \begin{array}{c} 3^2 \cdot \\ 2 \\ 4 \\ 2 \\ 2 \end{array} $	- 6 + 6 + 6	, 1, 1	, ,	2, 1, 1 4, 2, 2 2, 2, 1 2, 1, 4	$\begin{matrix} I_0^*,I_1,I_1\\ I_0^*,I_2,I_2\\ I_0^*,I_4,I_1\\ I_0^*,I_1,I_4 \end{matrix}$	$\begin{array}{c c} \textbf{495} \\ \textbf{2}:2 \\ \textbf{2}:1,3,4 \\ \textbf{2}:2 \\ \textbf{2}:2 \end{array}$
490	3		N = 49	6 =	2^4 ·	31	(6 isog	geny class	es)		496
A1 B1 C1	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	1 0 8	1 -1 -0	0	$\begin{bmatrix} 1 \\ -1 \\ 2 \end{bmatrix}$	 - 1	4, 1 4, 1 10, 1	$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	$ \begin{array}{ c c c c } \hline 1,1\\ 1,1\\ \hline 4,1\\ 2,2\\ \end{array} $	$ \begin{vmatrix} II,I_1 \\ II,I_1 \\ I_2,I_1 \\ I_3,I_4 \end{vmatrix} $	 2 : 2
1 4 10 3		-32	32	0	2	+ 1	1, 2	0, 2	2, 2	$\mathrm{I}_3^*,\!\mathrm{I}_2$	2 :1
C2 D1 D2 E1	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{r} -2 \\ 18 \\ -17 \end{array} $	$ \begin{array}{c} -1 \\ 11 \\ 27 \end{array} $	0	1 1 1 		4, 1 4, 3 4, 1	$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	1,1 1,1 1,1 1,1	$\begin{bmatrix} & \text{II,I}_1 \\ & \text{II,I}_3 \\ & & \text{II,I}_1 \end{bmatrix}$	3:2 3:1

	a_1	a_2	a_3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
496	3				N =	49	6 = 3	2^4 .	31 (co	ntinued)			496
F1 F2 F3 F4	0 0 0 0	0 0 0 0	0 0 0 0	-11 -331 -5291 -491	-70 -2310 -148134 154	1 1 1 1	2 4 2 4	- + + +	16, 1 14, 2 13, 1 13, 4	4, 1 2, 2 1, 1 1, 4	4, 1 4, 2 2, 1 4, 4	I_8^*, I_1 I_6^*, I_2 I_5^*, I_1 I_5^*, I_4	2:2 2:1,3,4 2:2 2:2
497	7				N=4	97	=7	71	(1 isog	eny class)			497
A1	1	1	0	25	-14	1	1	_	5,1	5,1	5,1	I_5,I_1	
498	3				N = 498	=	$2 \cdot 3$	83	(2 isog	geny class	es)		498
A1 A2 B1	1 1 	0 0 0	1 1 1	-5 5 	$ \begin{array}{r} -4 \\ -16 \\ \hline 28 \end{array} $	0 0 1	$\begin{bmatrix} 2\\2\\-1 \end{bmatrix}$	+	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{ c c c } \hline 2,1,1\\ 1,2,2\\ \hline 4,5,1\\ \hline \end{array} $	$\begin{bmatrix} 2, 1, 1 \\ 1, 2, 2 \\ 2, 5, 1 \end{bmatrix}$!	2:2 2:1
												14,13,11	501
A1 A2	1 1	1 1	0 0	$3 \\ -12$	N = 50 0 -15	0	2 2	107	$ \begin{array}{c} (1 \text{ isog} \\ 2, 1 \\ 1, 2 \end{array} $	$ \begin{array}{ c c } \hline 2,1\\ 1,2 \end{array} $	$\begin{array}{c c} 2,1\\ 1,2 \end{array}$	$\begin{matrix} \mathrm{I}_2,\!\mathrm{I}_1 \\ \mathrm{I}_1,\!\mathrm{I}_2 \end{matrix}$	$\begin{array}{ c c } & \bf 501 \\ \hline & \bf 2:2 \\ & \bf 2:1 \\ \hline \end{array}$
503	3				N = 5	03 :	= 50	3	(3 isoger	ny classes))		503
A1	1	0	1	-32		1	1	_	1	1	1	I_1	
B1		$-1 \\ -1 \\ -$		2	-1	!	1	 	1	1	1	I_1	
C1	1	0	0	-210	-1189	0	1	_	1	1	1	I_1	
50 4	1				N = 504		1	$\frac{2\cdot7}{}$		geny class		Т	504
A1 A2	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$0 \\ 0$	$0 \\ 0$	$-6 \\ -111$	9 450	1 1	$\frac{2}{2}$	 - +	4, 3, 2 8, 3, 1	$0, 0, 2 \\ 0, 0, 1$	$\begin{bmatrix} 2, 2, 2 \\ 2, 2, 1 \end{bmatrix}$	$\begin{array}{c c} III,III,I_2 \\ I_1^*,III,I_1 \end{array}$	2:2 2:1
B1 B2	0 0	$\begin{array}{c} -\overline{0} \\ 0 \\ 0 \end{array}$	0 0	-54 81	$-135 \\ -702$	'	$\begin{bmatrix} 2 \\ 2 \end{bmatrix}$	+	4, 9, 1 $8, 9, 2$	$ \begin{vmatrix} 0,0,1\\0,0,2 \end{vmatrix} $	$\begin{bmatrix} 2, 2, 1 \\ 2, 2, 2 \end{bmatrix}$	'	$egin{array}{ c c c c c c c c c c c c c c c c c c c$
C1	0	0	0	9	-54		$\begin{bmatrix} 2 \\ 4 \end{bmatrix}$	-	8, 6, 1	$\begin{bmatrix} 0, 0, 1 \\ 0, 0, 2 \end{bmatrix}$	$\begin{bmatrix} 2, 2, 1 \\ 2, 4, 2 \end{bmatrix}$	$\begin{bmatrix} I_1^*, I_0^*, I_1 \\ I_1^*, I_0^* \end{bmatrix}$	2 :2
C2 C3 C4	$\begin{bmatrix} 0 \\ 0 \\ 0 \end{bmatrix}$	0 0 0	0 0 0	-171 -2691 -531	-810 -53730 3726	0 0 0	$\begin{array}{c c} 4 \\ 2 \\ 2 \end{array}$	+ + +	10, 6, 2 11, 6, 1 11, 6, 4	$\begin{bmatrix} 0, 0, 2 \\ 0, 0, 1 \\ 0, 0, 4 \end{bmatrix}$	$ \begin{vmatrix} 2, 4, 2 \\ 1, 2, 1 \\ 1, 2, 2 \end{vmatrix} $	$ \begin{array}{c} III^*, I_0^*, I_2 \\ II^*, I_0^*, I_1 \\ II^*, I_0^*, I_4 \end{array} $	$egin{array}{c c} {f 2}:1,3,4 \\ {f 2}:2 \\ {f 2}:2 \end{array}$
D1 D2	0 0	$\begin{array}{c} -\overline{0} \\ 0 \\ 0 \end{array}$	0	-54 -999	-243 -12150	0	$\begin{bmatrix} 2 \\ 2 \end{bmatrix}$	 – +	4, 9, 2 8, 9, 1	$\begin{bmatrix} 0, 0, 2 \\ 0, 0, 1 \end{bmatrix}$	$\begin{bmatrix} 2, 2, 2 \\ 4, 2, 1 \end{bmatrix}$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	2 : 2
E1 E2	0 0	$\begin{array}{c} -0\\ 0\\ 0 \end{array}$	0	-6 9	5 26	1 1	$\begin{bmatrix} 2 \\ 2 \end{bmatrix}$	+	4, 3, 1 $8, 3, 2$	$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	$\begin{bmatrix} 2, 2, 1 \\ 4, 2, 2 \end{bmatrix}$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	2:2 2:1
F1 F2 F3	$\begin{bmatrix} 0 \\ 0 \\ 0 \\ 0 \end{bmatrix}$	0 0 0	0 0 0	-66 -111 -1371	205 $ -110 $ $ -19514$	1 1 1	$\begin{bmatrix} 4 \\ 4 \\ 2 \\ 2 \end{bmatrix}$	+++++	4,7,1 8,8,2 10,10,1	$\begin{bmatrix} 0, 1, 1 \\ 0, 2, 2 \\ 0, 4, 1 \\ 0 & 1, 4 \end{bmatrix}$	$\begin{bmatrix} 2, 4, 1 \\ 4, 4, 2 \\ 2, 4, 1 \\ 2, 2, 2 \end{bmatrix}$	$ \begin{bmatrix} III,I_1^*,I_1 \\ I_1^*,I_2^*,I_2 \\ III^*,I_4^*,I_1 \\ III^*,I_4^*,I_1 \end{bmatrix} $	2:2 2:1,3,4 2:2
G1 G2 G3 G4	$\begin{bmatrix} 0 \\ 0 \\ 0 \\ 0 \end{bmatrix}$	$\begin{array}{c} 0 \\ -\frac{1}{0} \\ 0 \\ 0 \\ 0 \\ \end{array}$	$ \begin{array}{c} 0 \\ 0 \\ 0 \\ 0 \\ 0 \end{array} $	$ \begin{array}{r} 429 \\ -66 \\ -2271 \\ -36291 \\ -3531 \end{array} $	-866 -1339 -41470 -2661010 9686	$\begin{bmatrix} 1 \\ 0 \\ 0 \\ 0 \\ 0 \end{bmatrix}$	$\begin{bmatrix} 2\\4\\4\\2\\2 \end{bmatrix}$		$ \begin{array}{c} 10,7,4\\ 4,9,4\\ 8,12,2\\ 10,9,1\\ 10,18,1 \end{array} $	$ \begin{array}{ c c c c c } \hline 0,1,4\\ 0,3,4\\ 0,6,2\\ 0,3,1\\ 0,12,1 \end{array} $	$ \begin{array}{ c c c } 2, 2, 2 \\ 2, 4, 4 \\ 4, 4, 2 \\ 2, 2, 1 \\ 2, 4, 1 \end{array} $	$\begin{bmatrix} III^*, I_1^*, I_4 \\ III, I_3^*, I_4 \\ I_1^*, I_6^*, I_2 \\ III^*, I_3^*, I_1 \\ III^*, I_{12}^*, I_1 \end{bmatrix}$	$ \begin{array}{c cccc} & 2 & : 2 \\ \hline & 2 & : 2 \\ & 2 & : 1, 3, 4 \\ & 2 & : 2 \\ \hline & 2 & : 2 \end{array} $
H1 H2	$\begin{bmatrix} 0 \\ 0 \\ 0 \end{bmatrix}$	$\begin{bmatrix} 0 \\ 0 \\ 0 \end{bmatrix}$	$\begin{bmatrix} 0 \\ 0 \\ 0 \end{bmatrix}$	-363 -363	110 2630	$\begin{bmatrix} 0 \\ 0 \\ 0 \end{bmatrix}$	$\begin{bmatrix} 2 \\ 2 \\ 2 \end{bmatrix}$	 	$ \begin{array}{c} 10, 18, 1 \\ \hline 10, 6, 1 \\ 11, 6, 2 \end{array} $	$ \begin{array}{ c c c c } \hline 0,12,1\\ 0,0,1\\ 0,0,2\\ \end{array} $	$\begin{bmatrix} 2, 4, 1 \\ 2, 2, 1 \\ 1, 2, 2 \end{bmatrix}$	$ \begin{array}{c c} III & ,I_{12},I_{1} \\ III^{*},I_{0}^{*},I_{1} \\ II^{*},I_{0}^{*},I_{2} \end{array} $	$ \begin{array}{ c c c c c } $

						-	Imi		1(A)	1 (:)		TZ 1:	т .
	a_1	a_2	a_3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
50	5				N = 50)5	=5	· 1	01 (1 is	sogeny cla	ss)		505
A1		-1			15	1	2	+	1, 1	1,1	1,1	I_1,I_1	2 :2
A2	1	-1	0	-5	26	1	2	_	2, 2	2,2	2,2	I_2,I_2	2 :1
500	6				N = 506 = 100	=	$2 \cdot 1$	11 •	23 (6 i	sogeny cla	usses)		506
A1	1	0	1	-48	-130		1	+	7, 1, 1	7, 1, 1	1, 1, 1	I_7,I_1,I_1	
B1	1	-1	0	-290561	60356981	0	1	+	3, 7, 1	3, 7, 1	1,1,1	I_3,I_7,I_1	
$\overline{C1}$	1	0	1	-12		0	3	+	1, 3, 1	1,3,1	1, 3, 1	I_1,I_3,I_1	3:2
C2	1	0	1	-397	-3072	0	1	+	3, 1, 3	3, 1, 3	1, 1, 1	I_3,I_1,I_3	3 :1
D1	1	-1	0	-935	11229	$1 \mid$	1	+	5, 5, 1	5, 5, 1	1, 5, 1	I_5,I_5,I_1	
E1	1	-1	1	-4	-1	$\overline{1}$	1	+	3, 1, 1	3, 1, 1	3, 1, 1	I_3,I_1,I_1	
F1	1	0	0	-86	292	$\overline{1}$	1	+	13, 1, 1	13, 1, 1	13, 1, 1	I_{13},I_{1},I_{1}	
50 ′	7				N = 507	7 -	_ 3	. 19	2^2 (3 is	ogeny class	202)		507
A1	1	1	Ω	-1693	$\frac{10 - 307}{26434}$		- <u>3</u> 1	. 16	$\frac{3 \text{ iso}}{2,8}$	$\frac{2,0}{}$	2,3	I_2,IV^*	7:2
$\begin{vmatrix} A1 \\ A2 \end{vmatrix}$	1	1	0	-12678	-3060351		1	_	$\frac{2}{14}, 8$	14,0	2,3 $2,3$	I_{14} , IV^*	7:1
B1	 1	 1	- 1	-10		_ '	1	! _	2,2	$\frac{1}{2}, 0$	[-2,1]	$\stackrel{\scriptscriptstyle\perp}{ }$ $\stackrel{\scriptstyle\scriptstyle\perp}{\mathrm{I}_2}$, $\stackrel{\scriptstyle\scriptstyle\perp}{\mathrm{II}}$	7:2
B2	1	1		-75	-1422		1	_	14, 2	14,0	2, 1	I_{14} ,II	7 :1
$\bar{C}1$	- <u>-</u>	1	1	81	-564	- ˈ 1	4	- -	1, 7	1,1	1,4	$egin{array}{cccccccccccccccccccccccccccccccccccc$	2:2
C2	1	1	1	-764	-7324	1	4	+	2, 8	2,2	2,4	I_2,I_2^*	2:1,3,4
C3	1	1	1	-11749	-495058	1	2	+	4,7	4, 1	2,4	$\mathrm{I}_4,\!\mathrm{I}_1^*$	2 :2
C4	1	1	1	-3299	64670	1	2	+	1, 10	1,4	1,4	I_1,I_4^*	2 :2
510	0				N = 510 =	= '2	$2 \cdot 3$. 5	· 17 (7	isogeny cl	asses)		510
A1	1	1	0	-2673	67797	0	2	_	18, 7, 1, 2	18, 7, 1, 2	2, 1, 1, 2	I_{18}, I_7, I_1, I_2	2 :2
A2	1	1	0	-46193	3801813	0	2	+	9, 14, 2, 1	9, 14, 2, 1	1, 2, 2, 1	I_9,I_{14},I_2,I_1	2 :1
B1	1	-			-7634							I_{14},I_3,I_1,I_2	
B2	1	0	1	-11603	-482002	0	2	+	7, 6, 2, 1	[7, 6, 2, 1]	1, 6, 2, 1	I_7,I_6,I_2,I_1	2 :1
C1	1	1			59 (2					I_{2},I_{5},I_{1},I_{2}	l l
C2		1			603	_ '						$ I_1,I_{10},I_2,I_1 $:
D1	1	1			299		4					I_{12},I_2,I_2,I_1	
D2 D3	1 1	1 1			$ \begin{array}{c c} -3157 \\ -206341 \end{array} $		$\frac{4}{2}$					I_6,I_4,I_4,I_2	
D3	1	1			-200341 -14757 1		$\frac{2}{2}$					$\begin{bmatrix} I_3, I_2, I_8, I_1 \\ I_3, I_8, I_2, I_4 \end{bmatrix}$	
E1	- - 1	- - - 1			305	- !	- - -	:				$ I_{16},I_{1},I_{1},I_{1} $	
E1	1	1	1	-360		0	8		8, 2, 2, 2		8, 2, 2, 2		l l
E3	1	1	1	-1440	16305		8					I_4, I_4, I_4, I_4	
E4	1	1	1	-21760	1226417		4			4, 1, 1, 1			2 :2
E5	1	1	1	-7220		0	4			2, 8, 8, 2	2, 2, 8, 2	I_2,I_8,I_8,I_2	
E6	1	1	1	3060	102705		4			2, 2, 2, 8	2, 2, 2, 8	I_2, I_2, I_2, I_8	
E7	1				-14759143		2			1, 16, 4, 1		I_1, I_{16}, I_4, I_1	
E8	1	1	1	6550	-962215	<u></u>	2	— 	1, 4, 16, 1	[1, 4, 16, 1]	[1, 2, 16, 1]	$ I_1,I_4,I_{16},I_1 $	2 :5
F1	1	0				0	2			4, 1, 1, 1		1, 1, 1, 1	2 :2
F2	1	0			$-4 \mid 0$		4			2, 2, 2, 2	2, 2, 2, 2		
F3	1	0	0		-990 (2			$\begin{bmatrix} 1, 4, 4, 1 \\ 1, 1, 1, 4 \end{bmatrix}$		_, _, _, _	2:2 2:2
F4	1	0	U	-166	806	U	2	+	1, 1, 1, 4	1, 1, 1, 4	1, 1, 1, 4	I_1, I_1, I_1, I_4	Z : Z

a_1	a_2 a_2	a_3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
510				$N = {}^{ u}$	510	= 2	. 3	\cdot 5 \cdot 17	(continue	ed)		510
G1 1	0	0	25	-375	0	6	_	6, 3, 3, 2	6, 3, 3, 2	6, 3, 3, 2	I_6, I_3, I_3, I_2	2 :2; 3 :3
G2 1		0	-655	-6223	0	6		3, 6, 6, 1	3, 6, 6, 1	3, 6, 6, 1	I_3, I_6, I_6, I_1	2:1;3:4
G3 1 G4 1		0	-3275	-72435 -4621873	0	$\frac{2}{2}$		2, 1, 1, 6	$\begin{bmatrix} 2, 1, 1, 6 \\ 1, 2, 2, 3 \end{bmatrix}$	$\begin{bmatrix} 2, 1, 1, 2 \\ 1, 2, 2, 1 \end{bmatrix}$	I_2, I_1, I_1, I_6	2:4;3:1
	0	0 -	- 52405 -		0		<u> </u>	1, 2, 2, 3			I_1, I_2, I_2, I_3	2 :3; 3 :2
513					1		· 19	`	geny clas	1	Г	513
A1 1	-1	0	-42	-127	1	1	— 	11,1	0,1	1,1	\prod_{-}^{+} \prod_{-}^{+} \prod_{-}^{+} \prod_{-}^{+}	
B1 1	-1	1	-5	6	1	1	_	5, 1	0,1	3, 1	IV,I_1	
514				N = 51	14 =	$= 2 \cdot$	25	7 (2 isc	geny clas	sses)		514
A1 1	-1	1	-91	-245	1	4	+	16, 1	16, 1	16, 1	I_{16}, I_{1}	2 :2
	-1	1	-1371	-19189	1	4	+	,	8, 2	8, 2	I_8,I_2	2:1,3,4
				-1244565	1	2	+	4,1	4,1	4,1	I_4,I_1	2 :2
			-1291 	-21589	1	4	— 	4,4	$\begin{bmatrix} 4,4\\ \end{bmatrix}$	$\begin{bmatrix} 4, 4 \\ \end{bmatrix}$	I_4,I_4	2 :2
B1 1 B2 1		0	-4	0	1	$\frac{2}{2}$	+	,	4,1	4,1	I_4,I_1	2:2
D2 1	U	0	16	4	1	Z	_	2,2	2,2	2,2	I_2,I_2	2 :1
516				N = 516	$\dot{i} =$	2^2 ·	3 ·	43 (4 is	sogeny cla	asses)		516
A1 0	-1	0			0	1		8, 1, 1	0, 1, 1	1,1,1	$ $ IV^*, I_1, I_1	
B1 0	-1	0	11	-47	1	1		8, 4, 1	0, 4, 1	[3, 2, 1]	IV^*,I_4,I_1	
C1 0	1	0	-13	-28	0	2	_	4, 1, 2	0, 1, 2	[3, 1, 2]	$ $ IV,I $_1$,I $_2$	2 :2
$C2 \mid 0$	1	0	-228	-1404	0	2	+	8, 2, 1	0, 2, 1	[3, 2, 1]	IV^*,I_2,I_1	2 :1
D1 0	1	0	-44	-732	0	3	_	8, 9, 1	0, 9, 1	3, 9, 1	IV^*,I_9,I_1	3 :2
$D2 \mid 0$	1	0	-7604	-257772	0	1	_	8, 3, 3	0, 3, 3	1, 3, 3	IV^*,I_3,I_3	3 :1
517				N = 51	17 =	= 11	. 4	7 (3 isc	geny clas	sses)		517
A1 0	-1	1	36	-3	0	1	_	3, 2	3, 2	1, 2	I_3,I_2	
B1 0	0	1	-16	-26	0	1	 _	1, 2	1,2	1,2	I_1,I_2	
C1 0	-1	1	-52	-3863	1	1		3, 4	3, 4	3,4	I_3,I_4	
520				N = 520) =	2^3 ·	5 ·	13 (2 i	sogeny cla	asses)		520
A1 0	0	0	-23	42	1	2		8, 1, 1	0, 1, 1	2, 1, 1	I_1^*,I_1,I_1	2 :2
A2 0		0	-43	-42	1	4		10, 2, 2	0, 2, 2	2, 2, 2	III^*, I_2, I_2	2:1,3,4
A3 0		0	-563	-5138	1	2		11, 4, 1	0, 4, 1	1, 2, 1	II^*,I_4,I_1	2 :2
$A4 \mid 0$	0	0	157 	-322		2	— :	11, 1, 4	[0, 1, 4]	$\begin{bmatrix} 1, 1, 2 \\ \end{bmatrix}$	II^*,I_1,I_4	2 :2
		0	-20	-28		2		8, 1, 1	0, 1, 1	4, 1, 1	I_1^*, I_1, I_1	2 :2
B2 0	-1	U	0	-100	0	2		10, 2, 2	0, 2, 2	2, 2, 2	III^*, I_2, I_2	2 :1
522				N = 522	=	$2\cdot 3^2$	$\frac{2}{2} \cdot \frac{7}{2}$	29 (13 1	isogeny cl	asses)	,	522
A1 1	-1	0	12	-208	1	1	_	5, 9, 1	5, 0, 1	1, 2, 1	I_5 , III^* , I_1	
			-2046	36244		$\frac{1}{2}$		22, 3, 1	22, 0, 1	[2, 2, 1]	I_{22} ,III, I_1	2 :2
B2 1	-1	0 -	-32766	2291092	0	2	+	11, 3, 2	11, 0, 2	1, 2, 2	I_{11} ,III, I_2	2 :1
	-1		-6	-54		3	—	, ,	1, 0, 3	1, 2, 3	I_1 , III , I_3	3 :2
			-1311	-17947	<u>-</u> -	1	— 	3, 9, 1	3, 0, 1	1, 2, 1	I_3 , III^* , I_1	3 :1
	-1		-9	-3699		1	—	7, 13, 1	7, 7, 1	1, 2, 1	I_7, I_7^*, I_1	7 :2
$D2 \mid 1$	-1	0 -	-58599	5490531	0	1	—	1,7,7	1, 1, 7	1, 2, 1	$\mathrm{I}_1,\!\mathrm{I}_1^*,\!\mathrm{I}_7$	7 :1

	a_1 a_2	a ₂	a_4	a_6	r	T	e	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
		из	<u>α4</u>			' '			, , ,	C_p	Rodalia	
522				N = 52	22 =	$= 2 \cdot$	3^2	\	$\frac{\text{ontinued}}{\text{ontinued}}$	Г	T	522
E1	1 - 1	0	-45	139	1	1	_	1,9,1	1,3,1	[1, 4, 1]	I_1,I_3^*,I_1	<u> </u>
F1	1 - 1		45	-203	1	1	_	10, 6, 1	10, 0, 1	2, 1, 1	I_{10},I_0^*,I_1	5 :2
F2	1 - 1	0	-4095	102577	1	1	_	2, 6, 5	2, 0, 5	[2, 1, 5]	I_2,I_0^*,I_5	5 :1
G1	1 - 1	1	-18416	-960173	0	2	Ī —	22, 9, 1	22, 0, 1	22, 2, 1	I_{22} , III^* , I_1	2 :2
G2	1 - 1	1	-294896	-61564589	0	2	+	11, 9, 2	11, 0, 2	11, 2, 2	I_{11} , III^* , I_2	2 : 1
H1	1 - 1	1	-146	713	0	3	Ī _	3, 3, 1	3, 0, 1	[3, 2, 1]	I_3 ,III, I_1	3 :2
H2	1 - 1	1	-56	1513	0	1	_	1, 9, 3	1, 0, 3	1, 2, 1	I_1 , III^* , I_3	3 : 1
I1	1 –1	1	1	7	1	1	Ī —	5, 3, 1	[5,0,1]	[5, 2, 1]	I_5 ,III, I_1	
J1	1 - 1	 1	-509	4677	 1	<u> </u>	<u> </u>	13, 7, 1	13, 1, 1	13, 4, 1	$ I_{13}, I_1^*, I_1 $	<u>-</u>
K1	1 - 1		4	47	0	 4	<u>!</u>	4,7,1	$\begin{bmatrix} 4, 1, 1 \end{bmatrix}$	$\begin{bmatrix} 4, 4, 1 \end{bmatrix}$	$egin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{bmatrix} 1 & 2 & 2 \end{bmatrix}$
K1 K2	1-1		-176	911	0	4	+	2, 8, 2	2, 2, 2	$\begin{bmatrix} 4, 4, 1 \\ 2, 4, 2 \end{bmatrix}$	I_{2},I_{2}^{*},I_{2}	$\begin{bmatrix} {f 2} & . & . & . \\ {f 2} & . & 1, 3, 4 \end{bmatrix}$
K3	1 - 1		-446	-2329	0	2	+	1, 7, 4	1, 1, 4	1, 2, 4	I_1, I_1^*, I_4	2:2
K4	1 - 1		-2786	57287	0	2		1, 10, 1	1, 4, 1	1, 4, 1	I_1, I_4^*, I_1	2 :2
L1	1 - 1	1	 -11	-17	0	1	<u> </u>	2, 6, 1	[2,0,1]	[2, 1, 1]	I_2,I_0^*,I_1	<u>-</u>
M1	1 - 1 - 1			-33115291	! <u>-</u> -	<u> </u>	<u> </u>	$\frac{11,27,1}{11,27,1}$! ´- ´			$\frac{1}{3}:2$
M2	1 - 1			858878903	0	3		33, 13, 3	, ,	33, 2, 3	, 41,	3:1
									, ,		307 77 0	
524			900	N = 524		ı		`	geny class	ĺ	T3.7* T	524
A1	0 1	0	-309	1991	1	1	_	8,1	0,1	1,1	IV^*,I_1	
525	<u> </u>			N = 525 =	= 3	$\cdot 5^2$. 7	(4 isog	geny class	es)		525
A1	1 1	1	-63	156	1	4	+	1, 7, 1	1, 1, 1	1, 4, 1	I_1, I_1^*, I_1	2 :2
A2	1 1	1	-188	-844	1	4	+	2, 8, 2	2, 2, 2	2, 4, 2	I_2,I_2^*,I_2	2:1,3,4
A3	1 1	1	-2813			2	+	1, 10, 1	1, 4, 1	1, 4, 1	I_1,I_4^*,I_1	2 :2
A4	1 1	1	437	-4594	<u> </u>	2	<u> </u>	4,7,4	4,1,4	[2, 4, 2]	I_4,I_1^*,I_4	2 :2
B1	1 1		25	0	0	2	_	2, 6, 1	2, 0, 1	2, 2, 1	I_2,I_0^*,I_1	2 :2
B2	1 1	0	-100	-125	0	4	+	4, 6, 2	4, 0, 2	2, 4, 2	I_4, I_0^*, I_2	2:1,3,4
B3	1 1	0	-1225	-17000	0	4	+	2, 6, 4	[2,0,4]	2, 4, 4	I_2,I_0^*,I_4	2:2,5,6
B4 B5	$\begin{array}{c cc} 1 & 1 \\ 1 & 1 \end{array}$	$0 \\ 0$	-975 -19600	11250 -1064375	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$\begin{array}{c c} 2 \\ 2 \end{array}$	+++++++++++++++++++++++++++++++++++++++	8, 6, 1 $1, 6, 2$	$\begin{bmatrix} 8, 0, 1 \\ 1, 0, 2 \end{bmatrix}$	$\begin{bmatrix} 2, 2, 1 \\ 1, 2, 2 \end{bmatrix}$	I_8, I_0^*, I_1	2:2 2:3
B6	1 1	0	-19000 -850	-1004375 -27125	0	$\frac{2}{2}$	_	1, 6, 2 $1, 6, 8$	1,0,2 $1,0,8$	1, 2, 2 $1, 2, 8$	$ \begin{array}{c c} I_1, I_0^*, I_2 \\ I_1, I_0^*, I_8 \end{array} $	2 · 3 2 · 3
C1	1 1		-450	3375		$\frac{1}{2}$	<u> </u>		$\begin{bmatrix} 1, 0, 0 \\ 3, 0, 1 \end{bmatrix}$	$\begin{bmatrix} 1, 2, 5 \\ 1, 2, 1 \end{bmatrix}$	$\begin{bmatrix} I_{1},I_{0},I_{0} \\ I_{3},III^{*},I_{1} \end{bmatrix}$	$\begin{bmatrix} 2 & 3 \\ 2 & 2 \end{bmatrix}$
C1	1 1	0	-430 175	12750	1	$\frac{2}{2}$	_	6, 9, 2	$\begin{bmatrix} 3, 0, 1 \\ 6, 0, 2 \end{bmatrix}$	$\begin{bmatrix} 1, 2, 1 \\ 2, 2, 2 \end{bmatrix}$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	$\begin{vmatrix} 2 & \cdot & 2 \\ 2 & \cdot & 1 \end{vmatrix}$
D1	 				'	$\frac{1}{2}$	<u> </u>		!	<u> </u>		$\begin{bmatrix} 2 & 1 \\ 2 & 2 \end{bmatrix}$
D1 $D2$	$\begin{bmatrix} 1 & 0 \\ 1 & 0 \end{bmatrix}$		$-18 \\ 7$	$\begin{array}{c} 27 \\ 102 \end{array}$	1 1	$\frac{2}{2}$	+	3, 3, 1 $6, 3, 2$	3, 0, 1 6, 0, 2	$\begin{bmatrix} 3, 2, 1 \\ 6, 2, 2 \end{bmatrix}$	I_3 ,III, I_1 I_6 ,III, I_2	$\begin{vmatrix} 2 & : & 2 \\ 2 & : & 1 \end{vmatrix}$
			<u> </u>					0,0,2	0,0,2	0,2,2	10,111,12	
528				N = 528 =				`	geny clas		Т	528
A1	0 - 1		-8	0	1	2		10, 1, 1	0, 1, 1	4, 1, 1	I_2^*,I_1,I_1	2 :2
A2	0 - 1		32	-32		2	<u> </u>	11, 2, 2	0,2,2	4, 2, 2	I_3^*, I_2, I_2	2 : 1
B1	0 - 1		1	-6	0	2		4, 4, 1	0, 4, 1	1, 2, 1	II,I_4,I_1	2 :2
B2	0 - 1	0	-44	-96	0	4	+	, ,	0, 2, 2	2, 2, 2	I_0^*, I_2, I_2	2:1,3,4
B3	0 - 1	0	-704	-6960	0	$\frac{2}{4}$		10, 1, 1	0, 1, 1	$\begin{bmatrix} 4, 1, 1 \\ 2, 1, 4 \end{bmatrix}$	I_{2}^{*},I_{1},I_{1}	2 :2
B4	0 - 1			288	0	4	<u>-</u> -	10, 1, 4	[0, 1, 4]	2,1,4	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	2 : 2
C1	0 - 1		-8016	278928	0	2		10, 7, 1	0,7,1	4, 1, 1	I_{2}^{*},I_{7},I_{1}	2 :2
C2	0 - 1	0	-7976	281808	0	2	—	11, 14, 2	0, 14, 2	2, 2, 2	I_3^*, I_{14}, I_2	2:1

$ \begin{array}{c c c c c c c c c c c c c c c c c c c $		a_1 a_2 a_3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	528 $N = 528 = 2^4 \cdot 3 \cdot 11$ (continued) 528											
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	D1	0 1 0		12	0	2	+	8, 1, 1	0, 1, 1	2, 1, 1		2 :2
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	D3	0 1 0	-472	-4108		2					_	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	D4	0 1 0	88	-300	0	2	 -	11, 1, 4	0, 1, 4	[4, 1, 2]	I_3^*, I_1, I_4	2 :2
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$												
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		<u>-</u>				¦			:	:	<u></u>	<u> </u>
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$, ,			·
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$											-	1
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$											-	·
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $							'			:		
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $												1
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $											9	·
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$					1							1
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	H1	0 1 0	-104	372	1	2	+	12, 3, 1				2 :2
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	H2	0 1 0	-184	-364	1	4	+	12, 6, 2	0, 6, 2		_	2:1,3,4
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Н3	0 1 0	-2344	-44428	1	2	+	12, 3, 4	0, 3, 4	2, 3, 2	I_4^*, I_3, I_4	2 :2
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	H4	0 1 0	696	-2124	1	4	_	12,12,1	0, 12, 1	4, 12, 1	I_4^*, I_{12}, I_1	2 :2
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	I1	0 1 0	-77	-330	0	2	_	4, 10, 1	0, 10, 1	1, 10, 1	II,I_{10},I_1	2 :2
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	I2	0 1 0	-1292	-18312	0	2	+	8, 5, 2	0, 5, 2	1, 5, 2	I_0^*, I_5, I_2	2 : 1
$ \begin{array}{ c c c c c c c c c } \hline J3 & 0 & 1 & 0 & -5632 & 160820 & 0 & 2 & + & 13, 1, 1 & 1, 1, 1 & 4, 1, 1 & I_{5}^{*}, I_{1}, I_{1} & 2:2 \\ \hline J4 & 0 & 1 & 0 & -192 & 4788 & 0 & 4 & - & 13, 4, 4 & 1, 4, 4 & 2, 4, 4 & I_{5}^{*}, I_{4}, I_{4} & 2:2 \\ \hline \hline {\bf 530} & & & & & & & & & & & & & & & & & & &$	J1	0 1 0	-32	-12	0	2	+	16, 1, 1	4, 1, 1	[4, 1, 1]	I_{8}^{*},I_{1},I_{1}	2 :2
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	J2	0 1 0			0		+	, ,	2, 2, 2	4, 2, 2	I_6^*, I_2, I_2	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$							+				-	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	J4	0 1 0	-192	4788	0	4	_	13, 4, 4	1, 4, 4	2, 4, 4	I_5^*, I_4, I_4	2 :2
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	530)		N = 530	=	$2 \cdot 5$. 53	(4 iso	geny class	ses)	<u> </u>	530
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$												
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	A2	1 0 1	-2929	-61244	0	1	<u> </u>	6, 6, 1	6, 6, 1	[2, 2, 1]	I_6,I_6,I_1	3 :1
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $, ,	, ,	, ,	1, 1, 1	2 :2
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	B2	1 - 1 0	16	-12	1	2	_	2, 2, 2	2, 2, 2	[2, 2, 2]	I_2,I_2,I_2	2 :1
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	C1	1 - 1 0	1226	30580	1	1	_	10, 10, 1	10, 10, 1	[2, 10, 1]	I_{10},I_{10},I_{1}	
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	D1	1 1 1	9	13	1	1	 –	6, 2, 1	6, 2, 1	[6, 2, 1]	I_6, I_2, I_1	·
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	532	2		N = 532	2 =							532
	A1	0 0 0	4	5	0	2	_	4, 2, 1	0, 2, 1	1, 2, 1	IV,I_2,I_1	2 :2
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	A2	0 0 0	-31	54	0	2	+	8, 1, 2	0, 1, 2	1, 1, 2	IV^*,I_1,I_2	2 :1
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	534 $N = 534 = 2 \cdot 3 \cdot 89$ (1 isogeny class) 534											
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$												
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	A2	1 1 1	26	107	1	2	_	3, 4, 2	3, 4, 2	3, 2, 2	13,14,12	2 :1
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$												537
$egin{array}{ c c c c c c c c c c c c c c c c c c c$	A1	1 1 0	-120	909	0	1	 -	13,1	13,1	1,1	I_{13} , I_1	
	B1	0 1 1	-75	-277	0	1	_	2, 1	2, 1	2, 1	I_2,I_1	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	$\overline{\text{C1}}$	0 1 1	13	5	0	3		6, 1	[6, 1]	6, 1	I_6,I_1	3 :2
	C2	0 1 1	-167	-958	0	1	_	2,3	2,3	2, 1	I_2,I_3	3 :1

	a_1	a_2	a_3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
537 $N = 537 = 3 \cdot 179$ (continued) 537													
D1	1	0	1	1	-1	0	1	_	1,1	1,1	1, 1	I_1,I_1	
E1	0	1	1	-340	2308	0	5	<u> </u>	10, 1	10,1	10, 1	$ m I_{10}, m I_{1}$	5 :2
E2	0	1	1	2450	-39812	0	1	_	2,5	2,5	2,1	I_2,I_5	5 :1
539)				N = 539) =	7^2 ·	11	(4 isog	eny classe	es)		539
A1	-	-1	1		-110013	0	1	_	8, 1	2,1	2, 1	I_2^*,I_1	3 :2
A2 A3		$-1 \\ -1$	1 1	-2417 21593	-210708 5467657	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	1 1	_	$12, 3 \\ 8, 9$	6,3 $2,9$	$2, 1 \\ 2, 1$	${f I_6^*, I_3} \ {f I_2^*, I_9}$	$egin{array}{c} {f 3}:1,3 \ {f 3}:2 \end{array}$
B1	0	0	$-\frac{1}{1}$	98	-86	0	- - - 1	 	8,1	$\begin{bmatrix} -2, 5 \\ -2, 1 \end{bmatrix}$	$\begin{bmatrix} -2, 1 \\ 2, 1 \end{bmatrix}$	$egin{array}{cccccccccccccccccccccccccccccccccccc$	
C1	1	0	1	170	-3237	1	$\frac{1}{2}$	_	9,2	3, 2	4, 2	$\mathrm{I}_3^*,\mathrm{I}_2$	2 :2
C2	1	0	1	-2525	-45279	1	2	+	12,1	6, 1	4,1	I_6^* , I_1	2 :1
D1	0	1	1	-16	-66	1	1	-	6, 1	0, 1	2, 1	I_0^*, I_1	5 :2
D2 D3	$0 \\ 0$	1 1	1	-506 -383196	7774 91174234	1 1	1 1	_	6, 5 $6, 1$	$0, 5 \\ 0, 1$	$2, 5 \\ 2, 1$	$egin{array}{c} \mathrm{I}_0^*, \mathrm{I}_5 \ \mathrm{I}_0^*, \mathrm{I}_1 \end{array}$	$egin{array}{c c} {f 5} : 1, 3 \\ {f 5} : 2 \end{array}$
540				000100	$\frac{N = 540}{N}$	<u> </u>				geny clas		-0,-1	540
A1	0	0	0	-33	$\frac{77 - 540}{73}$	$\begin{bmatrix} 0 \end{bmatrix}$	3	_	$\frac{4,3,1}{4,3,1}$	0,0,1	3, 1, 1	IV,II,I_1	3:2
A2	0	0	0	27	297	0	1	_	4, 9, 3	0, 0, 3	1, 1, 1	IV,IV^*,I_3	3 :1
B1	0	0	0	3	1	1	1	[-	4, 3, 1	0, 0, 1	1, 1, 1	$_{ m IV,II,I_1}$	3 :2
B2	0	0	0	-57 	169	1	3	—	4, 5, 3	0, 0, 3	3, 3, 3		3 :1
C1 C2	0	$0 \\ 0$	$0 \\ 0$	-648 1512	6372 33588	1 1	$\begin{array}{c c} 3 \\ 1 \end{array}$		8, 9, 2 8, 11, 6	0, 0, 2	3, 3, 2	IV^*, IV^*, I_2 IV^*, II^*, I_3	3 :2
D1	0 0	0	$-\frac{0}{0}$		-27	<u>1</u> 1	<u> </u>	'	4, 9, 1	$\begin{bmatrix} 0,0,6\\\\ 0,0,1 \end{bmatrix}$	$\begin{bmatrix} 1, 1, 2 \\ 3, 3, 1 \end{bmatrix}$	$\left \begin{array}{c} \mathrm{IV}^*, \mathrm{II}^*, \mathrm{I}_6 \\ \mathrm{IV}, \mathrm{IV}^*, \mathrm{I}_1 \end{array} \right $	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$
D1	0	0	0	-513	-27 -4563				4, 9, 1 $4, 11, 3$	$0, 0, 1 \\ 0, 0, 3$	1, 1, 1	IV,IV , I_1 IV,II^*,I_3	3:2 $3:1$
E1	0	0	0	-72	-236	0	1	' 	8, 3, 2	0, 0, 2	1, 1, 2	$_{ m IV^*,II,I_2}$	3:2
E2	0	0	0	168	-1244	0	3	_	8, 5, 6	0, 0, 6	3, 1, 6	IV^*, IV, I_6	3 : 1
F1	0	0	0	3	-11	0	3	-	4, 3, 3	0, 0, 3	3, 1, 3		3 :2
F2	0	0	0	-297	-1971	0	1	_	4, 9, 1	0, 0, 1	1, 3, 1	IV,IV^*,I_1	3 :1
542	2				N = 542	2 =	$2 \cdot 2$	71	(2 isog	geny classe	es)		542
A1 A2	1 1	1 1	1	$-37 \\ -677$	$-149 \\ -7061$	0	$\begin{array}{c c} 2 \\ 2 \end{array}$	_	14, 1	14, 1	14, 1	$_{\mathrm{I}_{14},\mathrm{I}_{1}}$	2:2 2:1
B1	1 1 1		1 1	-011 	9	$\begin{bmatrix} 0 \\ 1 \end{bmatrix}$		+ 	$\frac{7,2}{7,1}$	$\begin{bmatrix} -7, 2 \\ -7, 1 \end{bmatrix}$	$\frac{7,2}{7,1}$	$\left \begin{array}{c} \operatorname{I}_{7}, \operatorname{I}_{2} \\ \operatorname{I}_{7}, \operatorname{I}_{1} \end{array} \right $	2 . 1
544					N = 544			1 <u> </u>		eny classe	,	1) 1	oxdot 544
A1	0	0	0	-5	$\frac{10 - 94}{4}$	1	2	+	$\frac{(0.150g)}{6,1}$	0,1	2,1	III,I_1	2 :2
A2	0	0	0	5	18	1	2	<u> </u>	9, 2	0, 2	1, 2	${\mathrm{I}_0^*}, \overset{-}{\mathrm{I}_2}$	2 :1
B1		-1	0	-22	48	0	2	+	6, 1	0, 1	2, 1	$_{ m III,I_1}$	2 :2
B2	<u>-</u>	-1 	0	-17	65	0	2	— 	12,2	0, 2	2, 2	I_3^*,I_2	2 :1
C1 C2	0	1 1	$0 \\ 0$	$-22 \\ -17$	$-48 \\ -65$	0	$\begin{array}{c c} 2 \\ 2 \end{array}$	+	6, 1	0, 1	$\frac{2}{2}$, $\frac{1}{2}$	III,I_1 I* I_2	2:2 2:1
D1	0 0	0	- - -	$ \begin{array}{c} -1i \\ -5 \end{array} $	-05 -4	0	$\begin{bmatrix} 2 \\ -2 \end{bmatrix}$	— 	12, 2	$\begin{bmatrix} 0,2\\ \end{bmatrix}$	$\begin{bmatrix} 2, 2 \\ -2, 1 \end{bmatrix}$	$\begin{bmatrix} I_3^*,I_2 \\ IIIII. \end{bmatrix}$	$\begin{bmatrix} 2 & 1 \\ 7 & -1 \\ 2 & 2 \end{bmatrix}$
D1 $D2$	0	0	0	-5	$-4 \\ -18$	0	$\frac{2}{2}$	+	$6, 1 \\ 9, 2$	0, 1 $0, 2$	$2, 1 \\ 2, 2$	$egin{array}{c} ext{III}, ext{I}_1 \ ext{I}_0^*, ext{I}_2 \end{array}$	2:2 2:1
E1		 -1	0	-6	8	0	$\begin{vmatrix} - & - & - \\ 2 & 2 \end{vmatrix}$	 +	6,1	$\begin{bmatrix} - & 1 & 0 & 1 \\ 0 & 1 & 1 \end{bmatrix}$	$\frac{1}{2}, \frac{1}{1}$	$ III,I_1 $	2 : 2
E2	0	-1	0	-16	-12	0	2	+	9,2	0, 2	2, 2	I_0^*, I_2	2 :1

180			TABLE 1	: E	اطط	IPTI	C CURV	ES 544F-5	50E		
a_1	$a_2 a_3$	a_4	a_6	r '	Γ	s ($\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
544			N = 54	44 :	= 2	$2^5 \cdot 1$	17 (co	ontinued)			544
F1 0	_	-6	-8	0	2	+	6,1	0,1	2, 1	III,I_1	2 :2
$F2 \mid 0$	1 0	-16	12	0	2	+	9, 2	0, 2	1,2	I_0^*, I_2	2 : 1
545			N = 545	= ;	$5 \cdot 1$	109	(1 iso	ogeny clas	s)		545
	$-1 \ 0$	-284	1915			+	3,1	3,1	3,1	I_3,I_1	2 :2
	$ \begin{array}{ccc} -1 & 0 \\ -1 & 0 \end{array} $	-289 -914	$ \begin{array}{r} 1848 \\ -8277 \end{array} $			++	6, 2 $3, 4$	6, 2 3, 4	$6, 2 \\ 3, 4$	$\begin{matrix} \mathrm{I}_6,\!\mathrm{I}_2 \\ \mathrm{I}_3,\!\mathrm{I}_4 \end{matrix}$	$\begin{vmatrix} 2 : 1, 3, 4 \\ 2 : 2 \end{vmatrix}$
l I	$-1 \ 0$	256	7625			_	12, 1	12, 1	12, 1	I_{12},I_1	2:2 2:2
546 $N = 546 = 2 \cdot 3 \cdot 7 \cdot 13$ (7 isogeny classes) 546											
A1 1	1 0	-108	-486	-1						I_1, I_5, I_3, I_1	1
B1 1			'.							$ I_5,I_1,I_1,I_1 $!
C1 1		 -57	-164							$ I_8,I_3,I_1,I_1 $	 9 .9
$\begin{bmatrix} C1 & 1 \\ C2 & 1 \end{bmatrix}$	-	-137	380							I_{4},I_{6},I_{2},I_{2}	
C3 1	0 1	-1957	33140							I_2, I_{12}, I_1, I_1	
$C4 \mid 1$	0 1	403	2756	1	2	-2	, 3, 4, 4	2, 3, 4, 4	[2, 3, 2, 4]	I_2, I_3, I_4, I_4	2 :2
D1 1	–	13								I_3, I_9, I_1, I_1	
D2 1 D3 1	-	$-122 \\ -26057$	-4948 -1621108							I_9,I_3,I_3,I_3	
E1 1			'.	- '-						$ I_{27},I_1,I_1,I_1 $	·
!			-12372091							$ I_{17},I_{7},I_{1},I_{5} $	·
F1 1 F2 1		714 -3674496 -	-82908 -2711401518							$\begin{vmatrix} I_7, I_7, I_7, I_1 \\ I_1, I_1, I_1, I_7 \end{vmatrix}$	
G1 1			-7								
G2 1 G3 1		$-27 \\ -417$	$\frac{45}{3243}$, 2, 2, 2			I_2,I_2,I_2,I_2	
G3 1 G4 1		-417	$\begin{array}{c} 3243 \\ 255 \end{array}$, 1, 4, 1 $, 4, 1, 4$			$\begin{bmatrix} I_1, I_1, I_4, I_1 \\ I_1, I_4, I_1, I_4 \end{bmatrix}$	
549			N = 549 =	9			· · ·			1, 1, 1, 1	549
	$-1 \ 0$	3	N = 349 = 0		$\frac{\cdot}{2}$		$\frac{(3 \text{ ISO})}{3,1}$	$\frac{\text{geny class}}{0,1}$	2,1	III,I_1	343
	$-1 \ 0$ $-1 \ 0$	-12			$\begin{vmatrix} 2 \\ 2 \end{vmatrix}$		$3, 1 \\ 3, 2$	0, 1 $0, 2$	2, 1 $2, 2$	III,I_1 III,I_2	2 : 2 2 : 1
'	-1 1	25	-26				9,1	$\begin{bmatrix} - & 1 & 1 & 1 \\ 0 & 1 & 1 \end{bmatrix}$	$\begin{bmatrix} - & 1 & 2 & 1 \\ 2 & 1 & 1 \end{bmatrix}$	$\stackrel{!}{\mid}$ $\stackrel{-}{\operatorname{III}}{}^{*}, \stackrel{-}{\operatorname{I}}_{1}$	$ {f 2}:2$
	$-1 \ 1$	-110					9, 2	0, 2	2,2	$\mathrm{III}^*, \mathrm{I}_2$	2 : 1
$C1 \mid 1$	$-1 \ 0$	-18	-27	0	$\begin{bmatrix} - & - \\ 1 & \end{bmatrix}$	_	6,1	0,1	2, 1	I_0^*, I_1	
550			N = 550 = 2	2 . ;	5^2 .	. 11	(13 is	sogeny cla	sses)		550
A1 1	1 0	-25						3, 1, 1		I_3,I_1^*,I_1	3 : 2
	1 0	225						1, 3, 3			3 : 1
	0 1	249	-6102	0	$\overline{1}$					I_5,I_5^*,I_1	
B2 1		-148501						<u>-</u>	:	I_1,I_1^*,I_5	5 :1
'	0 1	-206	'.	- '-	'			11,0,1		I_{11} , II , I_1	 :
D1 1		49						1, 0, 1		I_1,IV^*,I_1	
!	0 1	-576 						3,0,3	<u>-</u>	$ I_3,IV^*,I_3 $:'
$E1 \mid 1$	$-1 \ 0$	-367	10541	U	1	_ 1	11, 9, 1	11, 0, 1	1, 2, 1	I_{11} , III^* , I_1	

	a_1	a_2	a_3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
550)				N = 55	50 =	= 2 ·	5^{2}	· 11 (co	ontinued)			550
F1	1	0	1	-701	-7202	1	1		1,9,1	1,0,1	1, 2, 1	I_1,III^*,I_1	5 :2
F2	1	0	1	4924	75298	1	1	_	5, 9, 5	5, 0, 5	1, 2, 5	I_{5},III^{*},I_{5}	5:1,3
F3	1	0	1		254051548	1	1	_	25, 9, 1	25, 0, 1	1, 2, 1	I_{25},III^*,I_1	$5:2^{'}$
$\overline{G1}$	<u>-</u> 1	0	 1	 -6	8	1	2	<u> </u>	4, 3, 1	$\begin{bmatrix} 4, 0, 1 \end{bmatrix}$	$\begin{bmatrix} 2, 2, 1 \end{bmatrix}$	$\begin{bmatrix} I_4,III,I_1 \end{bmatrix}$	$ \mathbf{\hat{2}}:2 $
G2	1	0	1	-106	408	1	$\frac{2}{2}$	+	2, 3, 1	2,0,1	$\begin{bmatrix} 2, 2, 1 \\ 2, 2, 2 \end{bmatrix}$	I_2,III,I_2	2 : 2 2 : 1
	<u>-</u>						<u> </u>	' 		:	:		<u>'</u>
H1 H2	1 1	1 1	1 1	$\begin{array}{c} 2 \\ -23 \end{array}$	$1 \\ -59$	0	1	_	1, 2, 1	1,0,1	$\begin{bmatrix} 1, 1, 1 \\ 2, 1, 1 \end{bmatrix}$	I_1,II,I_1	3 :2
	1 	 T	- <u>-</u>			0	1	— -	3,2,3	3,0,3	3, 1, 1	I_3,II,I_3	3:1
I1	1	1	1	-2213	39531	1	1	_	7, 7, 3	7, 1, 3	7, 4, 3	I_7,I_1^*,I_3	3 :2
I2	<u> </u>	1	1	7412	212781	1	1	<u> </u>	21, 9, 1	21, 3, 1	21, 4, 1	I_{21},I_3^*,I_1	3 :1
J1	1	-1	1	-15	87	1	1	—	11, 3, 1	11, 0, 1	11, 2, 1	I_{11} , III , I_1	
$\overline{\mathrm{K1}}$	1	1	1	-28	-69	0	1	Ī —	1, 3, 1	1,0,1	1, 2, 1	I_1,III,I_1	5:2
K2	1	1	1	197	681	0	5	_	5, 3, 5	5, 0, 5	5, 2, 5	I_5,III,I_5	5 :1,3
K3	1	1	1	-30328	2020281	0	5	_	25, 3, 1	25, 0, 1	25, 2, 1	I_{25} , III , I_1	5 :2
L1	 1	1	 1	-138	1031	0	2	<u>-</u> _	4, 9, 1	[4,0,1]	[4, 2, 1]	$\mid \mathrm{I}_4, \mathrm{III}^*, \mathrm{I}_1 \mid$	$ \hat{2}:2$
L2	1	1	1	-2638			2	+	2, 9, 2	2, 0, 2	2, 2, 2	I_2,III^*,I_2	2 :1
M1	<u> </u>	1	 1	-5138	-143969	0	1	<u> </u>	11, 8, 1	11,0,1	<u> </u>	$ I_{11},IV^*,I_1 $	<u> </u>
IVII	1	1	1	-3136	-145909	U	1		11, 0, 1	11,0,1	11, 1, 1	111,1 V ,11	
55 1	L				N = 551	=	$19 \cdot 2$	29	(4 isoge	eny classe	es)		551
A1	1	0	1	1	-5	1	1	_	2, 1	2, 1	2, 1	I_2,I_1	
B1	1	0	0	-11	14	1	1	Ī —	2, 1	[2, 1]	[2, 1]	$oxed{I_2,I_1}$	
$\bar{C}1$	0	1	1	-2376		1	1	<u> </u>	-7, 2	7, 2	7,2	I_7,I_2	
	 						<u> </u>	 - 		<u>'</u>	<u> </u>		<u> </u>
D1	0	1	1	-116	444	1	1		1,2	1,2	1,2	I_1,I_2	
552	2				N = 552 =	= 2	$3 \cdot 3$	23	(5 iso	geny class	ses)		552
A1	0	-1	0	-64	-260	1	2	_	10, 6, 1	0, 6, 1	2, 2, 1	III^*,I_6,I_1	2 :2
A2	0	-1	0	-1144	-14516	1	2		11, 3, 2	0, 3, 2	1, 1, 2	II^*,I_3,I_2	2 : 1
B1	0	-1	- 0	-2908	61876	0	2	<u>.</u> _	8, 14, 1	[0, 14, 1]	[2, 2, 1]	I_1^*, I_{14}, I_1	2 :2
$^{-1}$ B2		-1		-46648	3893500		$\overline{2}$		10, 7, 2	0, 7, 2	2, 1, 2	III^*,I_7,I_2	2:1
$\bar{C}1$	<u>-</u>	-1		4	-12		2	<u>-</u> -	$-\frac{1}{8}, \frac{1}{2}, \frac{1}{1}$	[0, 2, 1]	$\begin{bmatrix} 2, 2, 1 \end{bmatrix}$	$\begin{bmatrix} I_1 & I_2 & I_1 & I_2 & I_1 \\ I_1^*, I_2, I_1 \end{bmatrix}$	$ \mathbf{\hat{2}}:2 $
C2		-1		-56	-132		$\frac{2}{2}$		0, 2, 1 $10, 1, 2$	$0, 2, 1 \\ 0, 1, 2$	$\begin{bmatrix} 2, 2, 1 \\ 2, 1, 2 \end{bmatrix}$	$ I_1,I_2,I_1 = III^*,I_1,I_2 $	2:1
	 						<u> </u>	<u>-</u> -		'		<u>-</u>	:
D1 D2		$-1 \\ -1$		$-207 \\ -212$	$-1080 \\ -1020$	1	$\frac{2}{4}$		4, 3, 1 8, 6, 2	$0, 3, 1 \\ 0, 6, 2$	$\begin{bmatrix} 2, 1, 1 \\ 4, 2, 2 \end{bmatrix}$	$III,I_3,I_1 \\ I_1^*,I_6,I_2$	$egin{array}{c} {f 2}:2 \ {f 2}:1,3,4 \end{array}$
D_3			0	-212 -752	-1020 6972	1	4		10, 3, 4	$0, 0, 2 \\ 0, 3, 4$	$\begin{bmatrix} 4, 2, 2 \\ 2, 1, 4 \end{bmatrix}$	$ I_1,I_6,I_2 $ $ III^*,I_3,I_4 $	$\begin{bmatrix} 2 & 1 & 3 & 4 \\ 2 & 2 & 2 \end{bmatrix}$
D_4			0	248	-5252	1	2		10, 0, 4 $10, 12, 1$		[2, 1, 4] $[2, 2, 1]$	III^*, I_3, I_4 III^*, I_{12}, I_1	
	<u>-</u>			 -4	32		!	<u>-</u> -		!''	<u> </u>		
E1 E2	$\begin{array}{c c} 0 \\ 0 \end{array}$	1	0	-4 -184	32 896	1 1	4		8, 4, 1 $10, 2, 2$	$0, 4, 1 \\ 0, 2, 2$	$\begin{vmatrix} 4, 4, 1 \\ 2, 2, 2 \end{vmatrix}$	$I_1^*, I_4, I_1 \\ III^*, I_2, I_2$	$egin{array}{c} {f 2}:2 \ {f 2}:1,3,4 \end{array}$
E2 E3	0	1	0	-184 -304	-544	1	$\frac{4}{2}$		10, 2, 2 $11, 1, 4$	$0, 2, 2 \ 0, 1, 4$	$\begin{bmatrix} 2, 2, 2 \\ 1, 1, 2 \end{bmatrix}$	$ III^{-}, I_{2}, I_{2} $ $ II^{*}, I_{1}, I_{4} $	2:1,3,4 2:2
E4	0	1	0	-304 -2944	-544 60512	1	$\frac{2}{2}$		11, 1, 4 $11, 1, 1$	0, 1, 4 0, 1, 1	$\begin{bmatrix} 1, 1, 2 \\ 1, 1, 1 \end{bmatrix}$	$II^*,I_1,I_4 \\ II^*,I_1,I_1$	2 : 2 2 : 2
				2011	00012	_		<u> </u>	, -, -	, , , , ,	_, _, _	,-1,-1	_ · -
55 5	5				N = 555 =	= 3	. 5 .	37	(2 isog	geny class	es)		555
A1	0	1	1	-1	-29	0	1	_	1, 5, 1	1, 5, 1	1, 1, 1	I_1,I_5,I_1	
B1	0	1	1	-2405	-47869	0	3	Ī —	15, 3, 1	15, 3, 1	15, 3, 1	I_{15},I_3,I_1	3 :2
B2	0	1	1	-196805	-33670564		1	_	5, 1, 3	5, 1, 3	5, 1, 3	I_5, I_1, I_3	3 :1

102		TADEL	7 1. 1.71		V LD 00011 (J01D		
a_1 a_2 a_3	a_4	a_6	· T	$s \operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
556		N = 55	$6 = 2^{\frac{1}{2}}$	$^{2} \cdot 139$ (1 i	sogeny cla	ass)		556
A1 0 0 0	-8	9 1	1	- 4,1	0,1	3,1	IV,I_1	
557		N = 5	57 = 5	557 (2 isog	geny classe	es)		557
A1 1 1 0	0	1 1	1	- 1	1	1	I_1	
B1 0 -1 1	-268	1781	1	+ 1	1	1	I_1	
558		N = 558	$= 2 \cdot 3$	$3^2 \cdot 31$ (8 i	sogeny cla	sses)		558
A1 1 -1 0	0	2 1	1	-1, 3, 1	1, 0, 1	1,2,1	I_1 ,III, I_1	
B1 1 -1 0	-48	288		-5,3,3	5,0,3	1, 2, 3	I_5 ,III, I_3	3 :2
B2 1 - 1 0	417	') 1	-15, 9, 1	15, 0, 1	1,2,1	$ I_{15},III^*,I_1 $	3:1
$\begin{array}{ c c c c c } C1 & 1 & -1 & 0 \\ C2 & 1 & -1 & 0 \end{array}$	$-6 \\ -186$	$ \begin{array}{c c} -28 & 0 \\ -928 & 0 \end{array} $	$\begin{pmatrix} 2 \\ 4 \end{pmatrix}$	$\begin{vmatrix} -4,6,1\\+2,6,2 \end{vmatrix}$	4, 0, 1 2, 0, 2	$\begin{bmatrix} 2, 2, 1 \\ 2, 4, 2 \end{bmatrix}$	$egin{array}{c} { m I}_4, { m I}_0^*, { m I}_1 \ { m I}_2, { m I}_0^*, { m I}_2 \end{array}$	$egin{array}{ c c c c c c c c c c c c c c c c c c c$
$\begin{bmatrix} C2 & 1 & 1 & 0 \\ C3 & 1 & -1 & 0 \end{bmatrix}$		-61750		+ 1, 6, 1	1, 0, 1	1, 2, 1	I_1, I_0^*, I_1	2:1,5,1 2:2
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	-276	134	$\begin{vmatrix} 2 \end{vmatrix}$	+ 1, 6, 4	1, 0, 4	1, 2, 2	I_1, I_0^*, I_4	2 :2
D1 1 -1 0	135	$-243 \mid 1$		-5,11,1	[5, 5, 1]	[1, 4, 1]	I_5,I_5^*,I_1	5 :2
$D2 \mid 1 - 1 0$	-12555	544887		[-1, 7, 5]	1,1,5	1,4,5	I_1,I_1^*,I_5	5 :1
E1 1 -1 1	-2	-53 ($\begin{vmatrix} 1 \end{vmatrix}$	[-1, 9, 1]	1,0,1	1, 2, 1	I_1 , III^* , I_1	
F1 1 -1 1	46		$\lfloor \rfloor 3$	-15, 3, 1	15, 0, 1	15, 2, 1	I_{15} ,III, I_1	3 :2
F2 1 -1 1	-434	-7343		-5, 9, 3	5,0,3	[5, 2, 3]	I_5 ,III*, I_3	3 :1
G1 1 -1 1	-149	749 1	$\lfloor \rfloor 1$	[-7, 7, 1]	7,1,1	[7, 4, 1]	I_7,I_1^*,I_1	
H1 1 -1 1	-752	9213) 1	-1,17,1	1, 11, 1	1, 2, 1	I_1,I_{11}^*,I_1	
560		N = 560	$= 2^4$	$\cdot 5 \cdot 7$ (6 is	sogeny clas	sses)		560
A1 0 1 0	-1			- 8,1,1			I_0^*, I_1, I_1	
B1 0 0 0	-412	<u>-</u> -	$\begin{vmatrix} -1 & -1 & -1 \\ 1 & 1 \end{vmatrix}$	-8, 5, 3	0, 5, 3	[1, 5, 1]	I_0^*, I_5, I_3	<u> </u>
$\begin{bmatrix} C1 & 0 & -1 & 0 \end{bmatrix}$	-21	-35 0	-') 1	-12, 1, 1	[0, 1, 1]	$\begin{bmatrix} 1 & 1 & 1 & 1 \\ 1 & 1 & 1 & 1 \end{bmatrix}$	II^*,I_1,I_1	3 :2
$\begin{array}{ c c c c c c } \hline C2 & 0 & -1 & 0 \\ \hline \end{array}$	139) 1	-12, 3, 3	0, 3, 3	1, 1, 1	II^*,I_3,I_3	3 :1,3
$\begin{bmatrix} C3 & 0 & -1 & 0 \\ & & \end{bmatrix}$	-2101	39485 0) 1 	-12, 9, 1	0,9,1	$\begin{bmatrix} 1,1,1 \\ \end{bmatrix}$	II^*,I_9,I_1	3 :2
D1 0 0 0	37		$\lfloor $	-16, 2, 1	4, 2, 1	4, 2, 1	I_{8}^{*},I_{2},I_{1}	2 :2
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	-283	$ \begin{array}{c c} 1482 & 1 \\ -18902 & 1 \end{array} $		$\begin{vmatrix} + & 14, 4, 2 \\ + & 13, 8, 1 \end{vmatrix}$	2, 4, 2 $1, 8, 1$	4, 2, 2 2, 2, 1	$ \begin{array}{c c} I_6^*, I_4, I_2 \\ I_5^*, I_8, I_1 \end{array} $	$egin{array}{ c c c c c c c c c c c c c c c c c c c$
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	-4283	107882		+13, 0, 1 +13, 2, 4		4, 2, 4	I_5^{15}, I_8, I_1 I_5^*, I_2, I_4	2:2 2:2
E1 0 0 0	32	-212 1	-'- <i></i> - 1	-8,1,5	0, 1, 5	$\begin{bmatrix} 2, 1, 5 \end{bmatrix}$	I_0^*, I_1, I_5	<u>-</u>
F1 0 - 1 0	 -5	$\frac{1}{25}$ 1	-!	-8,3,1	0, 3, 1	$\begin{bmatrix} 2, 3, 1 \end{bmatrix}$	$ I_0^*, I_3, I_1 $	3 :2
$\begin{array}{ c c c c c }\hline F2 & 0 & -1 & 0\\\hline \end{array}$	-805	9065		-8,1,3		2, 3, 1 $2, 1, 1$	I_0^*, I_1, I_3	3 :1
561		N = 561	$= 3 \cdot 1$	$11 \cdot 17$ (4 i	sogeny cla	isses)	1	561
A1 0 -1 1	-3729) 1	- 10, 1, 1	10, 1, 1	2, 1, 1	I_{10}, I_1, I_1	
B1 0 1 1	-269	1628		-2, 5, 1	2, 5, 1	[2, 5, 1]	I_2,I_5,I_1	<u> </u>
$\begin{bmatrix} -1 & -1 & -1 & -1 \\ C1 & 0 & 1 & 1 \end{bmatrix}$	 -8	8 1	-'- <i>-</i>	-4,1,1	$\begin{vmatrix} -1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 $	$\begin{bmatrix} 4, 1, 1 \end{bmatrix}$	$ I_4, I_1, I_1 $	<u>-</u>
D1 1 0 0	-12	15 (-!	+1,1,1	$\begin{bmatrix} 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 $	$\begin{bmatrix} 1 & 1 & 1 & 1 & 1 \\ 1 & 1 & 1 & 1 & 1 \end{bmatrix}$	$\begin{bmatrix} I_1,I_1,I_1 \end{bmatrix}$	2 :2
$\begin{array}{ c c c c c }\hline D2 & 1 & 0 & 0\\\hline \end{array}$	-17	0 0	4	+ 2, 2, 2	2, 2, 2	2, 2, 2	I_2, I_2, I_2	2 : 1, 3, 4
D3 1 0 0	-182		$\begin{vmatrix} 2 \\ 1 \end{vmatrix}$	+ 1,1,4	1, 1, 4	1, 1, 4	I_1,I_1,I_4	2 :2
D4 1 0 0	68	17 () 4	-4,4,1	4, 4, 1	4, 4, 1	I_4,I_4,I_1	2 :2

						ımı	ı	7/4)	1 (1)	<u> </u>		T T
	a_1	a_2	a_3	a_4	$a_6 r$	$ \mathbf{T} $	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
56	2				N = 562	2 =	2 ·	281 (1 i	isogeny cla	ss)		562
A1 A2				$-4 \\ 16$	$\begin{array}{c c} 0 & 0 \\ 20 & 0 \end{array}$			$4, 1 \\ 2, 2$	$4, 1 \\ 2, 2$	$2, 1 \\ 2, 2$	$\begin{matrix} I_4,I_1\\I_2,I_2\end{matrix}$	2:2 2:1
56	3				N = 50	63 =	= 50	63 (1 is	ogeny class	s)		563
A1		1	1	-15	16 2			1	1	1	I_1	
56	1				N 564	22	2 9	47 (9	iaamana ala	2222)		564
		<u> </u>	0	-221	N = 564 = -11911				0, 5, 1	1	IV^*,I_5,I_1	304
				-37	'- '	'	<u>-</u> -		<u>'</u>	<u>-</u>	$\mid \text{IV*}, \text{I}_3, \text{I}_1 \mid$	 3 · ?
				-517					0, 3, 1 0, 1, 3		IV^*, I_1, I_3	
56	5				N = 565	<u> </u>	$5 \cdot$	113 (1 i	isogeny cla	ss)		565
A1	1	0	1	-19	-330	1	_	3,1	3,1	1,1	I_3,I_1	
56	6				N = 566	= 2	$2 \cdot 2$	283 (2 is	sogeny clas	ses)		566
A1	1	-1	0	-2			1	`	4,1	· ·	I_4,I_1	
B1	1	0	0	1	:-				1, 1	:	I_1,I_1	<u> </u>
56	7				N = 567	, =	3^4 .	· 7 (2 iso	ogeny class	ses)		567
A1		-1	0	0			1		0,2	1,2	II,I_2	
B1				-2	82 1				:	$\frac{1}{3}, 2$	IV^*,I_2	<u>-</u>
56	8				N = 568	3 =	2^{3}	·71 (1 i	isogeny cla	55)		568
A1		-1	0	-72	-2120	1	+	11,1	0,1	1,1	II^*,I_1	
57	'n				N = 570 =	o :	2 5	: 10 (19	2 igogony e	laggag)		570
A1	1	1	0	-98	N = 370 = 3721	1		$\frac{6.19}{8,3,1,2}$	$\begin{array}{ c c }\hline 3 & \text{isogeny } c \\ \hline 8, 3, 1, 2 \\ \hline \end{array}$	·	I_{8},I_{3},I_{1},I_{2}	2:2
A2			0	-1618	24388 1		+	, , ,			I_{4},I_{6},I_{2},I_{1}	2:1
B1	1	1	0	-78	-972 0	2			14, 2, 3, 1	[2, 2, 1, 1]		
B2	1	1	0	-1998	-351480	2	+	7, 1, 6, 2	7, 1, 6, 2	1, 1, 2, 2		
C1	1		0	-17	69 1			4, 1, 3, 2	4, 1, 3, 2	[2, 1, 3, 2]	I_4,I_1,I_3,I_2	2 :2
C2	1		0	-397	2881 1	'		2, 2, 6, 1	2, 2, 6, 1	!	I_2,I_2,I_6,I_1	2 :1
D1 D2	1 1	$0 \\ 0$	1 1	3676	-5146540			28, 5, 1, 2	28, 5, 1, 2		I_{28},I_5,I_1,I_2	
D2 D3		0		-78244 -1233444 -	$-7985758 \begin{vmatrix} 0 \\ -527363678 \end{vmatrix} 0$						I_{14}, I_{10}, I_2, I_4 I_7, I_{20}, I_1, I_2	
D4		0		-233764	33569186 0			7, 5, 4, 8			I_7, I_5, I_4, I_8	2:2
$\bar{\mathrm{E}1}$	1	0	1	12	-14 1	2	Ī-	8, 2, 1, 1	8, 2, 1, 1	2, 2, 1, 1	I_8, I_2, I_1, I_1	2 :2
E2	1	0	1	-68	-142 1			4, 4, 2, 2		2, 4, 2, 2		
E3 E4	1 1	0	1 1	$-968 \\ -448$	$ \begin{array}{c c} -11662 & 1 \\ 3506 & 1 \end{array} $			2, 2, 1, 4 2, 8, 4, 1			I_{2},I_{2},I_{1},I_{4}	2:2 2:2
					:-	'			$\begin{bmatrix} 2, 8, 4, 1 \\ -6, 6, 2, 1 \end{bmatrix}$	<u>-</u>	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	
F1 F2	1 1	-	1 1	-23 -1103	506 0 $13898 0$			6, 6, 3, 1 3, 3, 6, 2	$\begin{bmatrix} 6, 6, 3, 1 \\ 3, 3, 6, 2 \end{bmatrix}$	$\begin{bmatrix} 2, 6, 3, 1 \\ 1, 3, 6, 2 \end{bmatrix}$	$\begin{bmatrix} I_6, I_6, I_3, I_1 \\ I_3, I_3, I_6, I_2 \end{bmatrix}$	2:2;3:3 2:1;3:4
F3	1	0	1	202	-13624 0			18, 2, 1, 3	18, 2, 1, 3		I_{18}, I_2, I_1, I_3	
F4	1	0	1	-7478	-2409520	2	+	9, 1, 2, 6	9, 1, 2, 6	1, 1, 2, 6	I_9,I_1,I_2,I_6	2:3;3:2

a_1	$a_{2}a_{3}$	a_4	$a_6 r$	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
570			N = 57	0 =	2	. 3 . 5 . 19	(continued))		570
G1 1 G2 1	1 1	-51	53 0 -51 0	4	++	$4, 1, 2, 1 \\ 2, 2, 4, 2$	$ \begin{array}{ c c c c } \hline 4, 1, 2, 1 \\ 2, 2, 4, 2 \end{array} $	4,1,2,1 $2,2,2,2$	$\begin{matrix} I_4, I_1, I_2, I_1 \\ I_2, I_2, I_4, I_2 \end{matrix}$	2:2 2:1,3,4
G3 1 G4 1	1 1	199	$ \begin{array}{c c} -6207 & 0 \\ -151 & 0 \\ \hline \end{array} $	2	+	1, 1, 8, 1 $1, 4, 2, 4$	$\begin{array}{ c c c } 1, 1, 8, 1 \\ 1, 4, 2, 4 \\ \hline \end{array}$	$\begin{array}{ c c c } 1, 1, 2, 1 \\ 1, 2, 2, 2 \\ \hline \end{array}$	$\begin{bmatrix} I_1, I_1, I_8, I_1 \\ I_1, I_4, I_2, I_4 \\ \vdots \end{bmatrix}$	2:2 2:2
H1 1 H2 1	1 1		$ \begin{array}{c c} -3 & 0 \\ -75 & 0 \\ \hline \end{array} $	2	- + -	2, 2, 1, 1 $1, 1, 2, 2$	$\begin{array}{ c c c c c c }\hline 2,2,1,1\\ 1,1,2,2\\ \hline \end{array}$	$\begin{array}{ c c c c }\hline 2,2,1,1\\ 1,1,2,2\\ \hline \end{array}$	$\begin{bmatrix} I_2, I_2, I_1, I_1 \\ I_1, I_1, I_2, I_2 \\ \vdots \end{bmatrix}$	2 : 2 2 : 1
I1 1 I2 1 I3 1	1 1 1 1	$-30780 \\ -31160$	$\begin{array}{c} 32525 \ 0 \\ 2065677 \ 0 \\ 2011565 \ 0 \end{array}$	$\frac{4}{2}$	- + +	8, 5, 1, 4 4, 10, 2, 2 2, 20, 4, 1	$ \begin{array}{c} 8, 5, 1, 4 \\ 4, 10, 2, 2 \\ 2, 20, 4, 1 \end{array} $	$\begin{bmatrix} 8, 1, 1, 4 \\ 4, 2, 2, 2 \\ 2, 2, 4, 1 \end{bmatrix}$	$\begin{bmatrix} I_8, I_5, I_1, I_4 \\ I_4, I_{10}, I_2, I_2 \\ I_2, I_{20}, I_4, I_1 \end{bmatrix}$	2:2 2:1,3,4 2:2
$ \begin{array}{c c c} I4 & 1 \\ J1 & 1 \\ J2 & 1 \end{array} $	0 0	-1456	$ \begin{array}{r} 132819117 0 \\ -21604 0 \\ -1373170 0 \end{array} $	2	+ - +	$ \begin{array}{ccccc} 2, 5, 1, 1 \\ \hline$	$ \begin{array}{ c c c c c } \hline 2,5,1,1\\ 2,14,1,1\\ 1,7,2,2\\ \hline \end{array} $	$\begin{array}{ c c c c }\hline 2,1,1,1\\\hline 2,14,1,1\\\hline 1,7,2,2\\\hline \end{array}$	$\begin{bmatrix} I_2,I_5,I_1,I_1 \\ I_2,I_{14},I_1,I_1 \\ I_1,I_7,I_2,I_2 \end{bmatrix}$	2:2 2:2 2:1
K1 1 K2 1 K3 1	0 0	-25871 -414991	1614201 0 102863225 0 8420985 0	6 6	- - + -	24, 3, 3, 2	$ \begin{array}{ c c c c c c } \hline 24,3,3,2 \\ 12,6,6,1 \\ 8,1,9,6 \end{array} $	$ \begin{array}{ c c c c c } \hline 24, 3, 1, 2 \\ 12, 6, 2, 1 \\ 8, 1, 1, 6 \end{array} $	$\begin{bmatrix} I_{24},I_3,I_3,I_2 \\ I_{12},I_6,I_6,I_1 \\ I_8,I_1,I_9,I_6 \end{bmatrix}$	$egin{array}{c} {f 2}:2;{f 3}:3 \ {f 2}:1;{f 3}:4 \ {f 2}:4;{f 3}:1 \ \end{array}$
K4 1 L1 1	0 0	-463231 9335	77449961 0 -737383 0	$\begin{vmatrix} 2 \\ 10 \end{vmatrix}$		$4, 2, 18, 3 \\ \hline 20, 5, 5, 2$	$\begin{array}{ c c c c c c } \hline 4, 2, 18, 3 \\ \hline 20, 5, 5, 2 \\ \hline \end{array}$	$\begin{array}{ c c c }\hline 4,2,2,3\\\hline 20,5,5,2\\\hline \end{array}$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	2 :3; 3 :2 2 :2; 5 :3
L2 1 L3 1 L4 1	0 0	-3301465	$-8655975 \begin{vmatrix} 0 \\ -2309192023 \end{vmatrix} 0 \\ -147775056075 \begin{vmatrix} 0 \\ 0 \end{vmatrix}$	2	+ - +	10, 10, 10, 14, 1, 1, 102, 2, 2, 5	$ \begin{vmatrix} 10, 10, 10, 1 \\ 4, 1, 1, 10 \\ 2, 2, 2, 5 \end{vmatrix} $	$ \begin{vmatrix} 10, 10, 10, 1 \\ 4, 1, 1, 2 \\ 2, 2, 2, 1 \end{vmatrix} $	$\begin{matrix} I_{10}, I_{10}, I_{10}, I_1 \\ I_4, I_1, I_1, I_{10} \\ I_2, I_2, I_2, I_5 \end{matrix}$	$ 2:1;5:4 \\ 2:4;5:1 \\ 2:3;5:2 $
M1 1 M2 1 M3 1		-190	20 0 992 0 650 0	4	- + +	4, 4, 1, 1 2, 2, 2, 2 1, 1, 4, 4	$\begin{bmatrix} 4,4,1,1\\ 2,2,2,2\\ 1,1,4,4 \end{bmatrix}$	$ \begin{vmatrix} 4,4,1,1\\2,2,2,2\\1,1,4,2 \end{vmatrix} $	$\begin{bmatrix} I_4, I_4, I_1, I_1 \\ I_2, I_2, I_2, I_2 \\ I_1, I_1, I_4, I_4 \end{bmatrix}$	$egin{array}{c} {f 2}:2 \ {f 2}:1,3,4 \ {f 2}:2 \end{array}$
M4 1	0 0	-3040	64262 0	2	+	1, 1, 1, 1	1, 1, 1, 1	1, 1, 1, 1	I_1,I_1,I_1,I_1	2 :2
571		0.20	N = 57	1	5	71 (2 isog)	geny classes)			571
A1 0 B1 0	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		-10595 0 $2 2$	'	- - -	1 1	1 1	1 1 1	$egin{array}{cccc} & I_1 & & & & & & & & & & & & & & & & & & &$	
572		_ _	N = 572:		$\frac{1}{2}$.		isogeny cla			572
A1 0 A2 0			$ \begin{array}{r rrrr} & -121 & 0 \\ & -27401 & 0 \end{array} $	3	1	$ \begin{array}{c} $	0,3,2 0,1,6	3, 3, 2 1, 1, 6	$IV^*, I_3, I_2 \\ IV^*, I_1, I_6$	3:2 3:1
573			N = 573	= ;	3 ·	191 (3 iso	ogeny classe	s)		573
A1 1 A2 1			$ \begin{array}{c c} 0 & 0 \\ -3 & 0 \end{array} $	2	- +	2, 1 1, 2	2, 1 1, 2	2, 1 1, 2	$\begin{matrix} I_2,I_1\\I_1,I_2\end{matrix}$	2:2 2:1
B1 0 C1 0			$ \begin{array}{c c} -21121 0 \\ -2 1 \end{array} $	'	+ +	$\frac{5,1}{3,1}$	$\begin{bmatrix} 5, 1 \\ -3, 1 \end{bmatrix}$	$\frac{5,1}{3,1}$	$egin{array}{cccccccccccccccccccccccccccccccccccc$	<u> </u>
574			N = 574 =			· · · · · · · · · · · · · · · · · · ·	sogeny class	·	l	574
A1 1	1 0	-2	-2	1	+	1, 1, 1	1,1,1	1, 1, 1	I_1,I_1,I_1	
B1 1 B2 1			35165 1 29181 1	2	+ +	10, 4, 1 5, 8, 2	$ \begin{array}{ c c c c } \hline 10, 4, 1 \\ 5, 8, 2 \\ \hline \end{array} $	$\begin{bmatrix} 2, 2, 1 \\ 1, 2, 2 \end{bmatrix}$	$\begin{bmatrix} I_{10}, I_4, I_1 \\ I_5, I_8, I_2 \\ \end{bmatrix}$	2 : 2 2 : 1
C1 1 C2 1	1 0 1 0		$ \begin{array}{c c} 80 & 0 \\ -7728 & 0 \end{array} $		++	14, 2, 1 $7, 4, 2$	14, 2, 1 $7, 4, 2$	2, 2, 1 $1, 4, 2$	$I_{14}, I_2, I_1 \\ I_7, I_4, I_2$	2:2 2:1

	a_1	a_2	<i>a</i> .2	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
57	<u> </u>				N = 574 =		' '			(0)	P		574
D1	1	0	1	-31679	5254674		2	1	$\frac{34, 3, 2}{34, 3, 2}$		2, 3, 2	I_{34},I_{3},I_{2}	
D2	1	0	1	-687039	218902034				17, 6, 4	, ,	1, 6, 2	I_{17}, I_6, I_4	
E1	1	-1	0	-40	-88	0	1	+	3, 1, 1	3, 1, 1	1,1,1	I_3,I_1,I_1	'
F1	' 1		 1	 -80	190	1	3	<u>'</u>	5, 1, 3	$\begin{bmatrix} 5, 1, 3 \end{bmatrix}$	1,1,3	$ I_5,I_1,I_3 $	$ {\bf 3}:2 $
F2	1	0	1	-2335	-43598		1		15, 3, 1	15, 3, 1	1, 3, 1	I_{15}, I_3, I_1	
G1	1	1	1	-21	-5	1	1	+	11, 1, 1	11, 1, 1	11, 1, 1	$ I_{11},I_{1},I_{1} $	
H1	$1 \frac{1}{1}$	-1	1	3	5	1	2	<u> </u>	6, 1, 1	[6, 1, 1]	[6, 1, 1]	I_6,I_1,I_1	2 :2
H2	1	-1_{-1}	1	-37	85	1	2	+	[3, 2, 2]	[3, 2, 2]	[3, 2, 2]	I_3,I_2,I_2	2 :1
I1		-1		-19353	958713				21, 7, 1	21, 7, 1			7 :2
I2	1	-1 	1 -	-9611313 - 	-11466507927	1	1	+	3, 1, 7	$\begin{bmatrix} 3, 1, 7 \\ \end{bmatrix}$	[3, 1, 1]	I_3,I_1,I_7	7 : 1
J1	1		1	-175	789				5, 5, 1	5, 5, 1	5, 5, 1		5 :2
J2	1	1	1	-15785	-769911	0	1	+	1, 1, 5	1, 1, 5	1, 1, 5	I_1,I_1,I_5	5 :1
57	5				N = 575 = 5	5^2 ·	23	(5 isogen	y classes)	,	575
A1	1	-1	0	-2	1	1	1	+	2,1	0,1	1, 1	II,I_1	
B1	0	0	1	175	-1344	1	1	Ī-	11, 1	[5, 1]	4,1	I_5^*, I_1	
$\overline{\text{C1}}$	0	-1	1	-458	3943	0	1	Ī-	9,1	[0, 1]	[2,1]	$ $ III * , I_1	
D1	1	-1	1	-55	72	1	1	+	8,1	[0,1]	[3,1]	$ \text{IV*,I}_1 $	·
E1	0	1	1	-18	24		1	' -	3,1	0,1	[2, 1]	$ $ III,I_1	'
57	6				N = 576 = 2	2 ⁶ .	32	(9 isogen	y classes)	·	576
A1	0	0	0	0	8	1	2	_	10,3	0,0	2,2	I_0^* ,III	2:2;3:3
A2	0	0	0	-60	176	1	2	+	14, 3	0,0	4,2	I*,III	2:1;3:4
A3	0	0	0	0	-216			_	10, 9	0,0	2, 2	I_0^*, III^*	2:4;3:1
A4	0	_ 0 	0	-540	-4752		2	<u> </u> +	14,9	0,0	4,2	I ₄ ,III*	2 :3; 3 :2
B1	0		0	-39	-92		2	+	6,7	0,1	1,4	II,I_1^*	2 :2
B2 B3	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$0 \\ 0$	0	$-84 \\ -1164$	$160 \\ 15280$		$\begin{array}{c c} 4 \\ 2 \end{array}$	+++++++++++++++++++++++++++++++++++++++	12, 8 $15, 7$	$0, 2 \\ 0, 1$	$\begin{array}{c c} 4,4 \\ 2,2 \end{array}$	$egin{array}{c} { m I}_2^*, { m I}_2^* \ { m I}_5^*, { m I}_1^* \end{array}$	$egin{array}{c} {f 2}:1,3,4 \ {f 2}:2 \end{array}$
B4	0	0	0	276	1168		$\frac{2}{2}$	_	15, 10	0,1 $0,4$	2, 2 $2, 4$	I_5^{1}, I_4^{*}	2 :2
$\bar{C1}$	0	0	0	-39	92	_ :	2	' +	-6,7	$\begin{bmatrix} - & - & - & - & - & - & - & - & - & - $	1,2	II,I*	2:2
C2	0	0	0	-84			4	+	12, 8	0, 2	4,4	I_{2}^{*}, I_{2}^{*}	2:1,3,4
C3	0	0	0	-1164	-15280			+	15, 7	0, 1	2,4	$\overline{\mathrm{I}_{5}^{st}},\overline{\mathrm{I}_{1}^{st}}$	2 :2
C4	0	0	0	276	-1168	0	2	_	15, 10	$\begin{bmatrix} 0,4 \end{bmatrix}$	2,4	I_5^*, I_4^*	2 :2
D1	0	0	0	24	-56		2	-	10, 7	0,1	2, 2	I_0^*, I_1^*	2 :2
D_2	0	0	0	-156	-560		4	+	14,8	0,2	4,4	I_4^*, I_2^*	2:1,3,4
D_4	0	0	0	-2316	-42896		2	+	16,7	0,1	2,4	I_6^*, I_1^*	2:2
D4 D5	$\begin{array}{c c} 0 \\ 0 \end{array}$	$0 \\ 0$	$0 \\ 0$	-876 -13836	9520 626416		$\begin{array}{ c c }\hline 4\\ 2 \end{array}$	+++++++++++++++++++++++++++++++++++++++	16, 10 $17, 8$	0, 4 $0, 2$	$\begin{array}{c c} 4,4 \\ 2,2 \end{array}$	$egin{array}{c} { m I}_6^*, { m I}_4^* \ { m I}_7^*, { m I}_2^* \end{array}$	$egin{array}{c} {f 2}:2,5,6 \ {f 2}:4 \end{array}$
D6	0	0	0	-13630 564	37744			_	17, 14	$0, 2 \\ 0, 8$	2, 2 $2, 4$	$1_7, 1_2 \\ 1_7, 1_8^*$	2:4 2:4
E1	0		0	0	-8		$\frac{1}{2}$	<u>-</u> 	10, 3	$\begin{bmatrix} -0, 0 \\ 0, 0 \end{bmatrix}$	$\begin{bmatrix} -2 & -2 & -2 & -2 & -2 & -2 & -2 & -2 $	<u>-</u>	$ {\bf 2}:2;{\bf 3}:3 $
E2	0	0	0	-60	-176		$\frac{2}{2}$	+	14, 3	0,0	2,2	I_4^* ,III	2 : 2; 3 : 3
E3	0	0	0	0	216		2	_	10, 9	0,0	2, 2	I_0^* , III^*	2:4;3:1
E4	0	0	0	-540	4752	0	2	+	14,9	0,0	2,2	I ₄ ,III*	2 :3; 3 :2
F1	0		0	-3		0	2	+	6,3	0,0	1, 2	II,III	2 :2
F2	0	0	0	12	0	0	2	_	12, 3	0,0	2, 2	I_2^* ,III	2 :1

	ı						1	1		1		1	1
	a_1	a_2	a_3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
576	6				N = 5	76	= 2	6.5	3^2 (con	ntinued)			576
G1	0	0	0	-27	0	0	2	+	6,9	0,0	1, 2	II,III*	2 :2
G2	0	0	0	108	0	0	$\frac{2}{2}$	<u> </u>	12,9	0,0	2, 2	I ₂ ,III*	2 :1
H1	0	0	0	9	0	1	2	-	6, 6	0,0	1, 2	II,I_0^*	2 :2
H2	0	0	0	-36	0	1	4	+	12, 6	0,0	4, 4	I_{2}^{*},I_{0}^{*}	2:1,3,4
НЗ	0	0	0	-396	-3024	1	2	+	15, 6	0,0	2,2	I_5^*, I_0^*	2 :2
H4	0	0	0	-396	3024	1	2	+	15, 6	0,0	4,2	I_5^*, I_0^*	2 :2
I1	0	0	0	24	56	1	2	_	10, 7	0, 1	2,4	I_0^*, I_1^*	2 :2
I2	0	0	0	-156	560	1	4	+	14,8	0, 2	4,4	I_4^*, I_2^*	2:1,3,4
I3	0	0	0	-876	-9520	1	4	+	16, 10	0,4	4,4	I_6^*, I_4^*	2:2,5,6
I4 I5	$\begin{array}{c} 0 \\ 0 \end{array}$	$0 \\ 0$	$0 \\ 0$	-2316 -13836	42896 -626416	1	$\begin{array}{c c} 2 \\ 2 \end{array}$	++	16, 7 $17, 8$	0, 1 $0, 2$	$4, 2 \\ 2, 2$	I_6^*, I_1^*	2:2 2:3
16	0	0	0	-15650 564	-020410 -37744	1	$\frac{2}{2}$	_	17, 3 $17, 14$	$0, 2 \\ 0, 8$	4,4	$I_7^*, I_2^* \ I_7^*, I_8^*$	2 : 3 2 : 3
								-0		· · · · · · · · · · · · · · · · · · ·		17.8	
578			-1	0=0	N = 578				` `	geny class	1	T T*	578
A1	1	1	1	-873	5783	0	$\begin{array}{ c c }\hline 2\\ 2\\ \end{array}$	+	6,7	6, 1	6,2	I_6,I_1^*	2 :2; 3 :3
A2 A3	$\begin{vmatrix} 1 \\ 1 \end{vmatrix}$	1 1	1 1	-12433 -29773	528295 -1989473	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$\frac{2}{2}$	++	$3, 8 \\ 2, 9$	$3, 2 \\ 2, 3$	$\begin{array}{c} 3,4\\2,2\end{array}$	$I_3,I_2^* \ I_2,I_3^*$	$egin{array}{c} {f 2}:1;{f 3}:4 \ {f 2}:4;{f 3}:1 \end{array}$
A4	1	1	1	-23113 -32663	-1583717	0	$\frac{2}{2}$	+	1, 12	1,6	1,4	I_{1},I_{6}^{*}	2:4,3:1 $2:3;3:2$
					1000111	U		'	1, 12	1,0	1, 1	11,16	2 . 0, 0 . 2
579	9				N = 579	= :	3 · 19	3	(2 isoge	eny classe	es)		579
A1	0	-1	1	-2	11	0	1	<u> </u>	5, 1	$\begin{bmatrix} 5,1 \end{bmatrix}$	1,1	I_5,I_1	
B1	1	0	0	-3	0	1	2	+	2, 1	2,1	2,1	I_2,I_1	2 :2
B2	1	0	0	12	3	1	2	_	1, 2	1,2	1, 2	I_1,I_2	2 :1
580)				N = 580 =	2^{2}	.5.	29	(2 isog	geny clas	ses)		580
A1	0	0	0	-8	-7	1	2	+	4, 2, 1	0, 2, 1	3, 2, 1	IV,I_2,I_1	2 :2
A2	0	0	0	17	-42	1	2	-	8, 1, 2	0, 1, 2	3, 1, 2	IV^*,I_1,I_2	2 :1
B1	0	0	0	-32	-31	1	2	+	4, 3, 2	[0, 3, 2]	[3, 3, 2]	V_1 V_2 V_3 V_4	2 :2
B2	0	0	0	113	-234	1	2	_	8, 6, 1	0, 6, 1	3, 6, 1	IV^*,I_6,I_1	
582	2				N = 582 =	= 2	. 3 .	97	(4 isog	env class	es)		582
A1	1	1	0	-15	$\frac{-27}{}$		2	1	$\frac{(11338)}{6,2,1}$	6, 2, 1	2, 2, 1	I_{6},I_{2},I_{1}	2 :2
A2		1	0	25	_99		2	<u> </u>	3, 4, 2	3, 4, 2	1, 2, 2	I_3, I_4, I_2	2 :1
B1	 1	1	1	-46658	-3898033	0	$\frac{1}{2}$	+	12, 14, 1	12, 14, 1	12, 2, 1	I_{12}, I_{14}, I_{1}	2 :2
B2	1	1			-248562097				6, 7, 2	6, 7, 2	6, 1, 2	I_6, I_7, I_2	2 :1
$\overline{\text{C1}}$	1	1	1	-34	47	1	2	+	10, 2, 1	10, 2, 1	10, 2, 1	I_{10}, I_2, I_1	2:2
C2	1	1	1	-514	4271		2	+	5, 1, 2	5, 1, 2	5, 1, 2	I_5, I_1, I_2	2 :1
D1	1	0	0	-14	-12	0	4	+	4, 4, 1	[4, 4, 1]	[4, 4, 1]	I_4, I_4, I_1	2 :2
D2	1	0	0	-194	-1056	0	4	+	2, 2, 2	2, 2, 2	2, 2, 2	I_2,I_2,I_2	2:1,3,4
D3	1	0	0	-3104	-66822			+	1, 1, 1	1, 1, 1	1, 1, 1	-, -, -	2 :2
D4	1	0	0	-164	-1386	0	2	_	1, 1, 4	1, 1, 4	1, 1, 4	I_1,I_1,I_4	2 :2
583	3				N = 583 =	= 1	$11 \cdot 5$	3	(3 isoge	eny classe	es)		583
A1	0	1	1	6	-5			_	1,2	1,2	1,2	I_1,I_2	
B1	' 1	1	0	-358			 1	<u> </u>	4,3	4,3	4,1	I_4,I_3	:
$\bar{\mathrm{C1}}$	0	0	1	491	-2603	'	1	<u>:</u> 	3,4	3,4	3,2	I_3,I_4	:

$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		a_1	$a_2 a_3$	a_4	a_6	r	T	$s \operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	585	5			N = 585 =	: 3 ²	$2 \cdot 5 \cdot$	13 (9 iso	geny clas	sses)		585
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $		1	-1 1					-9,4,1			III^*, I_4, I_1	2 :2
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	A2	1	-1 1		83782	1	2	+9,2,2	0, 2, 2	2, 2, 2		2 :1
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		_	-				l	, , ,	, , ,			
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $! :	<u>-</u>	!			<u> </u>
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $		_	_ 0					, , , , , , , , , , , , , , , , , , ,	, , ,			
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $						' - -	! :	<u>-</u>	:			<u> </u>
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		_	-					, ,			, - ,	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	E1	0	0 1	-1713	-28022	0	1	 	:			:
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	F1	 1					2	-	:			2:2
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	F2	1	-1 0			1						
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $						1						
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$						_		, ,			-	
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $, ,				, ,
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$												
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$												
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	G1					' - -	1	<u>-</u>	!	:		'
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	H1	1	$-1 \ 0$	 -9	0	1	2	+6,1,1	0, 1, 1	[2, 1, 1]		2:2
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		1	-1 0	36								
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	I1	0	0 1	-597	8820	1	1	-9,7,1	3, 7, 1	[4, 7, 1]	I_3^*, I_7, I_1	
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	586	3			N = 586	= 2	$2 \cdot 29$	93 (3 isog	geny class	es)		586
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	A1	1	1 0	-1	-3	0	1	- 3,1	3, 1	1, 1	I_3,I_1	
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	B1	1	1 1	-18	415	1	1	-18,1	18,1	18,1	I_{18},I_1	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	$\bar{C1}$	1	1 1		7	1	1	-4, 1	4,1	[4, 1]	I_4,I_1	:
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	588	3			N = 588 =	: 2 ²	$2 \cdot 3 \cdot$	7^2 (6 iso	geny clas	sses)		588
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	A1	0	-1 0					` ` `		· ·	IV^*,I_5,IV	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	B1	0	-1 0	327	666	1	2	[-4, 3, 8]	0, 3, 2	3, 1, 4	$[IV, I_3, I_2^*]$	2:2;3:3
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	B2	0	-1 0	-1388				+8,6,7	0, 6, 1	3, 2, 4		2:1;3:4
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$							_					· · · · · · · · · · · · · · · · · · ·
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		0	$-1 \ 0$	-89588 	10350936	1 	2	[+8,2,9]	[0, 2, 3]	[1, 2, 4]	$[1V^*, I_2, I_3^*]$	2 :3; 3 :2
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$, ,	, , ,		, -,	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	C2	0	$-1 \ 0$	-44 	120	1	2	+8,2,3		[3, 2, 2]	IV*,I ₂ ,III 	2 : 1
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		0				'	! :	[-8, 5, 10]	!	!	<u>-</u>	<u> </u>
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$, ,	, , ,	, ,	, -,	
F2 0 1 0 -1780 28244 0 2 + 8, 2, 7 0, 2, 1 1, 2, 2 IV*, I_2 , I_1^* 2: 1 590 N = 590 = 2 · 5 · 59 (4 isogeny classes) 590 A1 1 0 1 156 176 0 3 - 1, 4, 3 1, 2, 3 I_1 , I_4 , I_3 3: 2							: :	!	:	:	<u></u>	'
			_					, , ,			· · -	
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	F2	U	1 0	-1780	28244	U	2	+ 8,2,7	0, 2, 1	1, 2, 2	$IV^{\mathtt{T}}, I_2, I_1^{\mathtt{T}}$	2:1
	<u>5</u> 90)_			N = 590 =	= 2	· <u>5</u> ·	59 (4 iso	geny class	ses)		590
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	$\overline{A1}$	1		156				- 1, 4, 3		1, 2, 3	$I_1, \overline{I_4}, \overline{I_3}$	3 :2
	A2	1	0 1	-1909	-36168	0	1	-3,12,1	3, 12, 1	1, 2, 1	I_3,I_{12},I_1	3 :1

		~			T		$\operatorname{ond}(\Lambda)$	$\operatorname{ord}_{-}(j)$		Kodaira	Igagonia
	a_1 a_2 a_3	a_4	a_6	r	' '		$\operatorname{ord}(\Delta)$	(0)	c_p	Kodaira	Isogenies
590	ı					$\frac{2 \cdot 5}{1}$	`	ontinued)			590
B1 B2	$ \begin{array}{c cccc} 1 & -1 & 0 \\ 1 & -1 & 0 \end{array} $	$\begin{array}{c} 1 \\ -79 \end{array}$	$ \begin{array}{c} 13 \\ 285 \end{array} $	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$\frac{2}{4}$	_	8, 1, 1	8, 1, 1	2, 1, 1	I_8,I_1,I_1	2 :2
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	-79 -179	-495	0	$\frac{4}{2}$	+ +	4, 2, 2 2, 1, 4	4, 2, 2 2, 1, 4	$\begin{bmatrix} 2, 2, 2 \\ 2, 1, 2 \end{bmatrix}$	$egin{array}{c} { m I}_4, { m I}_2, { m I}_2 \ { m I}_2, { m I}_1, { m I}_4 \end{array}$	$egin{array}{ c c c c c c c c c c c c c c c c c c c$
B4	1 - 1 0	-1259	17513	0	4	+	2, 4, 1	2, 4, 1	2, 4, 1	I_2,I_4,I_1	2:2
$\bar{C1}$	1 - 1 0	1	5	$\overline{1}$	1	Î	3, 2, 1	3, 2, 1	1, 2, 1	I_3,I_2,I_1	<u>-</u>
D1	1 0 0	-350	2500	1	1	 -	9, 4, 1	9, 4, 1	9, 4, 1	I_9,I_4,I_1	
59 1			N = 5	91	=3	197	(1 iso	geny class	s)		591
A1	0 -1 1	-3	2	1	1	+	2,1	2,1	2, 1	I_2,I_1	
592	2		N = 59)2 =	$= 2^4$	37	(5 isog	geny classe	es)		592
A1	0 1 0	-9	-13	1	1	+	8,1	0, 1	1,1	I_0^*, I_1	
B1	0 1 0	-33	-85	0	1	+	8,1	0,1	1,1	$\mathrm{I}_0^*, \mathrm{I}_1$	Ī
$\overline{\text{C1}}$	0 0 0	-16	-16	0	1	+	12, 1	0,1	1,1	$\mathrm{II}^*, \mathrm{I}_1$	
D1	0 1 0	-5	-1	1	1	+	8,1	0, 1	[2, 1]	$\mathrm{I}_0^*, \mathrm{I}_1$	
E1	0 -1 0	-53	-131	1	1	+	12, 1	0,1	1,1	$\mathrm{II}^*,\mathrm{I}_1$	3 :2
E2	0 - 1 0	-373	2813	1	1	+	12, 3	0,3	1,3	$\mathrm{II}^{st},\!\mathrm{I}_{3}$	3:1,3
E3	0 - 1 0	-29973	2007325	1	1	+	12, 1	0,1	1,1	II^*,I_1	3 :2
593	3		N = 5	593	= 59	93	(2 isoge	ny classes)		593
A1	1 0 1	-2	1	1	1	<u> </u>	1	1	1	I_1	
B1	1 0 0	-7	-30	0	2	-	2	2	2	I_2	2 :2
B2	1 0 0	-12	-17	0	2	+	1	1	1	I_1	2 :1
59 4	1		N = 594	=	$2\cdot 3^3$	$3 \cdot 11$	1 (8 iso	geny clas	ses)		594
A1	1 - 1 0	-18	36	1	1		4, 5, 1	4, 0, 1	[2, 3, 1]	I_4 , IV , I_1	
B1	$\begin{bmatrix} 1 & -1 & 0 \end{bmatrix}$	-9	_9	0	1	<u> </u>	1, 5, 1	1,0,1	$\begin{bmatrix} 1, 1, 1 \end{bmatrix}$	I_1,IV,I_1	
C1	1 - 1 0	-4146	103796	0	3	-	5, 9, 1	5, 0, 1	1, 3, 1	$I_5,\!IV^*,\!I_1$	3 :2
C2	1 -1 0	-3201	151613	0	1	<u> </u>	15, 11, 3	15,0,3	$\begin{bmatrix} 1,1,1 \\ \end{bmatrix}$	I_{15},II^*,I_3	3:1
D1	$\begin{bmatrix} 1 & -1 & 0 \\ -1 & -1 & -1 \end{bmatrix}$	-153	4909	1	1	<u> </u>	8, 5, 5	8,0,5	[2, 1, 5]	I_8 , IV , I_5	
E1	1 -1 1	-1379	-131165	0	1		8, 11, 5	8, 0, 5	[8, 1, 1]	I_8 , II^* , I_5	
F1	1 –1 1	-83	325	0	1		1, 11, 1	1, 0, 1	1,1,1	I_1,II^*,I_1	
G1	1 –1 1	-164	-809	0	1	Ī —	4, 11, 1	4, 0, 1	[4, 1, 1]	I_4,II^*,I_1	
H1	1 –1 1	-461	-3691	0	1	Ī —	5, 3, 1	5, 0, 1	5, 1, 1	I_5 , II , I_1	3 :2
H2	1 - 1 1	-356	-5497	0	3	_	15, 5, 3	15, 0, 3	15, 1, 3	I_{15} , IV , I_3	3 :1
595			N = 598	5 =	$5 \cdot 7$	• 17	(3 iso	geny class	ses)		595
A1	0 -1 1	-9996	388876	0	1	_	11, 3, 1	11, 3, 1	1, 1, 1	I_{11}, I_3, I_1	
B1	0 -1 1	434	-9589	0	1	Ī —	5, 7, 1	5, 7, 1	[1, 7, 1]	I_5,I_7,I_1	Ī
C1	0 -1 1	0	1	0	1		1, 1, 1	1, 1, 1	1,1,1	I_1,I_1,I_1	
598	3		N = 598	=	$2 \cdot 13$	3 · 23	3 (4 iso	ogeny clas	ses)		598
A1	1 - 1 0	-112	492	1	2	_	2, 4, 1	2, 4, 1	2, 4, 1	I_2, I_4, I_1	2 :2
A2	1 - 1 0	-1802	29898	1	2	+	1, 2, 2	1,2,2	1, 2, 2	I_1,I_2,I_2	2 :1
B1	1 - 1 0	44	496	1	1	_	5, 1, 4	5, 1, 4	1,1,4	I_5, I_1, I_4	

					IADL.	LJ 1.	. ביבו	APTIC CURV	ES 536C-0	031		189
	a_1	a_2	a_3	a_4	a_6	r	T	$s \operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
598	3				N =	598	3 = 2	$2 \cdot 13 \cdot 23$	(continued	l)		598
C1	1	1	1	-14	-27	0	1	-1, 1, 2	1, 1, 2	1, 1, 2	I_1,I_1,I_2	
$\overline{D1}$	1	1	1	4	-1443	1	1	[-17, 1, 2]	17, 1, 2	17, 1, 2	I_{17},I_1,I_2	<u>:</u>
600)				N = 600) =	$2^3 \cdot 3$	$3 \cdot 5^2$ (9 is	sogeny cla	sses)		600
A1	ı	-1	0	-383	3012	1	4	+4,2,7	0, 2, 1	2, 2, 4	III,I_2,I_1^*	2 :2
A2		-1	0	-508	1012	1	$\overline{4}$	+ 8,4,8	0, 4, 2	2, 2, 4	I_1^*, I_4, I_2^*	2 : 1, 3, 4
A3	0	-1	0	-5008	-133988	1	4	+10, 2, 10	0, 2, 4	2, 2, 4	$\mathrm{III}^*, \mathrm{I}_2, \mathrm{I}_4^*$	2:2,5,6
A4	0	-1	0	1992	6012	1	2	-10, 8, 7	0, 8, 1	2, 2, 4	$\mathrm{III}^*,\!\mathrm{I}_8,\!\mathrm{I}_1^*$	2 :2
A5		-1			-8683988	1	2	+ 11,1,8	0, 1, 2	1, 1, 4	II^*,I_1,I_2^*	2 :3
A6	0	-1 	0	-2008	-295988	1	2	-11, 1, 14	0,1,8	$\begin{bmatrix} 1,1,4 \\ \end{bmatrix}$	II^*,I_1,I_8^*	2 :3
B1	0	-1	0	7	-3	1	1	-8,1,2	0, 1, 0	4, 1, 1	I_1^*, I_1, II	
C1	0	-1	0	32	-68	0	2	-10, 3, 3	0, 3, 0	2, 1, 2	$\mathrm{III}^{*}, \mathrm{I}_{3}, \mathrm{III}$	2 :2
C2	0	-1	0	-168	-468	0	2	+ 11, 6, 3	0, 6, 0	1, 2, 2	II^*,I_6,III	2 :1
D1	0	1	0	17	38	0	2	[-4,1,6]	0,1,0	[2, 1, 2]	$ $ III, I_1,I_0^*	2 :2
D2	0	1	0	-108	288	0	4	+8,2,6	0, 2, 0	2, 2, 4	I_1^*, I_2, I_0^*	2:1,3,4
D3	0	1	0	-608	-5712	0	4	+ 10, 4, 6	0, 4, 0	2, 4, 4	$\mathrm{III}^*,\!\mathrm{I}_4,\!\mathrm{I}_0^*$	2:2,5,6
D4	0	1	0	-1608	24288	0	2	+ 10, 1, 6	0, 1, 0	2, 1, 2	$\mathrm{III}^*,\!\mathrm{I}_1,\!\mathrm{I}_0^*$	2 :2
D5	0	1	0	-9608	-365712	0	2	+ 11, 2, 6	0, 2, 0	1, 2, 2	II^*,I_2,I_0^*	2 :3
D6	0	1	0	392	-21712	0	2	[-11, 8, 6]	0,8,0	1, 8, 2	II^*,I_8,I_0^*	2 :3
E1	0	1	0	-233	1563	1	1	-8,7,4	0, 7, 0	4, 7, 3	I_1^*, I_7, IV	
F1	0	-1	0	92	-188	0	4	[-8, 1, 7]	[0, 1, 1]	[4, 1, 4]	I_1^*, I_1, I_1^*	2 :2
F2	0	-1	0	-408	-1188	0	4	+ 10, 2, 8	0, 2, 2	2, 2, 4	$\mathrm{III}^*,\!\mathrm{I}_2,\!\mathrm{I}_2^*$	2:1,3,4
F3		-1	0	-5408	-151188	0	2	+ 11, 4, 7	0, 4, 1	1, 2, 4	$\mathrm{II}^*,\!\mathrm{I}_4,\!\mathrm{I}_1^*$	2 :2
F4	0	-1	0	-3408	76812	0	2	+11, 1, 10	[0, 1, 4]	$\begin{bmatrix} 1,1,4 \end{bmatrix}$	II^*,I_1,I_4^*	2 :2
G1	0	-1	0	-5833	207037	0	1	-8,7,10	[0, 7, 0]	2, 1, 1	I_1^*, I_7, II^*	
H1	0	1	0	792	-6912	0	2	-10, 3, 9	0,3,0	2, 3, 2	$ III^*,I_3,III^* $	2 :2
H2	0	1	0	-4208	-66912	0	2	+ 11, 6, 9	0, 6, 0	1, 6, 2	II^*,I_6,III^*	2 :1
I1	0	1	0	167	-37	0	1	8,1,8	0,1,0	[2, 1, 1]	I_1^*,I_1,IV^*	
602	2				N = 602	2 =	$2 \cdot 7$	$7 \cdot 43$ (3 is	ogeny clas	sses)		602
A1	1	-1	0	121	-4291	0	2	-8, 5, 2	8, 5, 2	2, 1, 2	I_{8},I_{5},I_{2}	2 :2
A2	1	-1	0	-3319	-69651	0	2	+4,10,1	4, 10, 1	2, 2, 1	I_4, I_{10}, I_1	2 :1
B1	1	1	0	-22564	1295312	0	1	[-17, 5, 1]	17, 5, 1	$\begin{bmatrix} 1,1,1 \end{bmatrix}$	I_{17}, I_5, I_1	
C1	1	-1	0	-1	-1	0	1	[-1,1,1]	1,1,1	1, 1, 1	I_1,I_1,I_1	<u> </u>
603	3				N = 60)3 =	$= 3^2$	· 67 (6 isc	geny class	ses)		603
A1		-1	0	-3	0	0	2	+ 3,1	0,1	2, 1	III,I_1	2 :2
A2		-1		12	-9	0	2	$\begin{bmatrix} -3, 2 \\ -3, 2 \end{bmatrix}$	0, 2	2, 2	III,I_2	2 :1
B1	1	-1^{-1}	1	-29	28	0	2	+ 9, 1	0,1	2,1	III^*,I_1	2 :2
B2		-1		106	136	0	$\frac{1}{2}$	-9,2	0, 2	2, 2	III^*,I_2	2 :1
$\bar{C}1$	1	 -1	1	-7151		0	1	$\begin{bmatrix} - & 11, 1 \end{bmatrix}$	[5, 1]	4,1	$oxed{I_5^*,I_1}$	-
D1	<u>-</u>	0	1	 15	-23	! -	1	$\begin{bmatrix} - & - & - & - & - & - & - & - & - & - $	$\begin{bmatrix} 2, 1 \end{bmatrix}$	$\begin{bmatrix} 2,1 \end{bmatrix}$	$egin{array}{cccccccccccccccccccccccccccccccccccc$	<u> </u>
E1	<u>-</u>		0	 -9	-54	! -	<u>-</u>	$\begin{vmatrix} - & - & - & - & - & - & - & - & - & - $	3,1	$\begin{bmatrix} 2,1 \end{bmatrix}$	$\left \begin{array}{ccc} I_3^*, I_1 \end{array} \right $	<u> </u>
	<u>-</u>					! -		<u> </u>	!		:	<u> </u>
F1	U	U	1	-111	450	1	1	-6,1	0, 1	2, 1	I_0^*, I_1	

	a_1 a_2 a_3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
605	5		N = 605	=	$5 \cdot 11$	2	(3 isoge	eny classes	s)		605
A1	1 - 1 0	-1414	-44027	1	1	_	5,8	5,0	5,3	I_5,IV^*	
B1	1 –1 1	98	-316	1	4	i I —	$\frac{1}{7}$	1, 1	1,4	I_1,I_1^*	2 :2
B2	1 - 1 1	-507	-2494	1	4	+	2, 8	2, 2	2, 4	I_2,I_2^*	2:1,3,4
B3	1 - 1 1	-7162		1	2	+	4,7	4,1	4, 2	I_4,I_1^*	2 :2
B4	1 -1 1	-3532	79786	!	2	+	1, 10	1,4	1, 4	I_1,I_4^*	2 :2
C1	1 –1 1	-12	36	1	1	_	5,2	5,0	5,1	I_5 , II	
606	3		N = 606 =	= 2		101	(6 iso	geny class	es)	T	606
A1	1 0 1	35	-136		2		12, 3, 1	12, 3, 1	2, 3, 1	I_{12},I_{3},I_{1}	2 :2
A2	1 0 1	-285	-1544	0	4	+	, ,	6, 6, 2	2, 6, 2	I_6,I_6,I_2	[2:1,3,4]
A3 A4	$\begin{bmatrix} 1 & 0 & 1 \\ 1 & 0 & 1 \end{bmatrix}$	-4325 -1365	-109816 17896	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$\begin{array}{c} 2 \\ 2 \end{array}$		3, 12, 1 3, 3, 4	$\begin{bmatrix} 3, 12, 1 \\ 3, 3, 4 \end{bmatrix}$	1, 12, 1 $1, 3, 2$	$\begin{bmatrix} I_3, I_{12}, I_1 \\ I_3, I_3, I_4 \end{bmatrix}$	2:2 2:2
				!	! ! .	:		<u></u>		<u>'</u>	2 . 2
B1 C1	$\begin{bmatrix} 1 & 0 & 1 \\ - & - & - & - \\ 1 & 1 & 1 \end{bmatrix}$	4	2	1	1	— 	3, 2, 1	$\begin{bmatrix} 3, 2, 1 \\ 1 & 2 & 1 \end{bmatrix}$	$\begin{bmatrix} 1, 2, 1 \\ -1, 2, 1 \end{bmatrix}$	I_3,I_2,I_1	
	1 1 1	-33 	-87	0	1	- 	1, 2, 1	$\begin{bmatrix} 1, 2, 1 \\ -7, 17, 1 \end{bmatrix}$	$\begin{bmatrix} 1, 2, 1 \\ \\ 7, 1 \end{bmatrix}$	I_1,I_2,I_1	
D1	1 1 1	-1314 		0	1	— 	7,17,1	$\begin{bmatrix} 7, 17, 1 \\ -2, -2, 1 \end{bmatrix}$	7, 1, 1	\mid I_7, I_{17}, I_1	
E1	1 0 0	-120	576 	1	<u> </u> 	<u> </u>	9, 6, 1	9, 6, 1	9, 6, 1	I_9,I_6,I_1	<u> </u>
F1	$\begin{bmatrix} 1 & 0 & 0 \\ 1 & 0 & 0 \end{bmatrix}$	-90	324		5		5, 5, 1	5, 5, 1	5, 5, 1	I_5,I_5,I_1	5 :2
F2	1 0 0	600	-10626	0	1	_	1,1,5	1, 1, 5	1, 1, 5	I_1,I_1,I_5	5 :1
608	3		N = 608	= :	$2^5 \cdot 1$	9	(6 isoge	eny classes	s)		608
A1	0 0 0	-8	-16	1	1		12, 1	0,1	2,1	$_{\rm III^*,I_1}$	
B1	0 0 0	-56	4848	0	1	_	12, 5	0,5	2,1	$ $ III * , I_5	Ī
C1	0 0 0	5	2	0	1		9,1	0,1	1,1	I_0^*, I_1	Ī
D1	0 0 0	-8	16	1	1	_	12, 1	[0, 1]	2,1	$ $ III^*,I_1	Ī
E1	0 0 0	-56	-4848	1	1]	12, 5	0,5	2,5	$ $ III * , I_5	Ī
F1	0 0 0	5	-2	1	1	-	9,1	[0, 1]	2,1	I_0^*, I_1	
609	9		N = 609 =	= 3	.7.	29	(2 isog	eny classe	es)		609
A1	1 1 0	0	3	1	2	_	1, 2, 1	1, 2, 1	1, 2, 1	I_1, I_2, I_1	2 :2
A2	1 1 0	-35	66	1	2		2, 1, 2		2, 1, 2	I_2,I_1,I_2	2 :1
B1	1 1 1	-784	8720	1	4	Ī —	3, 8, 1	3, 8, 1	1, 8, 1	I_3, I_8, I_1	2 :2
B2	1 1 1	-12789	551346	1	8		6, 4, 2	6, 4, 2	2, 4, 2	I_6,I_4,I_2	2:1,3,4
B3	1 1 1	-13034	528806	1	4		12, 2, 4	12, 2, 4	2, 2, 4	I_{12},I_{2},I_{4}	2:2,5,6
B4		-204624	35542050		4		3, 2, 1	3, 2, 1	1, 2, 1	I_3,I_2,I_1	2 :2
B5 B6	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	-42469 12481	-2756140 2376092	1 1	$\frac{2}{2}$		24, 1, 2 $6, 1, 8$	$\begin{bmatrix} 24, 1, 2 \\ 6, 1, 8 \end{bmatrix}$	2, 1, 2 2, 1, 8	$\begin{bmatrix} I_{24}, I_1, I_2 \\ I_6, I_1, I_8 \end{bmatrix}$	2:3 2:3
		12401					0, 1, 0	0, 1, 0	2, 1, 0	16,11,18	
610			N = 610			61	`	eny classe		T	610
A1	1 -1 0	-35 	-75 	<u> </u>	<u> </u>	<u> </u>		5, 3, 1	1,1,1	I_5,I_3,I_1	
B1	1 - 1 0	-164	848		2		8, 3, 1	8, 3, 1	2, 3, 1	I_8,I_3,I_1	2 :2
B2	$\begin{bmatrix} 1 & -1 & 0 \\ 1 & 1 & 0 \end{bmatrix}$	-244	0 54500	1	4		4, 6, 2	4, 6, 2	2, 6, 2	I_4,I_6,I_2	$\begin{bmatrix} 2:1,3,4 \\ 2:2 \end{bmatrix}$
B3 B4	$\begin{bmatrix} 1 & -1 & 0 \\ 1 & -1 & 0 \end{bmatrix}$	-2744 976	$-54500 \\ -732$	1 1	$\frac{2}{4}$		2, 3, 4 2, 12, 1		2, 3, 4 $2, 12, 1$	I_2,I_3,I_4	$\begin{vmatrix} 2 : 2 \\ 2 \cdot 2 \end{vmatrix}$
				: 	!			<u> :</u>	$\begin{bmatrix} 2, 12, 1 \\ -1, 1 \end{bmatrix}$:	2 : 2
$\begin{array}{ c c }\hline C1 \\ C2 \end{array}$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$-5 \\ 15$	$-5 \\ -13$			+		$4, 1, 1 \\ 2, 2, 2$	$4, 1, 1 \\ 2, 2, 2$	$egin{array}{c} I_4, I_1, I_1 \ I_2, I_2, I_2 \end{array}$	2:2 2:1
\\ \alpha		10	10	ľ	ı <i>-</i>	1	-, -, -	_, _, _	-, -, -	-4,-4,-4	

										ES UITA-U			191
	a_1	a_2	a_3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
61	1				N = 6	11	= 13	$3 \cdot 4$	7 (1 iso	ogeny clas	ss)		611
A1	0	0	1	-1	1	0	1	_	1,1	1,1	1,1	I_1,I_1	
612	2				N = 612	=	$2^2 \cdot 3$	$3^2 \cdot 1$	17 (4 is)	sogeny cla	asses)		612
A1	0	0	0	-456	3748	0			8, 3, 1	0, 0, 1	3, 2, 1	IV^*,III,I_1	3 :2
A2	0	0	0	-216	7668	0	1	_	8, 9, 3	0, 0, 3	1,2,1	IV^*,III^*,I_3	
B1	0	0	0	-24	-284	1	3	Ī —	8, 3, 3	0, 0, 3	3, 2, 3	IV^* , III , I_3	3 :2
B2	0	0	0	-4104	-101196	1	1	— :	8,9,1	0,0,1	$\begin{bmatrix} 1, 2, 1 \\ \end{bmatrix}$	$ $ IV^* , III^* , I_1	3 :1
C1	0	0	0	-48	196	1	1	<u> </u>	8, 7, 1	0, 1, 1	[3, 4, 1]	IV^*,I_1^*,I_1	
D1	0	0	0	-14592	679412	0	1	_	8, 17, 1	0, 11, 1	1, 2, 1	IV^*,I_{11}^*,I_1	
614	4				N = 61	4 =	= 2 ·	307	(2 iso	geny class	ses)		614
A1	1	-1	1	-61	197	1	1	_	6, 1	6, 1	6, 1	I_6,I_1	
B1	1	0	0	27	1	1	3	 _	12, 1	12,1	12, 1	I_{12} , I_1	3 :2
B2	1	0	0	-373	-2991	1	1	_	4, 3	4,3	4,3	I_4,I_3	3 :1
615	5				N = 615	<u> </u>	· 3 · 5	$\cdot 4$	1 (2 iso	ogeny clas	sses)		615
A1	1	1	1	-6	-6	1	2	+	2, 2, 1	2, 2, 1	2, 2, 1	I_2, I_2, I_1	2 :2
A2	1	1	1	19	-16	1	2	_	4, 1, 2	4, 1, 2	2, 1, 2	I_4,I_1,I_2	2 :1
B1	0	1	1	79	-214	1	1	_	7, 4, 1	7, 4, 1	7, 2, 1	I_7,I_4,I_1	
616	3				N = 616	=	$2^3 \cdot 7$	$7 \cdot 1$	1 (5 is	ogeny cla	sses)		616
A1	0	0	0	85	86	1	2	_	10, 3, 2	0, 3, 2	2, 1, 2	III^*,I_3,I_2	2 :2
A2	0	0	0	-355	702	1	2	+	11, 6, 1	0, 6, 1	1, 2, 1	II^*,I_6,I_1	2 :1
B1		-1		3828	95348	0	2		8, 5, 6	0, 5, 6	2, 5, 2	I_1^*, I_5, I_6	2:2
B2	0	-1 	0	-22792	936540	0	2	+	10, 10, 3	0,10,3	[2, 10, 1]	III^*,I_{10},I_3	2 :1
C1	0	1	0	-12	-32		$\frac{2}{2}$	_	8, 1, 2	0, 1, 2	2, 1, 2	I_1^*, I_1, I_2	2 :2
C2	0	1		-232 	-1440 	0	2	+ 	10, 2, 1	$\begin{bmatrix} 0, 2, 1 \\ -2, -2, -2 \end{bmatrix}$	$\begin{bmatrix} 2, 2, 1 \\ -2, -2 \end{bmatrix}$	$ III^*,I_2,I_1$	2 : 1
D1	<u>'</u>	-1 		-1	197	1	1	— :	8, 2, 3	0, 2, 3	[4, 2, 3]	I_1^*, I_2, I_3	
E1 E2	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$0 \\ 0$	$0 \\ 0$	$-26 \\ -31$	$-51 \\ -30$	1 1	$\begin{bmatrix} 2 \\ 4 \end{bmatrix}$	+	4, 1, 1 $8, 2, 2$	0, 1, 1	2, 1, 1 $4, 2, 2$	III,I_1,I_1	2 :2
E2 E3	0	0	0	$-31 \\ -251$	-30 1510	1	4	++	0, 2, 2 10, 4, 1	$0, 2, 2 \\ 0, 4, 1$	2, 4, 1	$\begin{array}{c c} I_1^*,I_2,I_2 \\ III^*,I_4,I_1 \end{array}$	$egin{array}{ c c c c c c c c c c c c c c c c c c c$
E4	0	0	0	109	-226	1	2		10, 1, 4	0, 1, 4	2, 1, 2	III^*, I_1, I_4	2 :2
618	3				N = 618	=	$2\cdot 3$	• 10)3 (7 is	ogeny cla	sses)		618
A1	1	1	0	2	4	1	1	_	4, 1, 1	4, 1, 1	2, 1, 1	I_4,I_1,I_1	
B1	 1	1	0	-2819	-58803	1	<u></u> 1	<u>-</u> —	19, 1, 1	19, 1, 1	[1, 1, 1]	I_{19},I_1,I_1	
$\bar{C}1$	 1	0	1	-21	34	1	3	<u>-</u> _	1, 3, 1	$\begin{bmatrix} 1 & 1 & 2 & 2 & 2 & 2 & 2 & 2 & 2 & 2 &$	$\left \begin{array}{cccccccccccccccccccccccccccccccccccc$	$ I_1, I_3, I_1 $	$\frac{1}{3}:2$
C2	1	0	1	54	196	1	1	_	3, 1, 3	3, 1, 3	1, 1, 3	I_3, I_1, I_3	3 :1
D1	1	0	1	325	-7018	1	3	· —	4, 15, 1	[4, 15, 1]	[2, 15, 1]	I_4, I_{15}, I_1	3 :2
D2	1	0	1		-1118500	1	1		12, 5, 3	12, 5, 3	2, 5, 3	I_{12}, I_5, I_3	3 : 1
$\bar{\mathrm{E}1}$	1	1	1	1	5	1	1	Ī —	5, 1, 1	5, 1, 1	5, 1, 1	I_5,I_1,I_1	
1	 1	0	0	-185	1401	1	1	· —	11, 7, 1	11, 7, 1	11, 7, 1	I_{11},I_{7},I_{1}	
F1									, ,	, ,	, ,	/ -/ -	

132					IADLE	1 1.	מומנים	11 1	ic conv	E5 020A-0	241		
	a_1	a_2	a_3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
620)				N = 620 =	= 2	$2^2 \cdot 5$. 31	l (3 iso	ogeny clas	sses)		620
A1 A2	0	1 1	0	$-101 \\ 59$	359 1495		3 1	_	8, 1, 1 8, 3, 3	$0, 1, 1 \\ 0, 3, 3$	$3, 1, 1 \\ 1, 1, 3$	$IV^*, I_1, I_1 \\ IV^*, I_3, I_3$	3:2 3:1
B1	0		0	-1052	13129	<u>-</u> -	$\begin{bmatrix} 2 \end{bmatrix}$	 +	4, 5, 2	:	$\frac{1}{3}, \frac{1}{5}, \frac{1}{2}$	$ \text{IV,I}_5,\text{I}_2 $	2:2
B2	0	0	0	-1207	9006	1	2	+	8, 10, 1	0, 10, 1	3, 10, 1	IV^*,I_{10},I_1	2 :1
C1	0	0	0	8	4	1	1	_	8, 1, 1	0, 1, 1	3, 1, 1	IV^*,I_1,I_1	
62 1	Ĺ				N = 621	=	3^3 ·	23	(2 isog	eny class	es)		621
A1	1	-1	0	-123	548	0	1	+	11, 1	0,1	1,1	$\mathrm{II}^*, \mathrm{I}_1$	
B1	1	-1	1	-14	-16	1	1	+	5, 1	0,1	1,1	IV,I_1	
622	2				N = 62	2 =	= 2 ·	311	(1 iso	geny clas	s)		622
A1	1	-1	1	8	-5	1	1	_	7, 1	7,1	7,1	I_7,I_1	
623	3				N = 62	23 :	=7 ·	89	(1 isog	geny class	s)		623
A1	1	1	0	28	157	1	1	_	6, 1	6, 1	6, 1	I_6,I_1	
624	1				N = 624 =	= 2	4 · 3	. 13	(10 is	ogeny cla	sses)		624
A1		-1		-3	6	1	2	_	4, 1, 2	0,1,2	1, 1, 2	II,I_1,I_2	2 :2
A2		-1 		-68 	240 -14		<u>-</u>	+ 	8, 2, 1	:	$\frac{ 2,2,1 }{ 1,1 }$	$\left \begin{array}{c} \mathrm{I}_{0}^{*}, \mathrm{I}_{2}, \mathrm{I}_{1} \\ -\end{array}\right $	2 : 1
B1 B2		$-1 \\ -1$		$ \begin{array}{r} 5 \\ -60 \end{array} $	-14 -144			_ +	4, 3, 2 8, 6, 1	$0, 3, 2 \\ 0, 6, 1$	$1, 1, 2 \\ 2, 2, 1$	$II,I_3,I_2 \\ I_0^*,I_6,I_1$	2:2 2:1
C1	0	 -1	0	-7	-2	<u> </u>	'	+	$\frac{1}{4}, \frac{1}{4}, \frac{1}{1}$	0, 4, 1	1,2,1	$ II,I_4,I_1 $	2:2
C2	0	-1	0	-52	160			+	8, 2, 2	0, 2, 2	2, 2, 2	I_0^*, I_2, I_2	2:1,3,4
C3	_	-1	_	-832	9520				10, 1, 1	0, 1, 1	2, 1, 1	I_{2}^{*},I_{1},I_{1}	2 :2
C4		-1 		8	448	<u> </u>	<u>'</u>	:	10, 1, 4	$\begin{bmatrix} 0, 1, 4 \\ \end{bmatrix}$	4, 1, 4	I_2^*, I_1, I_4	2 :2
D1 D2	$0 \\ 0$		$0 \\ 0$	$ \begin{array}{c} -3 \\ 12 \end{array} $	$0\\12$	$\begin{vmatrix} 0 \\ 0 \end{vmatrix}$		+	4, 2, 1	0, 2, 1	1, 2, 1	II,I_2,I_1	2:2 2:1
!							<u>'</u>	— 	8, 1, 2	0,1,2	$\frac{ 2,1,2 }{ 1,10,1 }$		2 : 1
E1 E2	$0 \\ 0$	1 1	$0 \\ 0$	$-651 \\ 564$	-6228 -25668		$\begin{vmatrix} 2\\2 \end{vmatrix}$	+	4, 10, 3 8, 5, 6	$0, 10, 3 \\ 0, 5, 6$	$\begin{bmatrix} 1, 10, 1 \\ 2, 5, 2 \end{bmatrix}$	$II,I_{10},I_3 \\ I_0^*,I_5,I_6$	2:2 2:1
F1	0	1	0	-39	-108	<u> </u>	$\frac{1}{2}$	' +	4, 2, 1	0, 2, 1	1, 2, 1	$ II,I_2,I_1 $	2:2
F2	0	1	0	-44	-84		4	+	8, 4, 2	0, 4, 2	2, 4, 2	I_0^*, I_4, I_2	2:1,3,4
F3	0	1		-304	1892		4	+	10, 8, 1	0, 8, 1	4, 8, 1	I_{2}^{*},I_{8},I_{1}	2 :2
F4	0	1		136	-444	! -	4	- 	10, 2, 4	0, 2, 4	[2, 2, 4]	I_{2}^{*},I_{2},I_{4}	2 :2
G1		-1		-13	4		2	+	4, 6, 1	0, 6, 1	1, 2, 1	II,I_6,I_1	2 :2; 3 :3
G2 G3		$-1 \\ -1$		-148	-644		$\begin{array}{c c} 2 \\ 2 \end{array}$	+	8, 3, 2	0, 3, 2	1, 1, 2	I_0^*, I_3, I_2	2:1;3:4
G3 G4		-1 -1		$-733 \\ -748$	7888 7564		$\frac{2}{2}$	+++	4, 2, 3 8, 1, 6	$0, 2, 3 \\ 0, 1, 6$	$\begin{bmatrix} 1, 2, 3 \\ 1, 1, 6 \end{bmatrix}$	$II,I_2,I_3 \\ I_0^*,I_1,I_6$	2 :4; 3 :1 2 :3; 3 :2
H1	0		0	8	20	<u>-</u> -	$\begin{vmatrix} -1 \\ 2 \end{vmatrix}$	-	12, 1, 1	[0,1,1]	$\begin{array}{c c} 1 & -7 & -7 & -7 \\ \hline 1 & 4, 1, 1 \end{array}$	$oxed{ egin{array}{c} I_4^*, I_1, I_1 \end{array} }$	2 :2
H2	0	1		-72	180		4		12, 1, 1 $12, 2, 2$	$0, 1, 1 \\ 0, 2, 2$	4, 1, 1 $4, 2, 2$	$I_4,I_1,I_1 \\ I_4^*,I_2,I_2$	$\begin{bmatrix} 2 & 2 \\ 2 & 1, 3, 4 \end{bmatrix}$
НЗ	0	1	0	-312	-2028		2		12, 1, 4	0, 1, 4	2, 1, 4	I_4^*, I_1, I_4	2 :2
H4	0	1	0	-1112	13908	0	4	+	12, 4, 1	0, 4, 1	4, 4, 1	I_4^*, I_4, I_1	2 :2
I1	0	1	0	-312	-44460		$\frac{1}{2}$		28, 5, 1	16, 5, 1	[4, 5, 1]	I_{20}^*, I_5, I_1	2 :2
I2	0	1		-20792	-1150380		4		20, 10, 2	8, 10, 2	4, 10, 2	I_{12}^*, I_{10}, I_2	2:1,3,4
I3	0	1			-73684908		2		16, 5, 4	4, 5, 4	2, 5, 4	I_{8}^{*},I_{5},I_{4}	2 :2
I4	0	1	0	-37432	932948	0	4	+	16, 20, 1	4, 20, 1	4, 20, 1	I_8^*, I_{20}, I_1	2 :2

	$a_1 \ a_2 a$	3	a_4	$a_6 r$	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
62	4			N - 624	_ '	\mathbf{p}^4 .	3.13 (continued)		624
		_				_			,	TT T	
J1	0 1	-	-5								2 :2
J2	0 1	U	-20	24 0	2	+	8, 1, 2	0, 1, 2	1, 1, 2	I_0^*, I_1, I_2	2 : 1
62	6			N = 626 =	$2 \cdot$	313	3 (2 isos	geny class	es)		626
A1	1 - 1	0	-7	9 1	2	+	2,1	2, 1	2, 1	I_2,I_1	2 :2
A2	1 - 1	0	-17	-13 1				1, 2	1, 2	I_1,I_2	2 : 1
B1	1 0			39796 0						I_{19} , I_1	<u> </u>
co	7			37 00-			10 (01	'	,		COT
62				N = 627 = 3		_				T	627
A1	0 1	1	-1	-2 0	1	-	1, 1, 1	1, 1, 1	1, 1, 1	I_1,I_1,I_1	
B1	0 1	1	-363	-2995 0	3	<u>[</u> _	9, 3, 1	9, 3, 1	9, 3, 1	I_9,I_3,I_1	3 :2
B2	0 1	1	-30063	-2016358 0	1	_	3, 1, 3	3, 1, 3	3, 1, 3	I_3,I_1,I_3	3 : 1
62	Q			N COO	ο2	. 1	F7 (1:	1			628
_		_		N = 628 =		_		1		TT 7.0. T	040
A1	0 - 1	0	4	80	1	_	8, 1	0, 1	1, 1	IV^*,I_1	
62	9			N = 629 =	17	· 3'	7 (4 iso	geny class	es)		629
A 1	1 - 1	0	11	-18 1	1	_	3, 1	3, 1	1, 1	I_3,I_1	
	' :			1165 0	· – –				<u></u>	'	<u>-</u>
	' :			48 1					<u></u>	:	<u>-</u>
I	1-1			1904 1				$\begin{array}{cccccccccccccccccccccccccccccccccccc$		$ I_1,I_5 $	<u>-</u>
							,	,	,	17 0	
63	0			$N = 630 = 2 \cdot$	3^{2}	. 5	.7 (10	isogeny cla	asses)		630
A1	1 - 1	0	-105	441 0	6	+	2, 3, 1, 3	2, 0, 1, 3	2, 2, 1, 3	I_2 ,III, I_1 , I_3	2:2;3:3
A2	1 - 1	0	-75	675 0	6	_	1, 3, 2, 6	1, 0, 2, 6	1, 2, 2, 6	I_1 , III , I_2 , I_6	2:1;3:4
A3	1 - 1	0	-420	-2800 0				, , ,		I_6 , III^* , I_3 , I_1	
A4	1 - 1	0	660	-15544 0	2	-	3, 9, 6, 2	3, 0, 6, 2	1, 2, 2, 2	I_3,III^*,I_6,I_2	$ {\bf 2}:3;{\bf 3}:2 $
B1	1-1	0	-5124	142160 0	2	+	14, 3, 1, 5	14, 0, 1, 5	[2, 2, 1, 1]	$ \mathrm{I}_{14},\!\mathrm{III},\!\mathrm{I}_1,\!\mathrm{I}_5 $	2 :2
B2	1 - 1	0	-3204	248528 0	2	_	7,3,2,10	7, 0, 2, 10	1, 2, 2, 2	I_7 , III , I_2 , I_{10}	2 : 1
$\overline{C1}$	$\begin{vmatrix} 1-1 \end{vmatrix}$	0	1890	-24300 0	2	Ī-	16, 10, 2, 1	[16, 4, 2, 1]	[2, 2, 2, 1]	I_{16},I_4^*,I_2,I_1	2 :2
C2	1 - 1	0	-9630	-2109240	4					I_8,I_8^*,I_4,I_2	
С3	1 - 1	0	-135630	-19186524 0	2					I_4, I_{16}^*, I_2, I_1	
C4	1 - 1	0	-67950			+	4, 10, 8, 4	4, 4, 8, 4	2, 4, 2, 2	I_4, I_4^*, I_8, I_4	2:2,5,6
C5			-1080450	432540000 0							
C6			11430	21304296 0						I_2,I_2^*,I_{16},I_2	
C7				27669604050 0						I_1,I_1^*,I_2,I_4	2 :5
C8	1-1	U 	-1073700	438205950 0	2	<u> -</u>	1, 7, 2, 16			$ I_1,I_1^*,I_2,I_{16} $	2 :5
D1			90	436 1			8, 7, 1, 2			I_8,I_1^*,I_1,I_2	2:2
D2			-630	4900 1			4, 8, 2, 4				
D_3			-3330	-69080 1			2,7,1,8			I_2,I_1^*,I_1,I_8	2 :2
D4			-9450	355936 1			2, 10, 4, 2			I_2,I_4^*,I_4,I_2	2:2,5,6
D5			-151200	22667386 1			1, 8, 2, 1			I_1, I_2^*, I_2, I_1	2:4 2:4
D6	1 - 1	U	-8820	404950 1	2	-	1, 14, 8, 1	1,8,8,1	[1, 4, 2, 1]	I_1,I_8^*,I_8,I_1	2:4

				ITI	J(A)	1 (<i>i</i>)	<u> </u>	V - J - :	T
	$a_1 \ a_2 a_3$	a_4	$a_6 r$	T	$s \operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
63	n		N 7 — 4	ഭൗവ	$= 2 \cdot 3^2 \cdot 5 \cdot$	7 (cont	inued)		630
E1	$\frac{0}{1-1}$	21					'	т т* т т	1
E1 E2	$1-1 \ 0 \ 1-1 \ 0$	-159	$53 1 \\ 665 1$	$\begin{vmatrix} 2 \\ 4 \end{vmatrix}$	$\begin{bmatrix} -4, 6, 2, 1\\ +2, 6, 4, 2 \end{bmatrix}$	$\begin{vmatrix} 4, 0, 2, 1 \\ 2, 0, 4, 2 \end{vmatrix}$	$\begin{bmatrix} 2, 2, 2, 1 \\ 2, 4, 4, 2 \end{bmatrix}$	I_4, I_0^*, I_2, I_1	2:2 2:1,3,4
E3	$1-1 \ 0$ $1-1 \ 0$	-139 -789	-77771	2	+ 2, 0, 4, 2 + 1, 6, 8, 1	$\begin{bmatrix} 2, 0, 4, 2 \\ 1, 0, 8, 1 \end{bmatrix}$		$ \begin{vmatrix} I_2, I_0^*, I_4, I_2 \\ I_1, I_0^*, I_8, I_1 \end{vmatrix} $	2:1,3,4 $2:2$
E4	$1-1 \ 0$ $1-1 \ 0$	-2409	$\frac{-77771}{46115}1$		+ 1, 6, 3, 1 + 1, 6, 2, 4		$\begin{bmatrix} 1, 2, 3, 1 \\ 1, 2, 2, 2 \end{bmatrix}$	$I_1, I_0, I_8, I_1 $ I_1, I_0^*, I_2, I_4	2:2 2:2
				!	<u> </u>				÷
F1 F2	$ \begin{array}{ccc} 1 - 1 & 0 \\ 1 - 1 & 0 \end{array} $	-369 -3249	$ \begin{array}{c c} 1053 & 0 \\ -69795 & 0 \end{array} $		+12,9,1,1			I_{12},I_3^*,I_1,I_1	2 :2; 3 :3
F3	$1-1 \ 0$ $1-1 \ 0$	-3249 -24129	-097950 14486850		+6,12,2,2 +4,7,3,3	$ \begin{vmatrix} 6, 6, 2, 2 \\ 4, 1, 3, 3 \end{vmatrix} $	$ \begin{array}{c c} 2, 4, 2, 2 \\ 2, 2, 3, 3 \end{array} $	$\begin{bmatrix} I_6, I_6^*, I_2, I_2 \\ I_4, I_1^*, I_3, I_3 \end{bmatrix}$	2 :1,4,5; 3 :6 2 :6; 3 :1
F4	$1-1 \ 0$ $1-1 \ 0$	-24129 -51849	-4531275 0		+ 4, 7, 3, 3 + 3, 9, 1, 4		$\begin{bmatrix} 2, 2, 3, 3 \\ 1, 4, 1, 4 \end{bmatrix}$	$\begin{bmatrix} 1_4,I_1,I_3,I_3 \\ I_3,I_3^*,I_1,I_4 \end{bmatrix}$	2:0,3:1 $2:2;3:7$
F5	$1 - 1 \ 0$	-729	-177147 0			3, 12, 4, 1		$I_3,I_3,I_1,I_4 I_3,I_{12}^*,I_4,I_1$	2:2;3:8
F6	1 - 1 0	-24309	1426113 0		+ 2, 8, 6, 6		$\begin{bmatrix} 1, 1, 1, 1 \\ 2, 4, 6, 6 \end{bmatrix}$	I_2,I_2^*,I_6,I_6	2 : 3, 7, 8; 3 : 2
$\overline{\mathrm{F7}}$	$1-1 \ 0$	-58059			+1,7,3,12				2:6; 3:4
F8		6561	47785950						2:6; 3:5
G1	$1-1 \ 1$	-46118	-3792203 0	¦	[<u></u>	<u> </u>	$ I_{14},III^*,I_1,I_5 $	<u>-</u>
G2		-40118 -28838	-37922030 -66814190					$I_{7},III^{*},I_{2},I_{10}$	
				!	'	<u></u>			÷
H1 H2	$1-1 \ 1$ $1-1 \ 1$	$-47 \\ 73$	119 0 551 0		+6,3,3,1 $-3,3,6,2$		$\begin{bmatrix} 6, 2, 3, 1 \\ 3, 2, 6, 2 \end{bmatrix}$	I_6 ,III, I_3 , I_1	2 :2; 3 :3
п2 Н3	$1-1 \ 1 \ 1-1 \ 1$	-947	-109610		, , ,	$\begin{bmatrix} 3, 0, 6, 2 \\ 2, 0, 1, 2 \end{bmatrix}$			2:1;3:4
нз Н4		$-947 \\ -677$	-109010 -175490		$\begin{array}{cccc} + & 2, 9, 1, 3 \\ - & 1, 9, 2, 6 \end{array}$		$\begin{bmatrix} 2, 2, 1, 3 \\ 1, 2, 2, 6 \end{bmatrix}$	$\begin{bmatrix} I_2, III^*, I_1, I_3 \\ I_1, III^*, I_2, I_6 \end{bmatrix}$	
					:	<u></u>		<u> </u>	÷
I1	$1-1 \ 1$	-4478	-114163 0		+ 8,9,3,1	8, 3, 3, 1	1 1 1	$I_{8},I_{3}^{*},I_{3},I_{1}$	2 :2; 3 :3
I2	$1-1 \ 1$	-5198	-744190		+4,12,6,2	4, 6, 6, 2		I_4, I_6^*, I_6, I_2	[2:1,4,5;3:6]
I3 I4	$1-1 \ 1$ $1-1 \ 1$	-13253 -39218	449597 0 $2946557 0$						2:6;3:1
14 I5	$1-1 \ 1 \ 1-1 \ 1$	-39218 17302	-560419 0		+2,9,12,1 -2,18,3,4			$\begin{bmatrix} I_2, I_3^*, I_{12}, I_1 \\ I_2, I_{12}^*, I_3, I_4 \end{bmatrix}$	2:2;3:7 2:2;3:8
I6	1-1 1	-197573	33848381 0		+12, 8, 2, 6				[2 : 2, 3 : 3]
I7			2164026557 0			$\begin{bmatrix} 12, 2, 2, 5 \\ 6, 1, 4, 3 \end{bmatrix}$		$I_{6}, I_{1}^{*}, I_{4}, I_{3}$	[2 : 6; 3 : 4]
I8		-183173						I_6, I_4^*, I_1, I_{12}	, , , , , , , , , , , , , , , , , , ,
J1	$1-1 \ 1$	-32		:	+4,7,1,1	·			$ {f 2}:2$
J_2	$1-1 \ 1 \ 1-1 \ 1$	-32 -212			+ 4, 7, 1, 1 + 2, 8, 2, 2			_	2:2 $2:1,3,4$
J3	$1-1 \ 1$ $1-1 \ 1$	-212 -3362			+ 2, 8, 2, 2 + 1, 10, 1, 1				2:1,5,4 $2:2$
J4	1-1 1	58			$\begin{bmatrix} 1, 10, 1, 1 \\ -1, 7, 4, 4 \end{bmatrix}$				2:2 2:2
0 1			30000	_	1,1,1,1	1, 1, 1, 1	1, 2, 1, 2	11,11,14,14	2
63	2		N = 0	632	$=2^3\cdot 79$	(1 isogeny	class)		632
A1	0 1 0	-16	16 1	1	+ 10,1	0,1	2,1	$\mathrm{III}^*, \mathrm{I}_1$	
							1		
63	3		N = 0	333	$=3\cdot 211$	(1 isogeny	class)		633
A1	1 1 1	-17	-70 1	1	- 8,1	8,1	2, 1	I_8,I_1	
				l	<u> </u>	1	<u> </u>		
63	5		N = 63	35 =	$=5\cdot 127$ (2)	2 isogeny	classes)		635
A1	0 1 1	5	6 1	3	- 3,1	3,1	3,1	I_3,I_1	3 :2
	0 1 1	-45	-209 1		,	1,3	1,3	I_1,I_3	3 : 1
	$0-1 \ 1$	-10		:	!	1,1	1,1	$\begin{bmatrix} I_1,I_1 \end{bmatrix}$	<u>-</u>
				<u> </u>	<u>'</u>	<u> </u>	<u> </u>	1	1
63	7		N = 68	37 =	$=7^2\cdot 13$ (4)	4 isogeny	classes)		637
A1	$1-1 \ 0$	-107	454 1	1	-4,1	0,1	1,1	IV,I_1	7 :2
	$1 - 1 \ 0$	628	-17823 1		,	0,7	1,1	IV,I_7	7:1
					1	1	· ·	1 '	

				IABL	Æ 1:	: ELL.	IPI	IC CURV.	ES 037B-04	4B		195
	a_1 a_2 a_3	a_3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
637	,			N =	= 63	37 =	7^2 ·	13 (cc	ontinued)			637
B1 B2 B3	$ \begin{array}{c ccc} 0 & -1 \\ 0 & -1 \\ 0 & -1 \end{array} $	1 1 1	-359 621 -5749	-2507 -13238 415463	0 0 0	1 1 1	_ _ _	7, 1 $9, 3$ $15, 1$	$ \begin{array}{c c} 1,1\\ 3,3\\ 9,1 \end{array} $	$ \begin{array}{c c} 4,1 \\ 4,1 \\ 4,1 \end{array} $	$\begin{array}{c c} I_1^*, I_1 \\ I_3^*, I_3 \\ I_9^*, I_1 \end{array}$	$egin{array}{c} {f 3}:2 \ {f 3}:1,3 \ {f 3}:2 \end{array}$
C1 C2	<u>-</u>		-5252	-145223 6051758	$\begin{vmatrix} 1 \\ 1 \\ 1 \end{vmatrix}$	1 1	 — —	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{bmatrix} 0, 1 \\ 0, 7 \end{bmatrix}$	$egin{array}{cccc} 1 & 1, 1 \\ 1, 7 \end{array}$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	$egin{array}{c cccc} {f 7} : 2 \\ {f 7} : 1 \end{array}$
D1	0 0	1	49	-86	1	1		7, 1	1,1	2,1	$\mathbf{I}_1^*, \mathbf{I}_1$	
639)			N = 0	639	$= 3^2$. 71	(1 iso	ogeny class	s)		639
A1 A2	$ \begin{array}{cccc} 1 & -1 \\ 1 & -1 \end{array} $	1 1	$4 \\ -131$	$-34 \\ -520$	1 1	2 2	- +	8, 1 7, 2	2, 1 1, 2	$4, 1 \\ 4, 2$	$I_2^*, I_1 \\ I_1^*, I_2$	2:2 2:1
640				N = 6	640	$= 2^7$. 5	(8 isog	eny classe	s)		640
A1 A2	$\begin{array}{ccc} 0 & 0 \\ 0 & 0 \end{array}$	0	-13 -8	$-18 \\ -32$	1 1	2 2	+	7, 1 $14, 2$	$0, 1 \\ 0, 2$	1,1 $2,2$	$II,I_1\\III^*,I_2$	2:2 2:1
B1 B2	$\begin{bmatrix} 0 & 0 \\ 0 & 0 \end{bmatrix}$	0	-13 -8	18 32	1 1	$\begin{bmatrix} 2 \\ 2 \end{bmatrix}$	+	7, 1 $14, 2$	$ \begin{vmatrix} 0,1\\0,2 \end{vmatrix} $	$ \begin{array}{ c c } \hline 1,1\\ 2,2 \end{array} $	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	2:2 2:1
C1 C2	$\begin{bmatrix} 0 & 0 \\ 0 & 0 \end{bmatrix}$	0	-2 -52	$ \begin{array}{r} -4 \\ -144 \end{array} $	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$\begin{bmatrix} 2 \\ 2 \end{bmatrix}$	- - +	8, 2 $13, 1$	$\begin{bmatrix} 0, 2 \\ 0, 1 \end{bmatrix}$	$\begin{bmatrix} 2,2\\4,1 \end{bmatrix}$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	2:2 2:1
D1 D2	$\begin{bmatrix} 0 & -1 \\ 0 & -1 \end{bmatrix}$	0	-15 -265	$-25 \\ -1575$	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$\begin{bmatrix} 2 \\ 2 \end{bmatrix}$	 	$ \begin{array}{c} 8,4 \\ 13,2 \end{array} $	$\begin{bmatrix} 0, 4 \\ 0, 2 \end{bmatrix}$	$\begin{bmatrix} 2,4\\4,2 \end{bmatrix}$	$\begin{array}{ c c c c c c }\hline III,I_4\\ I_2^*,I_2\\ \end{array}$	2:2 2:1
E1 E2	$ \begin{array}{c cccc} 0 & -1 \\ 0 & -1 \end{array} $	0	-66 -61	230 261	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$\begin{bmatrix} 2 \\ 2 \end{bmatrix}$	 + -	7, 2 $14, 4$	$\begin{bmatrix} 0, 2 \\ 0, 4 \end{bmatrix}$	$ \begin{array}{c c} 1,2\\2,2 \end{array} $	$egin{array}{c c} II,I_2 & III^*,I_4 & \end{array}$	2:2 2:1
F1 F2	$\begin{bmatrix} 0 & 1 \\ 0 & 1 \end{bmatrix}$	0	-66 -61	-230 -261	0 0	$\begin{bmatrix} 2\\2\\2 \end{bmatrix}$	 + -	7, 2 $14, 4$	$\begin{bmatrix} 0,2\\0,4 \end{bmatrix}$	$ \begin{array}{c c} 1,2\\2,2 \end{array} $	$ \begin{array}{ccc} II,I_2 \\ III^*,I_4 \end{array} $	2:2 2:1
G1 G2	$\begin{bmatrix} 0 & 0 \\ 0 & 0 \end{bmatrix}$		$ \begin{array}{r} -2 \\ -52 \end{array} $	4 144	$\begin{vmatrix} 1 \\ 1 \\ 1 \end{vmatrix}$	$\begin{bmatrix} 2\\2\\2 \end{bmatrix}$	 - +	8, 2 13, 1	$\begin{bmatrix} 0, 2 \\ 0, 1 \end{bmatrix}$	$\begin{bmatrix} 2,2\\2,1 \end{bmatrix}$	$\begin{array}{ c c c c }\hline III,I_2\\I_2^*,I_1\end{array}$	$egin{array}{ c c c c c c c c c c c c c c c c c c c$
H1 H2	0 1	0	-15 -265	$ \begin{array}{c} -25 \\ 1575 \end{array} $!	$\begin{bmatrix} 2 \\ 2 \end{bmatrix}$	 - +	$ \begin{array}{c} $	$\begin{bmatrix} 0, 4 \\ 0, 2 \end{bmatrix}$	$\begin{bmatrix} 2,4\\2,2 \end{bmatrix}$	$\begin{array}{ c c c c c }\hline III,I_4\\ I_2^*,I_2\\ \end{array}$	$egin{array}{ c c c c c c c c c c c c c c c c c c c$
642	<u> </u>			N = 642	2 =	$2\cdot 3\cdot$. 10	7 (3 is	ogeny clas	ses)	1 2	642
A1 A2	1 1 1 1	0	-49 111	85 693	0	2 2	+	10, 3, 1 $5, 6, 2$	10, 3, 1	· · ·	$\begin{matrix} I_{10}, I_3, I_1 \\ I_5, I_6, I_2 \end{matrix}$	2:2 2:1
B1 B2	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1 1	140 -4315	-790 -109978	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$\begin{bmatrix} 3 \\ 1 \end{bmatrix}$		3, 12, 1 $9, 4, 3$		1, 12, 1	$egin{array}{c} I_3, I_{12}, I_1 \\ I_9, I_4, I_3 \\ \end{array}$	3 :2 3 :1
$\overline{\text{C1}}$	1 1	1	79	335	1	1		13, 4, 1	:	13, 2, 1	I_{13},I_{4},I_{1}	
643				N =	64	3 = 6	43	(1 isog	geny class)			643
A1	1 0	0	-4	3	2	1	_	1	1	1	I_1	
64 4	<u> </u>			N = 644	1 =	$2^2 \cdot 7$	· 2	3 (2 is	ogeny clas	1	T	644
A1	0 1		6		¦	1	<u>-</u> -	4,4,1	0,4,1	1,2,1	IV,I ₄ ,I ₁	
B1	0 - 1	0	2	-7	1	1	_	4, 2, 1	0, 2, 1	3, 2, 1	IV,I_2,I_1	

	a_1	a ₂	n.o	a_4	a_6	r	T	S	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
645		<i>∞</i> ∠ (~ა	<u>ω4</u>	N = 645					geny class	•	11.Juniiu	645
A1	1	1	0	2	$\frac{N - 045}{7}$	0	$\frac{3\cdot 3}{2}$	- 45	$\frac{(0.180)}{4, 1, 1}$	4,1,1	2,1,1	I_4,I_1,I_1	2:2
A2	1	1	0	-43	88	0	4	+	2, 2, 2	2, 2, 2	2, 1, 1 2, 2, 2	I_{2},I_{2},I_{2}	2:1,3,4
A3	1	1	0	-118	-407	0	2	+	1, 1, 4	1, 1, 4	1, 1, 4	I_1, I_1, I_4	2 :2
A4	1	1	0	-688	6667	0	2	+	1,4,1	1, 4, 1	[1, 2, 1]	I_1,I_4,I_1	2 :2
B1	1	1	0	-22	31	0	2	+	3, 2, 1	3, 2, 1	1, 2, 1	I_3,I_2,I_1	2 :2
B2	1	1 	0	3	126	0	2		6, 1, 2	[6, 1, 2]	[2, 1, 2]	I_6,I_1,I_2	2 :1
C1	0 -	-1 	1	-16780	855303	0	1	_	14, 2, 3	14, 2, 3	[2, 2, 1]	I_{14}, I_{2}, I_{3}	
D1	0 -	-1	1	-18000	-923542	0	1	_	6, 2, 1	6, 2, 1	[2, 2, 1]	I_6,I_2,I_1	
E1	0	1	1	1815	141239	1	1	-	12, 8, 1	12, 8, 1	12, 8, 1	I_{12}, I_{8}, I_{1}	
F1	0	1	1	10	44	1	1	<u> </u>	6, 2, 1	6, 2, 1	6, 2, 1	I_6,I_2,I_1	
646	3				N = 646	= 2	$2 \cdot 17$. 19	(5 iso	ogeny clas	ses)		646
A1	1 -		0	-125	-507	0	2	+	6, 1, 2	6, 1, 2	2, 1, 2	I_6,I_1,I_2	2 :2
A2	1 -	-1 	0		-867	0	2		3, 2, 4	$\frac{1}{2}$ 3, 2, 4	1, 2, 4	I_3,I_2,I_4	2:1
B1	1	1	1	-77	-77	0	2	+	4, 3, 2	4, 3, 2	4, 1, 2	I_4,I_3,I_2	2 :2
B2	1	1 	1	303	-229	0	2	— 	2, 6, 1	$\begin{bmatrix} 2, 6, 1 \\ \end{bmatrix}$	2,2,1	I_2,I_6,I_1	2 :1
C1	1	0	0	-241	1413	0	2	+	2, 1, 4	2, 1, 4	2, 1, 2	I_2,I_1,I_4	2 :2
C2	1	0	0	-3851 	91663	0	$\frac{1}{2}$	+	$\frac{1,2,2}{1,2,1,2}$	$\frac{1}{1}, \frac{1}{2}, \frac{2}{2}$	1,2,2	I_1,I_2,I_2	2 :1
D1 D2	$\begin{array}{c c} 1 & -1 \\ 1 & -1 \end{array}$	_	1 1	$-406 \\ -6486$	3237 202661	1 1	$\begin{array}{ c c }\hline 2\\ 2 \end{array}$	+ +	12, 1, 2 6, 2, 1	12, 1, 2 6, 2, 1	$\begin{vmatrix} 12, 1, 2 \\ 6, 2, 1 \end{vmatrix}$	$I_{12},I_1,I_2 \ I_6,I_2,I_1$	2:2 2:1
E1				 -153		<u>-</u> - 0	!	'		<u> </u>	. – – – –		2 :1
E_1	$\begin{array}{c c} 1 \\ 1 \end{array}$	$0 \\ 0$	0	-153 -913	$505 \\ -10287$	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	6	+++++++++++++++++++++++++++++++++++++++	6, 3, 2 3, 6, 1	6, 3, 2 3, 6, 1	6, 3, 2 3, 6, 1	$I_6, I_3, I_2 I_3, I_6, I_1$	2:2;3:3 $2:1;3:4$
E3	1	0	0	-4573	-119379	0	2	+	2, 1, 6	2, 1, 6	2, 1, 6	I_2, I_1, I_6	2:4;3:1
E4	1	0	0	-73163	-7623125	0	2	+	1, 2, 3	1, 2, 3	1, 2, 3	I_1, I_2, I_3	2:3;3:2
648	3				N = 648	8 =	$=2^3$ ·	3^4	(4 isog	geny classe	es)		648
A 1	0	0	0	-3	14	1	1	_	10,4	0,0	2, 1	III*,II	
B1	0	0	0	-3	-1	1	1	+	4, 4	0,0	2,1		
$\bar{C1}$	0	0	0	-27	-378	0	1	_	10, 10	0,0	2,1	III*,IV*	
D1	0	0	0	-27	27	1	1	+	4,10	0,0	2, 3	III,IV*	:
649)				N = 64	19 =	= 11	. 59	(1 iso	geny class	s)		649
A1	1	0	0	-1	4	1	1	_	2, 1	2,1	2,1	I_2,I_1	
650)				N = 650 =	= 2	$\cdot 5^2$	13	(13 is	ogeny clas	sses)		650
A1	1 -	-1	0	-167	-259	1	2	+	8, 7, 1	8, 1, 1	2, 2, 1	I_8,I_1^*,I_1	2 :2
A2		-1	0	-2167	-38259	1	4	+	4, 8, 2	4, 2, 2	2, 4, 2	I_4, I_2^*, I_2	2:1,3,4
A3		$-1 \\ -1$		-34667 -1667	-2475759 -56759	1	$\begin{array}{ c c }\hline 2\\ 2\\ \end{array}$	+	2, 7, 1	$\begin{bmatrix} 2,1,1\\ 2,4,4 \end{bmatrix}$	$\begin{bmatrix} 2,2,1\\ 2,4,2 \end{bmatrix}$	I_2,I_1^*,I_1	2:2 2:2
A4	1 ⁻ 1					1 	!	— 	2, 10, 4	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	$\begin{bmatrix} 2, 4, 2 \\ -2, 1 \end{bmatrix}$	$\mid I_2,I_4^*,I_4 \mid$	2 :2
B1 B2	$\begin{array}{c c} 1 \\ 1 \end{array}$	1 1	0	-130 -11330	-780 -468940	1 1	1 1		18, 2, 1 6, 2, 3	18, 0, 1 $6, 0, 3$	$\begin{bmatrix} 2, 1, 1 \\ 2, 1, 1 \end{bmatrix}$	I_{18} , II, I_1 I_6 , II, I_3	3 :2 3 :1
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	1 	 _1	$\frac{0}{0}$	-11330 -22	46	¦-	¦	 		!	¦	<u>-</u>	
	1 - 1 -	 - T				1	1 	— 	$\frac{1,2,2}{7,10,2}$	$\frac{1}{1}, 0, 2$	1, 1, 2	I ₁ ,II,I ₂ 	
D1	1		1	299	22048	0	1		7, 10, 2	7,0,2	1,1,2	\mid I_7,II^*,I_2	
E1 E2	$\begin{array}{c c} 1 \\ 1 \end{array}$				-1175052	0	$\begin{array}{c c} 2 \\ 2 \end{array}$		8, 11, 1	8, 5, 1	$\begin{bmatrix} 2, 4, 1 \\ 2, 4, 2 \end{bmatrix}$	I_8,I_5^*,I_1	2:2 2:1
$\mathbb{L}Z$	1	0	1	-19020	-1407052	0		_	4, 16, 2	4, 10, 2	2, 4, 2	I_4,I_{10}^*,I_2	2 :1

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+A2+1+1+0+-89631-1036589410+2+1+4.5.2+4.5.2+2.5.2+14.1e.1e.1e.1e.1e.1e.1e.1e.1e.1e.1e.1e.1e.	
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$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	
$\begin{bmatrix} D1 & 1 & 0 & 0 & 0 & 0 \\ D2 & 1 & 0 & 0 & -209 & -816 & 1 & 4 & + & 8, 2, 2 & 8, 2, 2 & 8, 2, 2 & 1_{8}, I_{2}, I_{2} & 2 : 1, 3 \end{bmatrix}$	4
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	´
$oxed{D4} \ oxed{1} \ \ 1 \ \ 0 \ \ 0 \ \ \ \ \ \ \ \ \ \ \$	
$oxed{E1} oxed{0} 1 1 23 -83 oxed{0} 3 -9, 1, 1 9, 1, 1 9, 1, 1 1_9, I_1, I_1 3: 2$	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	
654 $N = 654 = 2 \cdot 3 \cdot 109$ (2 isogeny classes)	54
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	
655 $N = 655 = 5 \cdot 131$ (1 isogeny class)	55
$egin{array}{ c c c c c c c c c c c c c c c c c c c$	
656 $N = 656 = 2^4 \cdot 41$ (3 isogeny classes) 6	56
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	
B2 0 1 0 8 -60 0 2 $-10,2$ 0,2 $2,2$ I_2^*,I_2 $2:1$	

	a_1	a_2	a_3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
65	6				N =	= 6	556 =	= 2	$2^4 \cdot 41$ (continued)	l	656
C1		-1	0	-24	-16	1 1	2				/ 	Т* Т	2:2
C1		-1 -1		-24 -184	$\frac{-10}{1008}$		$\frac{2}{2}$	+++++++++++++++++++++++++++++++++++++++	$14, 1 \\ 13, 2$	$\begin{array}{c c} 2,1\\1,2\end{array}$	4,1 $2,2$	$egin{array}{c} { m I}_6^*, { m I}_1 \ { m I}_5^*, { m I}_2 \end{array}$	$\begin{vmatrix} 2 & \cdot & 2 \\ 2 & \cdot & 1 \end{vmatrix}$
02	U			104	1000	U		'	10, 2	1, 2	2, 2	15,12	2.1
65	7				N = 65	57	$= 3^{2}$	$^2 \cdot ^7$	73 (4 is	ogeny clas	sses)		657
A1	1	-1	1	-743	7494		2	+	16, 1	10, 1	4, 1	$\mathrm{I}_{10}^*,\!\mathrm{I}_1$	2 :2
A2	1	-1	1	-11678	488634	0	2	+	11, 2	5, 2	2, 2	$\mathrm{I}_{5}^{st},\!\mathrm{I}_{2}$	2 :1
B1	0	0	1	-57	-167	0	1	Ī —	7,1	1,1	4,1	I_1^*,I_1	
C1	0	0	1	24	-36	1	1	Ī	9,1	3,1	2,1	$oxed{I_3^*,I_1}$	3 :2
C2	0	0	1	-246	2043	1	3	_	7,3	1,3	2,3	I_1^*,I_3	3 : 1
$\overline{D1}$	 1	-1^{-1}	 1	-11	10		2	i - İ+	6, 1	[0, 1]	$\frac{1}{4,1}$	$oxed{I_0^*,I_1}$	2:2
D2		-1		34		1	$\frac{2}{2}$	<u> </u>	6, 2	0, 2	2,2	I_0^{*,I_1}	2:1
									-,-	-, -	-,-	-07-2	
65	8				N = 658	8 =	= 2 ·	7 ·	47 (6 i	sogeny cla	isses)		658
A1	1	1	0	-117008	18214144	0	1	_	30, 7, 1	30, 7, 1	2, 1, 1	I_{30}, I_7, I_1	
B1	1	1	0	-9	5	0	2	- +	6, 1, 1	6, 1, 1	[2, 1, 1]	I_6, I_1, I_1	2 :2
B2	1	1	0	-49	-147	0	2	+	3, 2, 2	3, 2, 2	1, 2, 2	I_3,I_2,I_2	2 : 1
$\bar{C}1$	' - <i>-</i> 1	0	1	3	12	0	3	<u>:</u> -	2, 3, 1	[2, 3, 1]	2, 3, 1	I_2,I_3,I_1	3:2
C2	1	0	1	-32	-338		1	_	6, 1, 3	6, 1, 3	2, 3, 1 2, 1, 1	I_6, I_1, I_3	3 :1
D1	<u>'</u>			24		$\begin{vmatrix} 1 \\ 1 \end{vmatrix}$	1	<u> </u>	12, 1, 1	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	12,1,1	$ I_{12}, I_1, I_1 $	'
E1	!	$-\frac{1}{-1}$		1668	19775	<u> </u>	2	<u> </u>		$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	22,4,1		1
E1 E2		$-1 \\ -1$		-8572	183615		$\frac{2}{2}$	_	22, 4, 1 $11, 8, 2$	$\begin{bmatrix} 22, 4, 1 \\ 11, 8, 2 \end{bmatrix}$	$\begin{bmatrix} 22, 4, 1 \\ 11, 8, 2 \end{bmatrix}$	$I_{22},I_4,I_1 I_{11},I_8,I_2$	2:2 2:1
	<u>'</u>					<u>-</u> -:		+ -			:		2
F1	1	-1	1	-18	33	1	1	_	4, 1, 1	4, 1, 1	4, 1, 1	I_4,I_1,I_1	
65	9				N = 0	359) =	659) (2 iso	geny class	es)		659
A1	1	1	0	-79	-306	1	1	+	1	1	1	I_1	
B1	0	· 1	1	-372	2641	0	1	<u>-</u> i_	 1	i	1	I_1	<u>' </u>
	U				2011	V				1	1	-1	
<u>66</u>	0				N = 660 =	= 2	$2^2 \cdot 3$	3 - 5	5 · 11 (4	4 isogeny o	classes)		660
A1		-1		-21	-54		2			0, 2, 4, 1		IV,I_2,I_4,I_1	
A2	0	-1	0	-396	-2904	0	2	+	8, 1, 2, 2	0, 1, 2, 2	1, 1, 2, 2	IV^*,I_1,I_2,I_2	2 :1
B1	0	-1	0	-1	10	1	2	Ī —	4, 2, 2, 1	[0, 2, 2, 1]	[3, 2, 2, 1]	IV,I_2,I_2,I_1	2 :2
B2	0	-1	0	-76	280	1	2		8, 1, 1, 2	0, 1, 1, 2		$ V^*, I_1, I_1, I_2 $	
$\overline{C1}$	$\bar{0}$	1	0	-41	120	1	6	Ī —	4, 6, 2, 1	0, 6, 2, 1	3, 6, 2, 1	IV,I_6,I_2,I_1	$[{f 2}:2;{f 3}:3]$
C2			0	-716	7140		6		8, 3, 1, 2			$ V^*, I_3, I_1, I_2 $	· ·
С3		1	0	319	-1356		2		4, 2, 6, 3	0, 2, 6, 3		IV, I_2, I_6, I_3	1
C4	0	1	0	-1556	-13356	1	2	+	8, 1, 3, 6	0, 1, 3, 6		IV^*, I_1, I_3, I_6	
D1	0	1	0	219	-4500	0	6	Ī_	4, 6, 4. 3	0, 6, 4, 3	[3, 6, 2, 3]	IV,I_6,I_4,I_3	2 : 2; 3 : 3
D2			0	-3156	-63900		6		8, 3, 2, 6	0, 3, 2, 6	, , ,	$ V^*, I_3, I_2, I_6 $	
D3			0	-15621	-757296		2			0, 2, 12, 1		IV, I_2, I_{12}, I_1	i i
D4	0	1	0	-249996 -	-48194796	0	2	+	8, 1, 6, 2	0, 1, 6, 2	1, 1, 2, 2	IV^*, I_1, I_6, I_2	2:3;3:2
ee.	<u> </u>				3.7				201 /4 :		\	ı	eeo
66					N=6			<u>ا ر :</u> ا		isogeny cla	, , , , , , , , , , , , , , , , , , ,		662
A1	1	0	1	32	-210	1	1	_	16, 1	16, 1	2,1	I_{16},I_{1}	

							Len	I	1/4)	1 (1)		77 1 1	
	a_1	a_2	a_3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
663	3				N = 663 = 3	3 ·	13 · 1	17	(3 isog	eny classe	es)		663
A1	1	1	0	-262	-1745		2	+	6, 2, 1	6, 2, 1	2, 2, 1	I_6,I_2,I_1	2 :2
A2	1	_ 1 	0	-327	-900 	0	2	+	12, 1, 2	12, 1, 2	[2, 1, 2]	I_{12},I_1,I_2	2 : 1
B1	1	1	1	-539	4592	1	4	+	2, 2, 1	2, 2, 1	2, 2, 1	I_2,I_2,I_1	2 :2
B2	1	1 1	1 1	-544	4496 14004	1	8	+	4, 4, 2	4,4,2	$\begin{bmatrix} 2, 4, 2 \\ 2, 2, 4 \end{bmatrix}$	I_4,I_4,I_2	$\begin{bmatrix} 2:1,3,4\\ 2:2.5.6 \end{bmatrix}$
B3 B4	$\begin{vmatrix} 1 \\ 1 \end{vmatrix}$	1	1	-1389 221	-14094 17042	1 1	$\begin{array}{ c c } 4 \\ 4 \end{array}$	+	8, 2, 4 2, 8, 1	8, 2, 4 2, 8, 1	$\begin{bmatrix} 2, 2, 4 \\ 2, 8, 1 \end{bmatrix}$	$egin{array}{c} I_8, I_2, I_4 \ I_2, I_8, I_1 \end{array}$	2 : 2, 5, 6 2 : 2
B5	1	1	1	-20174	-1111138	1	2	+	16, 1, 2	16, 1, 2	$\begin{bmatrix} 2, 0, 1 \\ 2, 1, 2 \end{bmatrix}$	I_{16},I_{1},I_{2}	2:3
B6	1	1	1	3876	-89910		2	_	4, 1, 8	4, 1, 8	2, 1, 8	I_4, I_1, I_8	2 :3
$\bar{C}1$	' · 1		0	-33	-72	$\stackrel{\cdot}{ }1$	2	<u> </u>	4, 2, 1	[4, 2, 1]	4,2,1	$ I_4, I_2, I_1 $	2 :2
C2	1	0	0	-98	279	1	2	+	8, 1, 2	8, 1, 2	8, 1, 2	I_8,I_1,I_2	2 :1
664	$\overline{4}$				N = 664 =	= 2	$3 \cdot 83$		(3 isoger	ny classes)		664
A1	0	0	0	-7	10	2	1	_	8,1	0,1	4,1	I_1^*, I_1	
B1	0	1	0	1		1	<u>-</u>	<u>-</u> _	$\frac{1}{4}, \frac{1}{1}$	[0, 1]	$\begin{bmatrix} 2,1 \end{bmatrix}$	$ $ III, I_1	<u>-</u>
$\overline{C1}$	<u>'</u> :	 -1		 -3	4		<u> </u>	<u> </u>	<u>-</u> ′ 4, 1	[0,1]	$\begin{bmatrix} -1 & 1 & 1 \\ 2 & 1 & 1 \end{bmatrix}$	<u>/</u>	<u> </u>
66						<u> </u>	1	^		,		111,11	$\phantom{00000000000000000000000000000000000$
		1	1	6.1	N = 665 =		I	9	, ,	eny classe	<u> </u>	T T T	000
A1	1				258	. – ·	1	— -	3, 5, 1	$\begin{bmatrix} 3, 5, 1 \\ -1, 1 \end{bmatrix}$	$\begin{bmatrix} 1, 5, 1 \\ -1 & 1 \end{bmatrix}$	I_3,I_5,I_1	
B1		-1	0	-14	-17	1	2	+	1, 1, 1	1, 1, 1	$\begin{bmatrix} 1, 1, 1 \\ 2, 2, 2 \end{bmatrix}$	I_1,I_1,I_1	2:2
B2 B3		$-1 \\ -1$	$0 \\ 0$	$-19 \\ -194$	0 1085	$\begin{vmatrix} 1 \\ 1 \end{vmatrix}$	$\begin{vmatrix} 4 \\ 4 \end{vmatrix}$	+++++++++++++++++++++++++++++++++++++++	2, 2, 2 $1, 1, 4$	2, 2, 2 $1, 1, 4$	$\begin{bmatrix} 2, 2, 2 \\ 1, 1, 4 \end{bmatrix}$	$egin{array}{c} I_2,I_2,I_2 \ I_1,I_1,I_4 \end{array}$	$egin{array}{c} {f 2}:1,3,4 \ {f 2}:2 \end{array}$
B4		-1		76	-57	1	2	_	4, 4, 1	4, 4, 1	4, 2, 1	$I_1,I_1,I_4 \\ I_4,I_4,I_1$	2 : 2 2 : 2
C1	<u>'</u> ·	 1				$\begin{vmatrix} 1 \\ 1 \end{vmatrix}$!	<u> </u>	$\frac{1}{1}, \frac{1}{1}, \frac{1}{1}$	$\begin{bmatrix} 1 & 1 & 1 & 1 \\ 1 & 1 & 1 & 1 \end{bmatrix}$	$\begin{bmatrix} 1, 1, 1, 1 \\ 1, 1, 1 \end{bmatrix}$	$ I_1, I_1, I_1 $	<u> </u>
D1	<u>'</u> ·	 -1	1	-210	6798	¦- ·	5	! 	5, 5, 2	5, 5, 2	$\begin{bmatrix} 5, 5, 2 \end{bmatrix}$	$ I_5, I_5, I_2 $	$egin{array}{ c c c c c c c c c c c c c c c c c c c$
D1		$-1 \\ -1$			-1081562			_		$\begin{bmatrix} 3, 5, 2 \\ 1, 1, 10 \end{bmatrix}$		I_{1},I_{1},I_{10}	
E1	<u>'</u> ·			 -97	-368	· - ·				$\begin{bmatrix} 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 $	'	· ·	<u> </u>
660	l				N = 666 = 3			l		ı		1, 1, 2	666
A1		-1	0	-231) <i>(</i>	$\frac{7 \operatorname{rsog}}{5, 9, 1}$	1	<u> </u>	I_5 , III^* , I_1	
	<u>'</u> :					· - ·	<u>-</u>	— -		'	'	'	
B1	'	-1 		153	. – – – – – –	! - ·	<u> </u>	<u>-</u> -	1, 17, 1	. – – – – –	<u>'</u>	$ I_1,I_{11}^*,I_1$	
C1		-1							3, 9, 1		1, 4, 1	0,0,-	
C2	<u>-</u>	-1 			19062			— -		:	[I_1,I_1^*,I_3	3 : 1
D1	<u>'</u> :	-1 		-26		· - ·		— 	5, 3, 1	!		$ I_5,III,I_1 $	
E1	<u>'</u> :	-1 		13		. – ·	1	<u>-</u> -	13, 7, 1	. – – – – –	. – – – –	I_{13},I_1^*,I_1	<u> </u>
F1		-1		139	141		4		8, 9, 1	, ,	8, 4, 1	I_8,I_3^*,I_1	2 :2
F2		-1		-581						4, 6, 2			
F3 F4		$-1 \\ -1$		$-5441 \\ -7241$					2, 9, 4 $2, 18, 1$	2, 3, 4 2, 12, 1		_	2:2 2:2
G1	<u>'</u> ·				 	· - ·	<u>-</u>		23, 15, 1 $23, 15, 1$!	<u>'</u>	$ I_{23},I_{9},I_{1} $	= . <i>=</i>
669				1010000		<u> </u>	1	<u> </u>			,,	-20,-9,-1	669
		1	0	-1	N = 669 =	1	1	ა	, ,	eny class)	1 1	тт	009
A1		1	U	-1	-2	<u> </u>	1	_	1,1	1,1	1,1	I_1,I_1	
670					N = 670 =		1	Ι	`	eny classe	<u> </u>		670
A1	1	-1	U	-524	-8920	1	1	_	3, 11, 1	3, 11, 1	[1, 11, 1]	I_3, I_{11}, I_1	

200				mbi			J11 1	.10 00100	ES 010D-01			
	a_1 a_2	a_3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
670)			N =	= 67	70 = 3	$2 \cdot 5$	· 67 (c	ontinued)			670
B1 B2	$\begin{array}{ccc} 1 & 0 \\ 1 & 0 \end{array}$	1 1	$\begin{array}{c} 2 \\ -23 \end{array}$	$ \begin{array}{r} 6 \\ -174 \end{array} $	1 1	3	 - -	1, 3, 1 3, 1, 3	$1, 3, 1 \\ 3, 1, 3$	1, 3, 1 $1, 1, 3$	$I_1, I_3, I_1 \\ I_3, I_1, I_3$	3:2 3:1
C1	1 - 1	1	-13	21	1	1	<u> </u>	5, 1, 1	5,1,1	[5, 1, 1]	I_5,I_1,I_1	
D1	1 0	0	44	-624	1	1	_	19, 1, 1	19, 1, 1	19, 1, 1	I_{19}, I_1, I_1	
672	2			N = 67	' 2 =	= 2^5 ·	$3 \cdot 7$	7 (8 iso	geny class	es)		672
A1 A2	$\begin{array}{ccc} 0 & -1 \\ 0 & -1 \end{array}$		$ \begin{array}{c} 2 \\ -33 \end{array} $	4 81	1 1	2 2	+	6, 1, 2 $12, 2, 1$	$0, 1, 2 \\ 0, 2, 1$	2, 1, 2 $4, 2, 1$	$III,I_1,I_2 \\ I_3^*,I_2,I_1$	2:2 2:1
B1	$\begin{bmatrix} 1 & 0 & 1 \\ 0 & 1 \end{bmatrix}$	 0	210	1764	1	$\begin{bmatrix} -2 \\ 2 \end{bmatrix}$	<u> </u>	6, 5, 6	$\begin{bmatrix} 0, 5, 6 \end{bmatrix}$	$\begin{bmatrix} 2, 5, 6 \end{bmatrix}$	$ III,I_5,I_6 $	$\begin{bmatrix} 2 & 2 \\ 2 & 2 \end{bmatrix}$
B2	0 1		-1505	17199	1	2		12, 10, 3	, ,	4, 10, 3	I_3^*, I_{10}, I_3	
C1	0 - 1		-22	40	0	4	+	6, 4, 2	0, 4, 2	[2, 2, 2]	III,I_4,I_2	2:2,3,4
C2	0 - 1		-112	-392	0	2	+	, ,	0, 2, 4	1, 2, 2	I_0^*, I_2, I_4	2 :1
C3 C4	$\begin{array}{c c} 0 & -1 \\ 0 & -1 \end{array}$		$-337 \\ 48$	2497 180	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$\begin{array}{ c c }\hline 4\\ 2 \end{array}$	+	12, 2, 1 9, 8, 1	$0, 2, 1 \\ 0, 8, 1$	4, 2, 1 2, 2, 1	$I_3^*, I_2, I_1 I_0^*, I_8, I_1$	2:1 2:1
:	 				<u> </u>	<u>'</u>	<u>-</u>		!			
D1 D2	$ \begin{array}{ccc} 0 & -1 \\ 0 & -1 \end{array} $		$210 \\ -1505$	-1764 -17199	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$\begin{array}{c c} 2 \\ 2 \end{array}$	+	6, 5, 6 $12, 10, 3$	0, 5, 6 0, 10, 3	2, 1, 2 2, 2, 1	$III,I_5,I_6 \\ I_3^*,I_{10},I_3$	2:2 2:1
E1	0 - 1	0	-14	24	1	4	 +	6, 2, 2	0, 2, 2	[2, 2, 2]	III,I_2,I_2	2:2,3,4
E2	0 - 1		-49	-95	1	2	+	12, 4, 1	0, 4, 1	4, 2, 1	I_3^*, I_4, I_1	2 :1
E3	0 - 1		-224	1368	1	2	+	9, 1, 1	0, 1, 1	1, 1, 1	I_0^*, I_1, I_1	2 :1
E4	0 - 1	0	16	84	1	4	<u> </u>	9, 1, 4	0, 1, 4	[2, 1, 4]	I_0^*, I_1, I_4	2 :1
F1	$\begin{bmatrix} 0 & 1 \\ 0 & 1 \end{bmatrix}$	0	-14	-24	1	$\begin{vmatrix} 4\\2 \end{vmatrix}$	+	6, 2, 2	0, 2, 2	2, 2, 2	III,I_2,I_2	2:2,3,4
F2 F3	$\begin{bmatrix} 0 & 1 \\ 0 & 1 \end{bmatrix}$	$0 \\ 0$	$-224 \\ -49$	-1368 95	1 1	$\frac{2}{4}$	+ +	9, 1, 1 $12, 4, 1$	$0, 1, 1 \\ 0, 4, 1$	2, 1, 1 $4, 4, 1$	$I_0^*, I_1, I_1 I_3^*, I_4, I_1$	2:1 2:1
F4	$\begin{array}{ccc} 0 & 1 \\ 0 & 1 \end{array}$	0	16	-84	1	2	_	9, 1, 4	$0, 1, 1 \\ 0, 1, 4$	1, 1, 1 $1, 1, 2$	I_0^{3,I_4,I_1}	2:1 2:1
G1	$\begin{bmatrix} 1 & 1 & 1 \\ 0 & 1 \end{bmatrix}$	0	2	-4	0	2	<u>-</u> - 	6, 1, 2	<u> </u>	<u> </u>	$ III,I_1,I_2 $	2 : 2
G2	0 1	0	-33	-81	0	2	+	12, 2, 1	0, 2, 1	2, 2, 1	I_3^*, I_2, I_1	2 :1
H1	$\begin{bmatrix} 1 & - & - & - & - \\ 0 & 1 \end{bmatrix}$	0	-22	-40	0	' 4	<u>-</u> +	6, 4, 2	0, 4, 2	[2, 4, 2]	$ III,I_4,I_2 $	2:2,3,4
H2	0 1	0	-337	-2497	0	2	+	12, 2, 1	0, 2, 1	4, 2, 1	I_3^*, I_2, I_1	2 :1
H3	0 1	0	-112	392	0	4		9, 2, 4	0, 2, 4	2, 2, 4	I_0^*, I_2, I_4	2 :1
H4	0 1	0	48	-180	0	2	_	9, 8, 1	0, 8, 1	1, 8, 1	I_0^*, I_8, I_1	2 :1
674	Ļ			N = 6	74 :	$= 2 \cdot$	337	(3 isog	geny classe	es)		674
A1	1 0	1	3	0	1	1	_	3,1	3,1	1,1	I_3,I_1	
B1	1 - 1		-6	5		2	+	4, 1	4, 1	4, 1	${ m I_4,I_1}$	2:2
B2	1 - 1	1	14	21	1	2	<u> </u>	2,2	2,2	$\begin{bmatrix} 2,2 \end{bmatrix}$	I_2,I_2	2 :1
C1	1 -1	1	2064	18771	1	1	_	31, 1	31,1	31, 1	I_{31},I_{1}	
675	•			N = 6	75 :	$=3^{3}$	$\cdot 5^2$	(9 isog	geny classe	es)		675
A1	0 0	1	0	31	1	1	_	3,6	0,0	1,2	II,I_0^*	3 : 2, 3
A2	0 0	1	0	-844	1	1	_	9, 6	0,0	1, 2	IV^*, I_0^*	3:1,4
A3	$\begin{bmatrix} 0 & 0 \\ 0 & 0 \end{bmatrix}$	1	-750	7906	1	1	_	5,6	0,0	3, 2	IV,I_0^*	3 :1
A4	0 0			-213469 	1	1	<u> </u>	11,6	0,0	1,2	II*,I*	3 :2
B1	1 -1	1 	-5	2	<u>'</u>	1	+ 	5,2	0,0	3,1	IV,II	<u> </u>
C1	$\begin{bmatrix} 0 & 0 \\ 0 & 0 \end{bmatrix}$	1	0	6	0	3	-	3, 4	0,0	1,3	II,IV	3 :2
C2	0 0	1	0	-169	0	1	_	9, 4	0,0	1,1	IV*,IV	3 :1

			IADLE								201
	a_1 a_2 a_3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
675	5		N =	675	5 = 3	$3 \cdot 5$	² (coi	ntinued)			675
D1	1 -1 1	-1055	-3428	0	1	+	11,8	0,0	1, 1	II^*,IV^*	
E1	$\begin{bmatrix} 0 & 0 & 1 \end{bmatrix}$	0	781	0	1	i i -	3, 10	0,0	1,1	II,II*	3 :2
E2	0 0 1	0	-21094		1	_	9, 10	0,0	3, 1	$\mathrm{IV}^{*},\!\mathrm{II}^{*}$	3 : 1
F1	1 - 1 0	-42	-19	0	1	+	11,2	0,0	1,1	II*,II	<u>-</u>
G1	0 0 1	-75	531	0	1	<u> </u>	5,8	0, 2	1, 2	$ IV,I_2^* $	<u>-</u>
H1	0 0 1	-675	-14344	0	1	i	11,8	0, 2	1, 2	II^*,I_2^*	<u>-</u>
I1	1 - 1 0	-117	166	1	1	<u> </u>	5,8	0,0	1, 3	IV,IV*	-
676	3		N = 676	= 2	$2^2 \cdot 1$	3^{2}	(5 isog	geny classe	es)		676
A1	0 0 0	-676	-6591	0	2	+	4,7	0,1	3, 2	IV,I_1^*	2 :2
A2	0 0 0	169	-21970	0	2	_	8,8	0, 2	3, 4	IV^*, I_2^*	2 : 1
B1	0 1 0	-4	-12	0	1	Ī	8,2	0,0	$\begin{bmatrix} -1,1 \end{bmatrix}$	IV*,II	3 :2
B2	0 1 0	-524	-4796	0	1	_	8, 2	0, 0	3, 1	IV^*,II	3 :1
C1	0 1 0	-732	-23516	0	3	Ī —	8,8	0,0	3,3	IV^*,IV^*	3 :2
C2	0 1 0	-88612	-10182444	0	1	_	8, 8	0, 0	1,3	IV^*,IV^*	3 :1
D1	0 0 0	-169	845	0	1	+	4,4	0,0	1,1	IV,IV	
E1	0 0 0	-28561	1856465	0	1	+	4, 10	0,0	3,1	IV,II*	
677	7		N=6	77	= 67	7	(1 isoge	eny class)			677
A1	1 1 1	2	0	1	1	_	1	1	1	I_1	
678	3		N = 678 =	= 2	. 3 . 1	113	(6 iso	geny class	ses)		678
A1	1 1 0	-12	12		1			2, 1, 1	2, 1, 1	I_2,I_1,I_1	
B1	$\begin{bmatrix} 1 & 0 & 1 \end{bmatrix}$	6	-20	<u> </u>	 1	<u>-</u>	6, 3, 1	[6, 3, 1]		I_6, I_3, I_1	<u> </u>
$\bar{C1}$	1 1 1	-148		! 1	$\begin{array}{c c} 1 & 2 \\ \hline 2 \end{array}$!	$\frac{1}{14}, \frac{1}{4}, \frac{1}{1}$	14,4,1	14, 2, 1	$ I_{14}, I_4, I_1 $	$\begin{bmatrix} 2 & 2 & 2 \end{bmatrix}$
C2	1 1 1	492	-2475		2		7, 8, 2			I_{7},I_{8},I_{2}	2 :1
D1	$\begin{bmatrix} 1 & 0 & 0 \end{bmatrix}$	-1661	26097	0	7		14, 7, 1	<u>'</u>	14, 7, 1	I_{14}, I_7, I_1	7:2
D2	1 0 0	-7121	-2567403		1		2, 1, 7	, ,	, ,	I_2, I_1, I_7	7 :1
E1	1 0 0	-192	1008	0	4		4, 4, 1	4,4,1	[4, 4, 1]	I_4,I_4,I_1	2 :2
E2	1 0 0	-212	780	0	4	+	2, 8, 2	2, 8, 2	2, 8, 2	I_2, I_8, I_2	2:1,3,4
E3	1 0 0	-1342	-18430		2			1, 16, 1		I_1, I_{16}, I_1	2 :2
E4	1 0 0	598	5478	0	2	<u> </u>	$\frac{1}{4}, \frac{4}{4}$	1,4,4	$\begin{bmatrix} 1,4,4 \\ \end{bmatrix}$	I_1,I_4,I_4	2 :2
F1	1 0 0	-190	-1024		2		2,4,1	, ,	2, 4, 1	I_2, I_4, I_1	2 :2
F2	1 0 0	-180	-1134	0	2	_	1,8,2	1, 8, 2	1, 8, 2	I_1,I_8,I_2	2 :1
680)		N = 680 =	= 2	$3 \cdot 5$	17	(3 iso	geny class	ses)	T	680
A1	0 0 0	-143	658	1	4		8, 2, 1	0, 2, 1	4, 2, 1	I_1^*, I_2, I_1	2 :2
A2	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-163	14029		4		10, 4, 2	0, 4, 2	2, 2, 2	III^*,I_4,I_2	$\begin{bmatrix} 2:1,3,4 \\ 2:2 \end{bmatrix}$
A3 A4	$\begin{bmatrix} 0 & 0 & 0 \\ 0 & 0 & 0 \end{bmatrix}$	$-1163 \\ 517$	-14938 3318		$\begin{array}{c c} 2 \\ 2 \end{array}$		11, 2, 4 $11, 8, 1$		1, 2, 4 $1, 2, 1$	$ II^*, I_2, I_4 $ $ II^*, I_8, I_1 $	2:2 2:2
B1	$\begin{bmatrix} 0 & 0 & 0 \\ -1 & 0 & -1 & 0 \end{bmatrix}$			<u> </u>	<u> </u>	 		!		:	4 · 4
			-20	<u>!</u>	1	<u> </u>	11, 1, 1	!	1,1,1	$ II^*,I_1,I_1 $	
$\begin{array}{ c c } C1 \\ C2 \end{array}$	$ \begin{array}{c cccc} 0 & -1 & 0 \\ 0 & -1 & 0 \end{array} $		-79900 -80868	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$\begin{array}{c c} 2 \\ 2 \end{array}$		8, 4, 1 $10, 8, 2$	$0, 4, 1 \\ 0, 8, 2$	$4, 4, 1 \\ 2, 8, 2$	$ I_1^*,I_4,I_1 $ $ III^*,I_8,I_2 $	2:2 2:1
	0		22000	ľ	i —	1	- , ~ , -	- , - , -	, -, -	1 ,-0,-2	

a_1	$a_{2}a_{3}$	a_4	$a_6 r$	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
681			N = 681 = 681	= 3	. 22	27 (5 iso	geny class	es)		681
A1 0	$-1 \ 1$	-13	24 1	1	_	4,1	4,1	2,1	I_4,I_1	
B1 1		-1154	-15345 0	'	' +	10, 2	$\begin{bmatrix} 1 & 10, 2 \end{bmatrix}$	$\begin{bmatrix} -2 & 2 & 2 & 2 & 2 & 2 & 2 & 2 & 2 & 2 $	$oxed{ egin{array}{c} I_{10},I_2 \end{array} }$	2 :2,3,4
B2 1	_	-1149	-154800		+	5, 1	5,1	1, 1	I_{5},I_{1}	2 :1
B3 1	1 0	-2369	208620	4	+	5, 4	5, 4	1, 4	I_5, I_4	2 : 1
B4 1	1 0	-19	-42812 0	2	-	20, 1	20, 1	2,1	I_{20} , I_1	2 : 1
$C1 \mid 0$	-1 1	0	2 2	1	<u> </u> -	2, 1	$\begin{bmatrix} 2,1 \end{bmatrix}$	[2,1]	I_2,I_1	
$D1 \mid 0$	1 1	-431	-3592 0	1	_	4,1	4,1	4,1	I_4,I_1	
$E1 \mid 0$	1 1	-179	881 1	1	_	10, 1	10, 1	10, 1	I_{10}, I_{1}	
682			N = 682 =	$2 \cdot$	11	· 31 (2 is	sogeny clas	sses)		682
A1 1	0 0	-33	73 1	3	_	9, 1, 1	9, 1, 1	9, 1, 1	I_9,I_1,I_1	3 :2
A2 1	0 0	167	225 1	3	_	3, 3, 3	3, 3, 3	3, 1, 3	I_3, I_3, I_3	3:1,3
A3 1	0 0	-2003	-39269 1	1	_	1, 9, 1	1, 9, 1	1, 1, 1	$\mathrm{I}_1,\!\mathrm{I}_9,\!\mathrm{I}_1$	3 :2
B1 1	$-1 \ 1$	359	-6663 1	1	<u> </u>	19, 3, 1	19, 3, 1	19, 3, 1	I_{19}, I_{3}, I_{1}	
684			N = 684 =	2^2 .	3^2	· 19 (3 i	isogeny cla	sses)		684
A1 0	0 0	-192	1028 1	1	_	8, 6, 1	0, 0, 1	3, 2, 1	IV^*,I_0^*,I_1	
B1 0	0 0	24	-511 1	$\frac{1}{2}$	- -	4, 9, 2	0, 3, 2	3, 4, 2	IV,I_3^*,I_2	2:2
B2 0	0 0	-831			+	8, 12, 1	0, 6, 1	3, 4, 1	IV^*, I_6^*, I_1	
C1 0	0 0	24	-268 0	1	-	8, 8, 1	0, 2, 1	[1, 2, 1]	IV^*,I_2^*,I_1	
685			N = 685	= 5	5 • 1	37 (1 is	sogeny clas	s)		685
	$-1 \ 0$	-5	6 1	1	_	1,1	1,1	1,1	I_1,I_1	
688			M C00	<u> </u>	4	19 (9:	-1)		688
	0.0		I	1	* • <u>4</u>		geny class	· · · · · · · · · · · · · · · · · · ·	τ√ τ	000
A1 0		4	-4 1		<u> -</u>	8,1	0,1	1,1	I_0^*, I_1	 -:
B1 0		-13			_	8, 1	,	2, 1	I_0^*, I_1	3 :2
B2 0		67		·	<u> -</u>		0,3	2,1	I_0^*, I_3	3 :1
$C1 \mid 0$	$-1 \ 0$	-5	-19	1	_	12, 1	0,1	1,1	II^*,I_1	
689			N = 689	= 1	13 ·	53 (1 is	sogeny clas	s)		689
A1 1		-14	19 1	2	+	1, 1	1,1	1,1	I_1,I_1	2 :2
A2 1	0 0	-9	34 1	2	_	2,2	2,2	2, 2	I_2,I_2	2 : 1
690			N = 690 = 2	2 · 3	. 5	· 23 (11	isogeny cla	asses)		690
A1 1	1 0	172	-1968 1	2	_	14, 2, 4, 1	14, 2, 4, 1	2, 2, 2, 1	$I_{14}, I_{2}, I_{4}, I_{1}$	2 :2
A2 1	1 0	-1748							I_7, I_1, I_8, I_2	
B1 1	1 0	167							I_6, I_7, I_1, I_2	
B2 1	1 0	-753							I_3, I_{14}, I_2, I_1	
C1 1	1 0	-22777		·	·			'		-'
$C2 \mid 1$			-2148591611 0							
D1 1		-12		· – –	·				I_2,I_3,I_1,I_2	-'
D2 1	1 0	-242							I_1, I_6, I_2, I_1	

	a_1	$a_2 a_3$	a_4	a_6	r	$ \mathbf{T} $	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
69		23	***	N = 690		<u> </u>		` '	(continue	_		690
E1	1	0 1	-604	-5734		$\frac{-2}{2}$	1	1	12, 5, 1, 1		I_{12}, I_5, I_1, I_1	1
E_2	1	0.1	-924	-3734 922		4		, , ,	, , ,	, , ,	I_{6},I_{10},I_{2},I_{2}	
E3	1	0 1	-10644	420826		2		3, 5, 4, 4	$\begin{bmatrix} 0, 10, 2, 2 \\ 3, 5, 4, 4 \end{bmatrix}$		I_{3},I_{5},I_{4},I_{4}	
E4	1	0 1	3676	8282		2					I_3, I_5, I_4, I_4 I_3, I_{20}, I_1, I_1	
F1	 1	0 1	-13	8	-!	2		:	:		;	2 :2
F1 F2	1	0.1	-13 -93	-344		4		8, 1, 1, 1 $4, 2, 2, 2$	$\begin{bmatrix} 8, 1, 1, 1 \\ 4, 2, 2, 2 \end{bmatrix}$	$\begin{bmatrix} 2, 1, 1, 1 \\ 2, 2, 2, 2 \end{bmatrix}$	$egin{array}{c} I_8, I_1, I_1, I_1 \ I_4, I_2, I_2, I_2 \end{array}$	
F3	1	0 1	-93 -1473	$ \begin{array}{c c} -344 \\ -21872 \end{array} $		2		2, 1, 4, 1	$\begin{bmatrix} 4, 2, 2, 2 \\ 2, 1, 4, 1 \end{bmatrix}$	$\begin{bmatrix} 2, 2, 2, 2 \\ 2, 1, 4, 1 \end{bmatrix}$	$ I_{1},I_{2},I_{2},I_{2} $ $ I_{2},I_{1},I_{4},I_{1} $	2 :1,3,4 $ 2:2 $
F4	1	0 1	7	-1024		$\frac{2}{4}$		2, 1, 4, 1 2, 4, 1, 4	$\begin{bmatrix} 2, 1, 4, 1 \\ 2, 4, 1, 4 \end{bmatrix}$	$\begin{bmatrix} 2, 1, 4, 1 \\ 2, 4, 1, 4 \end{bmatrix}$	$\begin{bmatrix} 1_2,I_1,I_4,I_1 \\ I_2,I_4,I_1,I_4 \end{bmatrix}$	
	' - -			. – – – – –	-!			'	!		:	:
G1 G2	1 1	1 1 1 1	-4491 -86411	-207687 -9808711		4					I_{28}, I_4, I_2, I_1	1
G2 G3	1			-9808711 -626186311		$\frac{4}{2}$		7, 4, 2, 4			I_{14},I_{8},I_{4},I_{2}	
G3 G4		1 1	-1362411 -101131	-6258247		$\frac{2}{2}$			$\begin{bmatrix} 7, 4, 2, 4 \\ 7, 16, 8, 1 \end{bmatrix}$	$\begin{bmatrix} 7, 2, 2, 2 \\ 7, 2, 2, 1 \end{bmatrix}$	$I_7, I_4, I_2, I_4 $ I_7, I_{16}, I_8, I_1	
	¦				-'		<u>-</u> -		!		:	[
H1	1	1 1	4	29		2		6, 2, 2, 1	6, 2, 2, 1	6, 2, 2, 1	I_{6},I_{2},I_{2},I_{1}	2 :2
H2	1	1 1	-116	413	1	2	+	[3, 1, 4, 2]	[3, 1, 4, 2]	[3,1,2,2]	I_{3},I_{1},I_{4},I_{2}	2 : 1
I1	1	0 0	134	-604		2		6, 1, 5, 2	6, 1, 5, 2	6, 1, 1, 2	I_6, I_1, I_5, I_2	2 :2
I2	1	0 0	-786	-5940	0	2	+;	3, 2, 10, 1	[3, 2, 10, 1]	3, 2, 2, 1	$ I_3,I_2,I_{10},I_1 $	2 :1
J1	1	0 0	-245	-1503	0	$\overline{2}$	Ī-:	[10, 1, 1, 2]	10, 1, 1, 2	10, 1, 1, 2	$ I_{10},I_1,I_1,I_2 $	2 :2
J2	1	0 0	-3925	-94975	0	2	+	5, 2, 2, 1	5, 2, 2, 1	5, 2, 2, 1	I_5, I_2, I_2, I_1	2 :1
$\overline{\mathrm{K1}}$	1	0 0	-420	3600	0	8	Ī_	8, 8, 2, 1	8, 8, 2, 1	8, 8, 2, 1	$ I_8,I_8,I_2,I_1 $	2:2
K2	1	0 0	-6900	220032		8		4, 4, 4, 2	4, 4, 4, 2	4, 4, 4, 2	I_4, I_4, I_4, I_2	
К3	1	0 0	-7080	207900		4		2, 2, 8, 4	2, 2, 8, 4	2, 2, 8, 2	I_2, I_2, I_8, I_4	
K4	1	0 0	-110400	14109732	0	4		2, 2, 2, 1	2, 2, 2, 1	2, 2, 2, 1	I_2, I_2, I_2, I_1	2 :2
K5	1	0 0	-25830	-1370850	0	2	+	1, 1, 4, 8	1, 1, 4, 8	1, 1, 4, 2	I_1, I_1, I_4, I_8	2 :3
K6	1	0 0	8790	1010922	0	2	<u> </u>	1, 1, 16, 2	1, 1, 16, 2	1, 1, 16, 2	I_1, I_1, I_{16}, I_2	2 :3
69	2			N = 692	_	2^2	. 17	73 (1 is	sogeny cla	ss)		692
A 1	0	1 0	-52	180	0	2	_	8, 2	0, 2	1,2	IV^*,I_2	2 :2
A2	0	1 0	-57	148	0	2	+	4, 1	0, 1	1, 1	IV,I_1	2 :1
69	3			N = 693 =	= 3	$3^2 \cdot 7^2$	7 · 1	1 (4 is	ogeny clas	sses)		693
A1	1	$-1 \ 1$	31	-264	0	2	_	6, 3, 2	0, 3, 2	2, 1, 2	I_0^*, I_3, I_2	2 :2
A2		$-1 \ 1$	-464						0, 6, 1		I_0^*, I_6, I_1	2 :1
B1	0	0 1	18	-7	-:				0, 2, 1		$ I_0^*, I_2, I_1 $!
C1	۰ -				-'				<u>'</u>			 9 .9
C1	$\begin{array}{c c} 0 \\ 0 \end{array}$		$-804 \\ -444$	$ \begin{array}{c c} -8775 \\ -16650 \end{array} $					0, 2, 1		I_0^*, I_2, I_1	3:2 2:1:2
C_2			-444 3966	-10050 430965				6, 6, 3 6, 2, 9		1, 6, 3 $1, 2, 9$	$ \begin{array}{c c} I_0^*, I_6, I_3 \\ I_0^*, I_2, I_9 \end{array} $	3:1,3 3:2
	' - -				- '			:	<u>'</u>			[
D1		-1 0	-306	-1985				7, 2, 1		4, 2, 1	I_1^*, I_2, I_1	2 :2
D2 D3		-1 0	-351					8, 4, 2		4, 4, 2	I_{2}^{*},I_{4},I_{2}	$\begin{bmatrix} 2 : 1, 3, 4 \\ 2 : 2, 5, 6 \end{bmatrix}$
D3 D4		$-1 0 \\ -1 0$	-2556 1134	$ \begin{array}{r} 49387 \\ -10535 \end{array} $				10, 2, 4 $7, 8, 1$	4, 2, 4 $1, 8, 1$	4, 2, 4 2, 8, 1	I_4^*, I_2, I_4 I_4^*, I_2, I_4	$\begin{vmatrix} 2 : 2, 5, 6 \\ 2 : 2 \end{vmatrix}$
D_5		$-1 0 \\ -1 0$		-10535 3167194				, ,	$\begin{bmatrix} 1, 8, 1 \\ 8, 1, 2 \end{bmatrix}$	$\begin{bmatrix} 2, 6, 1 \\ 4, 1, 2 \end{bmatrix}$	$I_1^*, I_8, I_1 I_8^*, I_1, I_2$	2:2 2:3
D6		$-1 0 \\ -1 0$	279	150880					2, 1, 8	2, 1, 8	$I_8, I_1, I_2 \\ I_2^*, I_1, I_8$	2:3 2:3
69				N = 696 =							1 2, 1, 0	696
A1		1 0	-88	1	- 1		1	,	1	i i	TTT T. T	
	' - -	-1 0		349	- '	1		$\frac{4,3,1}{1111111111111111111111111111111111$	$\begin{bmatrix} 0, 3, 1 \\ -2, -2, -1 \end{bmatrix}$	$\begin{bmatrix} 2, 1, 1 \\ \end{bmatrix}$	$ III,I_3,I_1 $	
B1	0	1 0	8	-16	U	1	_	11, 1, 1	0, 1, 1	1,1,1	II^*,I_1,I_1	

	a_1 a_2 a_3	a_4	a_6	r	T	S	$\operatorname{ord}(\Lambda)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
696			N = 6		' '			$\frac{\text{ord}_{-}(j)}{\text{continued}}$	•	Hodaira	696
C1	1	12	9	1	1	_	$\frac{25}{4,5,1}$	0, 5, 1	2, 5, 1	III,I_5,I_1	
D1	$\begin{bmatrix} 0 & -1 & 0 \end{bmatrix}$	-5920	177388	0	 1	 	11, 5, 3	$\begin{bmatrix} 0, 5, 3 \end{bmatrix}$	$\begin{bmatrix} 1 & 1 & 1 & 1 \\ 1 & 1 & 1 & 1 \end{bmatrix}$	II^*,I_5,I_3	<u> </u>
E1	$\begin{bmatrix} 0 & -1 & 0 \end{bmatrix}$	-36	 -87	<u>-</u> -	1	 —	4, 1, 3	$\begin{bmatrix} 0, 1, 3 \end{bmatrix}$	$\begin{bmatrix} 2, 1, 1 \end{bmatrix}$	$ $ III,I_1,I_3	<u> </u>
F1	$\begin{bmatrix} 0 & -1 & 0 \end{bmatrix}$	56		1	' 1	' _	$\frac{1}{4}, \frac{1}{7}, \frac{1}{3}$	$\begin{bmatrix} 0, 7, 3 \end{bmatrix}$	$\begin{bmatrix} 2, 1, 3 \end{bmatrix}$	$ $ III,I_7,I_3	<u>-</u>
G1	$\begin{bmatrix} 0 & 1 & 0 \end{bmatrix}$	-4	5	1	' 1	' _	4, 3, 1	$\begin{bmatrix} 0, 3, 1 \end{bmatrix}$	$\begin{bmatrix} 2, 3, 1 \end{bmatrix}$	$ III, I_3, I_1 $	<u> </u>
699			N = 69	9 =	= 3 · :	$\frac{1}{233}$		geny clas		7 07 1	699
A1	0 1 1	-10	-17			_	3, 1	3,1	3, 1	I_3,I_1	
700)		N = 700 =	= 2	$2 \cdot 5^2$. 7	(10 is	ogeny cla	sses)		700
A1	0 -1 0	-133	-2863	0	1	_	8, 9, 1	0, 3, 1	1, 2, 1	IV^*, I_3^*, I_1	3 :2
A2	0 - 1 0	-20133	-1092863	0	1	<u> </u>	8, 7, 3	0, 1, 3	3, 2, 1	IV^*,I_1^*,I_3	3 :1
B1	0 - 1 0	2	-3		1	-	4, 2, 1	0, 0, 1	$\begin{bmatrix} 1, 1, 1 \end{bmatrix}$	IV,II,I_1	3 :2
B2	$\begin{bmatrix} 0 & -1 & 0 \\ -1 & -1 & -1 \end{bmatrix}$	-98 	-343 		1	— 	4, 2, 3	[0,0,3]	$\frac{1}{2}$ 3, 1, 1	IV,II,I ₃	3 :1
C1	0 0 0	-5	5	1	1	— 	4, 2, 1	[0,0,1]	$\frac{1}{2}, \frac{3}{1}, \frac{1}{1}$	$ $ IV,II,I $_1$	<u> </u>
D1	0 0 0	800	26500	1	1	_	8, 7, 5	[0, 1, 5]	3, 4, 5	IV^*,I_1^*,I_5	<u> </u>
E1	0 0 0	-2000	-34375	1	2	+	4, 9, 2	0, 0, 2	3, 2, 2	IV,III^*,I_2	2 :2
E2	0 0 0	-1375	-56250	1	2		8, 9, 4	0,0,4	$\frac{1}{2}, \frac{3}{2}, \frac{2}{2}$	$ $ $ $ $ $ $ $ $ $ $ $ $ $ $ $ $ $	2 :1
F1	0 0 0	-125	625	1	1	_	4, 8, 1	0, 0, 1	1, 3, 1	IV,IV^*,I_1	<u> </u>
G1	0 0 0	-40	100	1	1	_	8, 3, 1	0, 0, 1	3, 2, 1	IV^* , III , I_1	
H1	0 0 0	-80	-275	0	2	+	4, 3, 2	0, 0, 2	1, 2, 2	IV,III,I_2	2 :2
H2	0 0 0	-55	-450	0	2	_	8, 3, 4	0, 0, 4	1, 2, 4	IV^* , III , I_4	2 :1
I1	0 1 0	42	-287		3	–	4, 8, 1	0, 0, 1	3, 3, 1	IV,IV^*,I_1	3 :2
I2	0 1 0	-2458	-47787	<u>-</u> -	1	<u>'</u>	4, 8, 3	[0,0,3]	$\begin{bmatrix} 1,1,3 \\ \end{bmatrix}$	IV,IV*,I ₃	3 :1
J1	0 0 0	-1000	12500	0	1	_	8, 9, 1	0, 0, 1	1, 2, 1	IV^*,III^*,I_1	
70	I		N = 7	01	= 70)1	(1 isog	eny class)	1	701
A1	0 -1 1	-2	1	0	1	+	1	1	1	I_1	
702	2		N = 702 =	= 2	$\cdot 3^3 \cdot$	13	(16 is	ogeny cla	sses)		702
A1	1 - 1 0	_9	-19	1	1	_	[5, 3, 2]	5, 0, 2	1, 1, 2	I_5 , II , I_2	
B1	1 - 1 0	-3	-1	1	1	+	1, 3, 1	1, 0, 1	[1, 1, 1]	I_1,II,I_1	
C1	1 - 1 0	39	35	0	1		1, 11, 1	1, 0, 1	1,1,1	I_1,II^*,I_1	<u> </u>
D1	1-1 0	-366	-2476	0	1	+	7, 11, 1	7, 0, 1	1,1,1	I_7,II^*,I_1	
E1	$\begin{vmatrix} 1 & -1 & 0 \\ 1 & -1 & 0 \end{vmatrix}$	-5826			3	<u>'</u>	9, 3, 6	9,0,6	$\begin{bmatrix} 1, 1, 6 \end{bmatrix}$	I_9,II,I_6	3 : 2, 3
E2	1 - 1 0	11919	881693		1		27, 9, 2	27, 0, 2	1, 1, 2	I_{27},IV^*,I_2	3 :1
E3	1-10-	-472266	125037036	0	3	<u> </u>	3, 5, 2	3, 0, 2	1, 3, 2	I_3 ,IV, I_2	3 :1
F1	1 - 1 0	-648	9536	0			11, 3, 5	11, 0, 5	1,1,1	I_{11} ,II, I_{5}	<u> </u>
G1	1 - 1 0	-165	533	0	1	+	19, 3, 1	19,0,1	1,1,1	I_{19} , II , I_1	<u> </u>
H1	1-1 0	-132	618	1	3	+	1, 3, 1	1, 0, 1	[1, 1, 1]	I_1,II,I_1	3 :2
H2		-177	197		3		3, 9, 3	3, 0, 3	1, 3, 3	I_3,IV^*,I_3	3 :1,3
H3	$\begin{bmatrix} 1 & -1 & 0 \\ -1 & -1 & -1 \end{bmatrix}$	-8952		<u>-</u> -	1	:	9,11,1	9,0,1	1, 1, 1	:	3 :2
I1	1-1 1	-29	55	<u>-</u> -	<u>'</u>	+	1,9,1	1, 0, 1	1,1,1	I_1,IV^*,I_1	<u> </u>
J1	1 - 1 1	-5834	-251639	0	1	-	11, 9, 5	11, 0, 5	11, 1, 1	I_{11},IV^*,I_5	

a_1	$a_2 a_3$	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
702			N = 702	= 2	$2\cdot 3^{5}$	$3 \cdot 1$	3 (co	ntinued)			702
K1 1	-1 1	-41	105	1	1	+	7, 5, 1	7, 0, 1	7, 3, 1	I_7 , IV , I_1	
L1 1	-1 1	-83	595	1	1	;	5, 9, 2	5, 0, 2	5, 3, 2	I_5 , IV^* , I_2	<u>-</u>
M1 1	-1 1	-1487	-12905	1	1		19, 9, 1	19, 0, 1	19, 3, 1	I_{19} , IV^* , I_1	:
N1 1	-1 1	-20	-1	0	3	- +	3, 3, 3	3,0,3	3, 1, 3	I_3 , II , I_3	3:2,3
N2 1	-1 1	-1190	-15497	0	1		1, 9, 1	1, 0, 1	1, 3, 1	I_1,IV^*,I_1	3 :1
N3 1	-1 1		12323	0	3	+	9, 5, 1	9, 0, 1	9, 1, 1	I_9 , IV , I_1	3 :1
O1 1	$-1 \ 1$	4	-3	0	1	-	1, 5, 1	1,0,1	1, 1, 1	I_1,IV,I_1	<u> </u>
	-1 1	1324			3		27, 3, 2	27, 0, 2		$_{\rm I_{27},II,I_2}$	3 :2
	$-1 \ 1$	-52436			3		9, 9, 6	9,0,6	9, 3, 6	I_9,IV^*,I_6	
P3 1	-1 1-	-4250390 -	-3371749577	U	1	_	3, 11, 2	3, 0, 2	3, 1, 2	I_3,II^*,I_2	3 :2
703			N = 703 =	19	. 37	(2 isogei	ny classes			703
A1 0	0 1	-736	1057	0	1	+	2,5	2,5	2, 1	I_2,I_5	
B1 0	0 1	1	-8	1	1		1,2	1,2	1, 2	$ m I_1, I_2$	
$\overline{704}$			N = 704 = 2	2 ⁶ .	11	(12 isoge	ny classes	s)		704
A1 0	1 0	-1	1	1	1		6,1	0,1	1,1	II,I_1	5 : 2
A2 0	1 0	-41	-199	1	1	_	6, 5	0, 5	1, 1	II,I_5	5:1,3
A3 0	1 0	-31281	-2139919	1	1	<u> </u>	6,1	0,1	1,1	$_{\rm II,I_1}$	5 :2
B1 0	-1 0	1	1	1	1	-	6, 1	0,1	1, 1	$_{ m II,I_1}$	
C1 0	1 0	1	-1	0	1	-	6, 1	0,1	1,1	$_{ m II,I_1}$	
	-1 0	11	-19		1	-	14, 1	0, 1	1, 1	$\mathrm{II}^*,\!\mathrm{I}_1$	3 :2
$D2 \mid 0$	-1 0	-309	-2003	0	1	<u> </u>	14,3	0,3	1,3	II*,I ₃	3 :1
E1 0	0 0	-16	32	0	1	<u> </u>	14,1	0,1	1,1	II^*,I_1	<u> </u>
F1 0	1 0	11	19		1	-	14, 1	0,1	1, 1	$\mathrm{II}^*,\!\mathrm{I}_1$	3 :2
1	1 0	-309	2003	!	1	— 	14,3	0,3	1,1	II*,I ₃	3 :1
$G1 \mid 0$	$-1 \ 0$	-11 	-11	0	1	-	6, 1	0,1	1,1	$_{\rm II,I_1}$	<u> </u>
H1 0	0 0	2	14	0	1	<u> </u>	6, 3	0,3	1,1	II,I_3	
I1 0	0 0	-16	-32	0	1		14, 1	0,1	1,1	II^*, I_1	<u> </u>
J1 0	1 0	-11	11	1	1	-	6,1	0,1	1,1	$_{ m II,I_1}$	
	-1 0	-1	-1		1	-	6, 1	0, 1	1,1	$_{ m II,I_1}$	5 :2
	-1 0	-41	199		1	_	6,5	0,5	1,5	$_{ m II,I_5}$	5:1,3
	-1 0	31281	2139919	<u>-</u> - '	1	ļ — -	6, 1	[0,1]	1,1	II,I_1	5 :2
L1 0	0 0	2	-14	1	1	_	6, 3	0,3	1,3	II,I_3	
705			N = 705 = 3	3 • 5	$5 \cdot 47$	7	(6 isoge	eny classe	s)		705
A1 0	-1 1	-5781	175862	1	1	-	14, 5, 1	14, 5, 1	2, 1, 1	I_{14}, I_5, I_1	<u> </u>
B1 1	1 1	-120	42282	1	1	-	3, 3, 5	3,3,5	1, 3, 5	I_3,I_3,I_5	
$C1 \mid 0$	1 1	9	20		3	_	6, 1, 1	[6, 1, 1]	6, 1, 1	I_6,I_1,I_1	3 :2
$\begin{bmatrix} C2 & 0 \\ - & - \end{bmatrix}$	1 1	-81 		:	1	-	2, 3, 3	[2, 3, 3]	2, 1, 1	I_{2},I_{3},I_{3}	3 :1
D1 1	0 1	6	1	1	1		1, 3, 1	1,3,1	1,1,1	I_1,I_3,I_1	<u> </u>
E1 1	0 0	-36	81	1	1	-	5, 1, 1	5, 1, 1	5, 1, 1	I_5, I_1, I_1	

	a_1	$a_2 a$	l_3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
70	5				N =	70	5 =	$3 \cdot $	$5 \cdot 47$ (c	continued)			705
F1	1		1	-368	2681		2	+	1, 3, 1	1, 3, 1	1, 3, 1	I_1,I_3,I_1	2 :2
F2 F3	1 1		1 1	-373 -1078	2603 -10369		$\frac{4}{2}$	+	2, 6, 2	2, 6, 2	2, 6, 2	I_2,I_6,I_2	$\begin{bmatrix} 2 : 1, 3, 4 \\ 2 : 2 \end{bmatrix}$
F4	1	_	1	-1078 252	-10309 10603		$\frac{2}{4}$	+	1, 12, 1 $4, 3, 4$	1, 12, 1 $4, 3, 4$	$\begin{bmatrix} 1, 12, 1 \\ 4, 3, 4 \end{bmatrix}$	$I_1,I_{12},I_1 \ I_4,I_3,I_4$	2:2 2:2
70	ი				N = 70	6 =	= 2 ·	353	3 (4 iso	geny class	es)	<u> </u>	706
A1		1	0	1	-1	1 1	1	<u> </u>	$\frac{1}{1,1}$	1,1	1,1	I_1,I_1	
B1	1	 -1	1	-118	2693	1	1	 -	23,1	$\begin{bmatrix} 23, 1 \end{bmatrix}$	23,1	$oxed{I_{23},I_1}$	<u>-</u>
$\bar{C}1$	1	 -1	1	-7 - 7	-5	1	- ₋ -	 +	2, 1	[2,1]	$\frac{1}{2}, 1$	I_2,I_1	2 :2
C2	1	-1	1	3	-25	1	2	_	1, 2	1, 2	1, 2	I_1,I_2	2 :1
D1	1	0	0	-18	4	$\overline{1}$	2	+	10, 1	10, 1	10, 1	I_{10},I_1	2:2
D2	1	0	0	-178	-924	1	2	+	5, 2	5, 2	5, 2	I_5,I_2	2 :1
70	7				N = 7	07	= 7	. 10	01 (1 is	ogeny clas	s)		707
A1	0	1	1	-12	12	2	1	+	2,1	2, 1	2,1	I_2,I_1	
70	8				N = 708	3 =	$= 2^2$. 3 .	59 (1 i	sogeny cla	ass)		708
A1	0	-1	0	11	34	0	2	_	4, 6, 1	0, 6, 1	1, 2, 1	IV,I_6,I_1	2 :2
A2	0	-1	0	-124	520	0	2	+	8, 3, 2	0, 3, 2	1, 1, 2	IV^*,I_3,I_2	2 :1
70	9				N =	709	9 =	709	(1 isog	geny class))		709
A1	0	-1	1	-2	0	2	1	+	1	1	1	I_1	
71	0				N = 710	=	$2 \cdot $	$5 \cdot 7$	71 (4 iso	ogeny clas	ses)		710
A1	1	1	0	-27	-59	1	1	+	3, 4, 1	3, 4, 1	1, 4, 1	I_3, I_4, I_1	
B1	1	1	1	-416	3009	1	1	+	17, 2, 1	17, 2, 1	17, 2, 1	I_{17},I_{2},I_{1}	
$\bar{\mathrm{C1}}$	1	1	1	-70	195	1	1	+	7, 2, 1	[7, 2, 1]	7, 2, 1	I_7,I_2,I_1	
D1	1	1	1	-1105	11727	0	5	+	5, 10, 1	[5, 10, 1]	5, 10, 1	I_5,I_{10},I_1	5 :2
D2	1	1	1 –	181355 -	-29801973	0	1	+	1, 2, 5	1, 2, 5	1, 2, 5	I_1, I_2, I_5	5 : 1
71	1				N = 71	1 =	= 3 ²	. 79	9 (3 iso	geny class	es)		711
A1	1	-1	0	3	-2	1	1	_	3, 1	0,1	2,1	III,I_1	
B1	1	-1	1	25	28	1	1	-	9,1	0,1	2,1	$\Pi III^*, I_1$	
$\bar{\text{C1}}$	1	-1	0	-18	-23	0	1	+	6, 1	0,1	1,1	I_0^*, I_1	
71	2				N = 7	12	= 2	3.8	39 (1 is	ogeny clas	s)		712
A 1	0	1	0	-32	-80		2	+	10, 1	0,1	2,1	$\mathrm{III}^*, \mathrm{I}_1$	2 :2
A2	0	1	0	-72	112	0	2	+	11, 2	0, 2	1, 2	$\mathrm{II}^*,\!\mathrm{I}_2$	2 :1
71	3				N = 7	13	= 2	3 · 3	31 (1 is	ogeny clas	s)		713
A1	1	0	1	-1	1	1	1	_	1,1	1,1	1,1	I_1,I_1	
71	4				N = 714 =	= 2	2 · 3	. 7 .	17 (9 i	sogeny cla	isses)		714
A1	1		0		81940	1	2	_	14, 8, 3, 1	14, 8, 3, 1	[2, 2, 1, 1]	$I_{14}, I_{8}, I_{3}, I_{1}$	2 :2
A2	1			-55174 	. – – – – – –	. – :	2					I_7, I_4, I_6, I_2	2 :1
B1	1	1	0	-37	-107	0	1	1—	3, 5, 1, 1	3, 5, 1, 1	1, 1, 1, 1	I_3,I_5,I_1,I_1	

	a_1	$a_{2}a_{3}$	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$)	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
71	4			N = 714 =	= 2	2 . 3	} · '	$7 \cdot 17$	(0	continued)		714
C1	1	1 0	-14597	-686643	0	1	_	17, 3, 5,	1	17, 3, 5, 1	1, 1, 5, 1	I_{17}, I_3, I_5, I_1	
D1	1	1 0	-21	45	 1	2	Ī-	6, 4, 1,	1	[6, 4, 1, 1]	[2, 2, 1, 1]	$ I_6,I_4,I_1,I_1 $	2 :2
D2	1	1 0	-381	2709	1	2	+	3, 2, 2, 3	2	3, 2, 2, 2	1, 2, 2, 2	I_3, I_2, I_2, I_2	2 : 1
E1	1	1 1	-2204	-41731	0	1	Ī-	7, 3, 1, 3	5	7, 3, 1, 5	7,1,1,1	$ I_7,I_3,I_1,I_5 $	
$\overline{F1}$	1	1 1	1	101	- '- 1	4	<u>-</u> -	12, 2, 1,	1	12, 2, 1, 1	12, 2, 1, 1	I_{12}, I_2, I_1, I_1	2:2
F2	1	1 1	-319	2021	1	4	+	6, 4, 2, 3	2	6, 4, 2, 2	6, 2, 2, 2	I_6, I_4, I_2, I_2	2:1,3,4
F3	1		-679	-3883						3, 2, 4, 4		I_3, I_2, I_4, I_4	
F4	!	11	-5079	137205	- '-		<u>'</u> -		'			$I_{3}, I_{8}, I_{1}, I_{1}$!
G1			-70244	7127525								I_{24}, I_4, I_4, I_1	
G_2	ı	1 1	-90724	2605541		8						$I_{12}, I_{8}, I_{8}, I_{2}$	
G3 G4	ı	1 1 1 1	-859044 349916	-304722459 (20936165)		4						$I_6, I_{16}, I_4, I_4 $ I_6, I_4, I_{16}, I_1	
G5	ı			-19563199515		2						I_3, I_8, I_2, I_8	
G6		1 1	-292604	-699871003		2						I_3, I_{32}, I_2, I_2	
H1	1	1 1	1	-1	 0	1	- -		;			$oxed{I_{1},I_{1},I_{1},I_{1}}$	<u> </u>
I1	1	0 0	108	11664	0	9	Ī_	9, 9, 3,	1	9, 9, 3, 1	9, 9, 3, 1	I_{9},I_{9},I_{3},I_{1}	3 :2
I2	1	0 0	-972	-315144	0	3				3, 3, 9, 3		I_3, I_3, I_9, I_3	
I3	1	0 0	-381702	-90803346	C	1	_	1, 1, 3, 9	9	1, 1, 3, 9	1, 1, 3, 1	I_1, I_1, I_3, I_9	3 :2
7 1	5			N = 715 = 5	•]	11 -	- 13	3 (2 i	so	geny class	ses)		715
A1			-5	6		3	_	3, 1, 1		3, 1, 1	3, 1, 1	I_3,I_1,I_1	3 :2
A2	0	11	45	-129	1	1	<u> </u> -	1,3,3		1,3,3	1,1,3	I_1,I_3,I_3	3 :1
B1	0	0 1	43	-2088	1	1	_	7, 1, 3		7, 1, 3	7, 1, 3	I_7,I_1,I_3	
7 1	8			N = 718 =	$2 \cdot$. 35	59	(3 iso	oge	eny classe	es)		718
A1	1	$-1 \ 0$	-17	-163	0	1	_	15, 1		15, 1	1, 1	I_{15} , I_1	
В1	1	0 1	-5	0	2	1	+	4,1		4,1	2,1	I_4,I_1	
$\bar{\text{C1}}$	1	$-1 \ 1$	-514	4609	1	1	+	12, 1		12,1	12,1	I_{12} , I_1	
72	20			$N = 720 = 2^4$		3^{2}	. 5	(10 i	isc	ogeny clas	sses)		720
A1	0	0 0	-3	18	1	2	_	10, 3, 1	1	0, 0, 1	4, 2, 1	I_2^* ,III, I_1	2 :2
A2	0	0 0	-123	522	1	2	+	11, 3, 2	2	0, 0, 2	4, 2, 2	I_3^* ,III, I_2	2:1
B1	0	0 0	-27	-486	0	$\overline{2}$	Ī-	10, 9, 1	 L	0, 0, 1	[4, 2, 1]	$ I_2^*,III^*,I_1 $	2 :2
B2	0	0 0	-1107	-14094	0	2	+	11, 9, 2	2	0, 0, 2	2, 2, 2	I_3^* ,III*, I_2	2 : 1
C1			-138	623		$\overline{2}$	+	4, 8, 1		0, 2, 1	1, 2, 1	II,I_2^*,I_1	2 :2
C2			-183	182		4	+	8, 10, 2		0, 4, 2	2, 4, 2	I_0^*, I_4^*, I_2	2:1,3,4
C_4			-1803	-29302		4		10, 8, 4		0, 2, 4	4, 4, 2	I_2^*, I_2^*, I_4	2 : 2, 5, 6
C4 C5	ı		717 -28803	1442 -1881502 0		2 2		10, 14, 11, 7, 2		$0, 8, 1 \\ 0, 1, 2$	2, 4, 1 2, 4, 2	$ \begin{array}{c c} I_2^*, I_8^*, I_1 \\ I_3^*, I_1^*, I_2 \end{array} $	2:2 2:3
C6		0 0	-26003 -723	-64078		$\frac{2}{2}$	_	11, 7, 2 $11, 7, 8$		$0, 1, 2 \\ 0, 1, 8$	4, 2, 2	$I_3, I_1, I_2 \\ I_3^*, I_1^*, I_8$	2:3 2:3
D1	<u>'</u> – –		-18	27	- '-	2	<u>!</u>	4, 6, 1	:	$\begin{bmatrix} -0, 0, 1 \\ 0, 0, 1 \end{bmatrix}$	$\begin{bmatrix} -7, -7, -7 \\ 1, 2, 1 \end{bmatrix}$	$\left \begin{array}{cccccccccccccccccccccccccccccccccccc$	$ {f 2}:2$
D_2			-63	-162		4	+	8, 6, 2		0, 0, 1 0, 0, 2	2, 4, 2	I_0^{*,I_0,I_1} $I_0^{*,I_0^{*,I_2}}$	2 : 2 $ 2: 1, 3, 4 $
D3	ı		-963	-11502		$\overline{2}$	+	10, 6, 1		0, 0, 1	4, 2, 1	I_2^*, I_0^*, I_1	2:2
D4	0	0 0	117	-918	0	2	_	10, 6, 4	1	0, 0, 4	2, 2, 2	I_2^*, I_0^*, I_4	2 :2

	a_1	$a_2 a_3$	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$ord_{-}(i)$	c_p	Kodaira	Isogenies
	**1			0		1-1		()	(3)	· p		8
72	0			N = 7	720) =	2^4	$\cdot 3^2 \cdot 5$	(continu	ied)		720
E1	0	0 0	33	-34		2	_	8, 7, 1	0, 1, 1	2, 2, 1	I_0^*, I_1^*, I_1	2 :2
E2	0	0 0		-286		4		10, 8, 2	0, 2, 2	4, 4, 2	I_2^*, I_2^*, I_2	2:1,3,4
E3	0	0 0	-1947	-33046		2		11, 10, 1	0, 4, 1	[2, 4, 1]	I_3^*, I_4^*, I_1	2 :2
E4	0	0 0	-1227	16346	- :	4 	+ :	11, 7, 4	0, 1, 4	[4, 4, 4]	I_3^*, I_1^*, I_4	2 :2
F1	0	0 0	-123	-598		2		18, 3, 1	6, 0, 1	4, 2, 1	I_{10}^* , III , I_1	2:2;3:3
F2	0	0 0	-2043	-35542		2		15, 3, 2	3, 0, 2	2, 2, 2	I_7^* ,III, I_2	2 :1; 3 :4
F3	$0 \\ 0$	$\begin{array}{ccc} 0 & 0 \\ 0 & 0 \end{array}$	837	2538		$\frac{2}{2}$		14, 9, 3	2,0,3	4, 2, 1	I_6^*, III^*, I_3	2:4;3:1
F4			-3483	20682	- :		'	13, 9, 6	1,0,6	[2, 2, 2]	I_5^* , III^* , I_6	÷
G1	0	0 0	93	-94		2		14, 3, 3	2,0,3	4, 2, 3	I_6^* ,III, I_3	2 :2; 3 :3
G2	0	0 0	-387	-766		2		13, 3, 6	1,0,6	4, 2, 6	I_5^* ,III, I_6	2:1;3:4
G3 G4	$0 \\ 0$	$\begin{array}{ccc} 0 & 0 \\ 0 & 0 \end{array}$	-1107 -18387	$16146 \\ 959634$		$\frac{2}{2}$		18, 9, 1 $15, 9, 2$	6, 0, 1		I_{10}^*, III^*, I_1 I_7^*, III^*, I_2	2 :4; 3 :1 2 :3; 3 :2
					- :		'		$\frac{3,0,2}{-}$	$\frac{1}{1}, \frac{1}{1}, \frac{1}{1}$		
H1 H2	0	$\begin{array}{ccc} 0 & 0 \\ 0 & 0 \end{array}$	-3	322		2		12, 7, 1	0, 1, 1	4, 4, 1	I_4^*, I_1^*, I_1 I_1^*, I_2^*	2 :2
H2 H3	$0 \\ 0$	$\begin{array}{ccc} 0 & 0 \\ 0 & 0 \end{array}$	-723 -1443	$7378 \\ -9758$		$\frac{4}{4}$		12, 8, 2 $12, 10, 4$	0, 2, 2	4, 4, 2	I_4^*, I_2^*, I_2 I_4^*, I_4^*, I_4^*	2 :1,3,4
H4	0	0 0	-1443 -11523	-9758 476098		2		12, 10, 4 $12, 7, 1$	0, 4, 4 0, 1, 1	4, 4, 2 2, 2, 1	$I_4^*, I_4^*, I_4 \ I_4^*, I_1^*, I_1$	$\begin{vmatrix} 2 : 2, 5, 6 \\ 2 : 2 \end{vmatrix}$
H5	0	$\begin{array}{ccc} 0 & 0 \\ 0 & 0 \end{array}$	-19443	-1042958		$\frac{2}{4}$		12, 1, 1 $12, 14, 2$	$0, 1, 1 \\ 0, 8, 2$	4, 4, 2	I_4^{*}, I_8^{*}, I_2	2 :3,7,8
H6	0	0 0	5037	-73262		$\overline{2}$		12, 8, 8	0, 2, 8	2, 2, 2	I_4^*, I_2^*, I_8	2 :3
H7	0		-311043	-66769598		2		12, 10, 1	0, 4, 1	4, 2, 1	I_4^*, I_4^*, I_1	2 :5
H8	0	0 0	-15843	-1441118	1	2	_	12, 22, 1	0, 16, 1	2, 4, 1	I_4^*, I_{16}^*, I_1	2 :5
I1	0	0 0	-12	11	0	2	+	4, 6, 1	0, 0, 1	1, 2, 1	II,I_0^*,I_1	$ {\bf 2}:2;{\bf 3}:3$
I2	0	0 0	33	74	0	2	_	8, 6, 2	0, 0, 2	1, 2, 2	I_0^*, I_0^*, I_2	2:1;3:4
I3	0	0 0	-372	-2761	0	2	+	4, 6, 3	0, 0, 3	1, 2, 3	II,I_0^*,I_3	2:4;3:1
I4	0	0 0	-327	-3454	0	2	-	8, 6, 6	0, 0, 6	1, 2, 6	I_0^*, I_0^*, I_6	2:3;3:2
J1	0	0 0	213	3674	0	2	-	16, 9, 1	4, 3, 1	4, 2, 1	I_8^*, I_3^*, I_1	$ {\bf 2}:2;{\bf 3}:3$
J2	0	0 0		48026	0	4		14, 12, 2	2, 6, 2	4, 4, 2	I_6^*, I_6^*, I_2	2 :1,4,5; 3 :6
J3	0	0 0		-108214				24, 7, 3	12, 1, 3			2:6; 3:1
J4	0	0 0		-324934		2		13, 18, 1	1, 12, 1			2:2;3:7
J5	0	0 0		3259514 -4043446		4		13, 9, 4	1, 3, 4		0.0.	
J6 J7	$\begin{array}{c c} 0 \\ 0 \end{array}$	$0 \ 0$		-4043446 -259067446				18, 8, 0 $15, 10, 3$		4, 4, 0 $4, 4, 3$	-	$\begin{vmatrix} 2 : 3, 7, 8; 3 : 2 \\ 2 : 6; 3 : 4 \end{vmatrix}$
J8	0	0 0		-259007440 -874294							$I_7, I_4, I_3 $ I_7, I_1^*, I_{12}	· ·
00	Ü			0,1201	U		<u> </u>	10,1,12	0,1,12	2, 1, 12	17,11,112	2.0,0.0
72	2			N = 72	2 =	= 2 ·	. 19	0^2 (6 is	ogeny cl	asses)		722
A1		0 1	714	-16080	_		1		$\frac{3,0}{3}$	1,3	I_3,IV^*	3 :2
			-33581					9, 8	9,0	1,3		3 :1
		-1 0			- :		' -	3,3				<u>-</u>
C1	1	0 1	 -8		- :		ί -	5,7	5,1	1, 2		$ {f 5}:2$
C2				1710222			_	1,11		1, 2 $1, 2$	- / I	5 :1
D1		$-1 \ 1$		77485			 -	$\frac{1}{3}, \frac{1}{9}$	3,0	$\begin{bmatrix} -\frac{1}{3}, 2 \end{bmatrix}$	$ I_3, III^* $	<u>-</u>
E1	1	1 1	-5603	-163815	'- :		¦ —	3,7	3,1	3, 4		3 : 2
E2	1			-612177				9, 9	9, 3	9, 4	_	3:1,3
E3	1		-30873	16782247				27, 7	27, 1	27, 4	I_{27}, I_1^*	3 :2
F1	1	1 1	2	3	1	 1	' -	3, 2	3,0	3, 1	I_3 ,II	$ {\bf 3}:2$
F2	1	1 1		307				9, 2	9,0	9, 1	I_9 ,II	3 :1
							1	,	,	,	· ,	

	a_1 a_2 a_3	l_3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
723	3			N = 723	= ;	$3 \cdot 2$	41	(2 isoge	eny classe	(s)		723
A1	1 1	_	-4	_		2	+	2, 1	2,1	2, 1	I_2,I_1	2 :2
A2	1 1	1	11	-10	1	2	<u> </u> –	1, 2	1,2	1,2	I_1,I_2	2 :1
B1	0 1	1	-3	-4	1	1	_	1,1	1,1	1,1	I_1,I_1	
72	5			N = 725	<u> </u>	5^2 ·	29	(1 isog	geny class)		725
A1	1 - 1		-67			2	+	7, 1	1,1	2,1	I_1^*, I_1	2 :2
A2	1 -1	0	58	841	1	2	_	8, 2	2,2	4,2	I_2^*, I_2	2 : 1
726	6			N = 726 =	2	. 3 .	11^{2}	(9 iso	geny class	ses)		726
A1	1 1		-35		1	2	+	6, 3, 3	6, 3, 0	2, 1, 2	I_6,I_3,III	2 :2
A2	1 1	0	-475	-4187	1	2	+	3,6,3	3,6,0	1, 2, 2	I_3,I_6,III	2 :1
B1	1 1	0	21657	-1855179	0	1	<u> </u> –	10, 4, 10	10, 4, 0	[2, 2, 1]	I_{10},I_4,II^*	
C1		0	-244			2		4, 1, 7	[4, 1, 1]	[2, 1, 2]	I_4, I_1, I_1^*	2 :2
C2		0	-2664		0	4	+	2, 2, 8	2, 2, 2	2, 2, 4	I_2,I_2,I_2^*	2:1,3,4
C3 C4		0	-42594	$3365850 \\ 100302$	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$\frac{2}{2}$	+	1, 1, 7 $1, 4, 10$	$\begin{bmatrix} 1,1,1\\ 1&4&4 \end{bmatrix}$	$\begin{bmatrix} 1, 1, 4 \\ 1, 2, 4 \end{bmatrix}$	$egin{array}{cccccccccccccccccccccccccccccccccccc$	2:2 2:2
	<u>'</u> .				<u> </u>	<u> </u>	<u> </u>		1,4,4	$\begin{bmatrix} 1, 2, 4 \\ -2, 4 \end{bmatrix}$	$\left \begin{array}{ccc} \mathrm{I}_{1}, \mathrm{I}_{4}, \mathrm{I}_{4}^{*} \\ \mathrm{I}_{1}, \mathrm{I}_{2}, \mathrm{I}_{3} \end{array} \right $	2 .
D1	<u>'</u> -	1	-14 		1	1	<u> </u>	2,4,2	2,4,0	[2, 4, 1]	I_2,I_4,II	
E1 E2	_	1	-5448 13912		1 1	$\begin{array}{ c c }\hline 2\\ 2\\ \end{array}$		10, 5, 7	$\begin{bmatrix} 10, 5, 1 \\ 5, 10, 2 \end{bmatrix}$	$\begin{bmatrix} 2, 5, 4 \\ 1, 10, 4 \end{bmatrix}$	I_{10},I_{5},I_{1}^{*}	2 :2; 5 :3
E2 E3				-732778 517205302	$\frac{1}{1}$	$\frac{2}{2}$		5, 10, 8 2, 1, 11	$\begin{bmatrix} 5, 10, 2 \\ 2, 1, 5 \end{bmatrix}$	$\begin{bmatrix} 1, 10, 4 \\ 2, 1, 4 \end{bmatrix}$	$egin{array}{c} I_5, I_{10}, I_2^* \ I_2, I_1, I_5^* \ \end{array}$	$egin{array}{ c c c c c c c c c c c c c c c c c c c$
E4				518284622	1	$\frac{2}{2}$	-	1, 2, 16	1, 2, 10	1, 2, 4	I_1, I_2, I_{10}^*	2:3;5:2
F1	' 1 1	 1	-4298	46487	0	2	i	6, 3, 9	6,3,0		I_6,I_3,III^*	2:2
F2	1 1	1						3, 6, 9	3, 6, 0	3, 2, 2	I_3,I_6,III^*	
G1	1 1	1	179	1475	1	1	<u> </u>	10, 4, 4	10, 4, 0	10, 2, 3	$\overline{ }$ $\overline{\mathrm{I}_{10}},\overline{\mathrm{I}_{4}},\overline{\mathrm{IV}}$:
H1	1 0	0	-668	-6324	0	2	Ī+	2, 3, 7	[2, 3, 1]	[2, 3, 2]	$[I_2,I_3,I_1^*]$	2:2;3:3
H2			542				-	1, 6, 8	1, 6, 2	1, 6, 4		2:1;3:4
H3			-9743				+	6, 1, 9		6, 1, 2	· / - / J	2:4;3:1
H4	<u> </u>			734801	<u> </u>	:	<u> </u>	3, 2, 12	<u></u>	<u> </u>	:	2 :3; 3 :2
I1	1 0	0	-1636	-28588	0	1	_	2, 4, 8	2, 4, 0	2, 4, 1	I_2,I_4,IV^*	
728	8			N = 728 =	= 2 ³	$3 \cdot 7$. 13	(4 isos	geny class	ses)		728
A1	0 - 1	0	-8	-20	0	1	_	11, 1, 1	0, 1, 1	1, 1, 1	II^*,I_1,I_1	
B1	0 - 1	0	1071	8501	0	1	Ī -	8, 1, 7	[0, 1, 7]	[4, 1, 1]	$oxed{I_1^*,I_1,I_7}$	
C1	0 0	0	-68	-236	1	1	Ī -	8, 1, 3	[0, 1, 3]	[2, 1, 3]	I_1^*, I_1, I_3	
D1	0 1	0	-1	51	1	1	Ī -	8, 3, 1	0, 3, 1	[2, 3, 1]	I_1^*, I_3, I_1	
730	0			N = 730 =	2	. 5 .	73	(11 iso	geny class	ses)		730
A1	1 -1	0	-865	-9219	0	2	+	16, 4, 1	16, 4, 1	2, 2, 1	I_{16}, I_4, I_1	2 :2
A2	1 - 1	0	415	-35075	0	2			8, 8, 2		I_8, I_8, I_2	
B1	1 0	1	96	-658	0	3	Ī -	7, 1, 3	7, 1, 3	1,1,3	I_7,I_1,I_3	3 :2
B2	1 0	1	-3919	-94974	0	1	_	21, 3, 1	21, 3, 1	[1, 1, 1]	I_{21},I_3,I_1	3 :1
C1	1 –1	0	-2440	47006	0	1	<u></u>	1, 7, 1	1,7,1	1,1,1	I_1,I_7,I_1	
D1	$\begin{bmatrix} 1 & 1 \end{bmatrix}$	0	-1897	29189	0	1	[+	27, 1, 1	[27, 1, 1]	[1, 1, 1]	I_{27}, I_1, I_1	
E1	1 1	0	-2	-4	0	1	Ī -	3, 1, 1	3, 1, 1	1,1,1	I_3,I_1,I_1	

		~	~				ITEL		and(A)	and (i)		Vodeine	Igamonica
	a_1	a_2	a_3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
730)				N = 7	30	$= 2 \cdot$	5.	73 (cc	entinued)	I	T	730
F1		-1	_	-949	11493		2	+	4, 4, 1	4, 4, 1	2, 4, 1	I_4,I_4,I_1	2 :2
F2	1 -	-1 	0	-929	11985	1	2	<u> </u>	2, 8, 2	2,8,2	2,8,2	I_2,I_8,I_2	2 : 1
G1	1 -	-1	0	-4	-2	1	1	+	1, 1, 1	1, 1, 1	1, 1, 1	I_1,I_1,I_1	
H1	1	0	0	19	-5	0	1	Ī —	1, 5, 1	[1, 5, 1]	$\left[\begin{array}{cc} 1,1,1\end{array}\right]$	I_1,I_5,I_1	Ī
I1	1	1	1	-26	39	$\overline{1}$	1	+	7, 1, 1	[7, 1, 1]	[7, 1, 1]	I_7,I_1,I_1]
J1	1	1	1	-405	-1925	1	1	+	9, 7, 1	9,7,1	9, 7, 1	I_{9},I_{7},I_{1}	
K1	1	0	0	-15	17	0	3	 +	3, 3, 1	3, 3, 1	3, 3, 1	I_3,I_3,I_1	3 :2
K2	1	0	0	-365	-2713	0	1	+	1, 1, 3	1, 1, 3	1, 1, 3	I_1, I_1, I_3	3 :1
731	L				N = 73	1 =	: 17·	43	(1 isog	geny class)		731
A1	1	0	1	-539	4765	1	1	_	3,1	3,1	1,1	I_3,I_1	
732)				N = 732 =	_ o	2.2	61	(3 igo	geny elec	202)		732
A1		-1	0	-17	$\frac{N - 132 - 132}{30}$		2		$\frac{(3 \text{ iso})}{4, 4, 1}$	0,4,1	1,2,1	TVII	2:2
A1 A2	0 -		0	-17 28	120	0	$\frac{2}{2}$	+	$4, 4, 1 \\ 8, 2, 2$	$0, 4, 1 \\ 0, 2, 2$	1, 2, 1 $1, 2, 2$	$ IV, I_4, I_1 IV^*, I_2, I_2 $	2:2 2:1
B1	l 0 -		0	-100	424	<u>!</u>	<u> </u>	<u> </u>	8, 4, 1	$\begin{bmatrix} 0, 2, 2 \\ 0, 4, 1 \end{bmatrix}$	$\begin{bmatrix} 3, 2, 1 \end{bmatrix}$	$ \text{IV}^*, \text{I}_4, \text{I}_1 $	
C1	0	- - . 1	$\frac{0}{0}$	 -29	36	<u>!</u>	$\frac{1}{1} \frac{1}{2}$:		!	<u></u>	!	$\begin{bmatrix} 1 & - & - & - & - & - \\ 2 & 2 & 2 & & \end{bmatrix}$
C1	0	1	0	-29 -164	-828		$\frac{2}{2}$	+ +	4, 6, 1 $8, 3, 2$	$0, 6, 1 \\ 0, 3, 2$	$\begin{bmatrix} 3, 6, 1 \\ 3, 3, 2 \end{bmatrix}$	$\begin{vmatrix} IV,I_6,I_1\\IV^*,I_3,I_2 \end{vmatrix}$	$\begin{vmatrix} 2 & 2 \\ 2 & 1 \end{vmatrix}$
						_		'	0,0,2	0,0,2	0,0,2	1 ,13,12	
733					N = 7			1		eny class)	Г	T	733
A1	1	1	0	-75	-284	0	1	+	1	1	1	I_1	
734	Į.				N = 734	4 =	2 · 3	867	(1 isog	geny class)		734
A1	1	1	1	-3	-31	0	2	_	10, 1	10, 1	10, 1	I_{10}, I_{1}	2 :2
A2	1	1	1	-163	-863	0	2	+	5, 2	5, 2	5, 2	I_5,I_2	2 :1
735	5				N = 735 = 100	= 3	3 · 5 ·	7^2	(6 isog	geny class	es)		735
A1	1	1	0	-123	-552	0	2	+	1, 1, 7	1,1,1	1, 1, 4	I_1, I_1, I_1^*	2 :2
A2	1	1	0	-368	1947	0	4		2, 2, 8	2, 2, 2	2, 2, 4	_	2:1,3,4
A3	1	1	0	-5513	155268	0	2	+	1, 4, 7	1, 4, 1	1, 2, 2	$I_1,I_4,I_1^{\overline{*}}$	2 :2
A4	1	1	0	857	13462	0	2	_	4, 1, 10	4, 1, 4	2, 1, 4	I_4,I_1,I_4^*	2 :2
B1	0 -	-1	1	-15206	-1184338	0	1	Ī —	7, 4, 10	7,4,0	[1, 2, 1]	I_7,I_4,II^*	
$\overline{\text{C1}}$	0 -	· -1	1	5	6	1	1	i	3, 2, 2	3, 2, 0	1, 2, 1	I_3,I_2,II	3 :2
C2	0 -	-1	1	-205	1203	1	1	_	1, 6, 2		1, 6, 1	I_1, I_6, II	3 :1
D1	0	1	1	229	-2614	0	3	Ī —	3, 2, 8	3, 2, 0	[3, 2, 3]	I_3,I_2,IV^*	3 :2
D2	0	1	1	-10061	-392605	0	1	-	1, 6, 8	1, 6, 0	1, 2, 3	I_1,I_6,IV^*	3 :1
E1	1	0	0	-1	-64	1	2	Ī —	1, 1, 6	1,1,0	[1, 1, 2]	I_1,I_1,I_0^*	2 :2
E2	1	0	0	-246	-1485		4		2, 2, 6	2, 2, 0	2, 2, 4	I_2,I_2,I_0^*	2:1,3,4
E3	1	0	0	-3921	-94830		2	+	1, 1, 6	1, 1, 0	1, 1, 4	I_1, I_1, I_0^*	2 :2
E4	1	0	0	-491	1896		4		4, 4, 6	4, 4, 0	4, 2, 4		2:2,5,6
E5	1	0	0	-6616	206471		4	+	8, 2, 6	8, 2, 0	8, 2, 4		2:4,7,8
E6	1	0	0	1714	14685		2	_	2, 8, 6	2, 8, 0	2, 2, 2	I_2,I_8,I_0^*	2 :4
E7	1	0		-105841	13244636		2	+	, ,	4, 1, 0	4, 1, 2	I_4,I_1,I_0^*	2 :5
E8	1	0	0		285606	1 -	2	— 	16, 1, 6	16, 1, 0	16, 1, 4	$ I_{16}, I_1, I_0^* $	2 :5
F1	0	1	1	-310	3364	1	1	l	7, 4, 4	7, 4, 0	7, 4, 3	I_7,I_4,IV	Ĩ

	a_1 a_2 a_3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
73	7		N = 737	= [11 · 6	57	(1 isoge	eny class)			737
A1	0 - 1 1	406	-686	1	1	_	4,3	4,3	4,3	I_4,I_3	
738	8		N = 738 = 2	2 . 3	$3^2 \cdot 4$	1	(10 isog	geny class	es)		738
A1	1 - 1 0	66	116	1	1	_	5, 9, 1	5, 0, 1	1, 2, 1	I_5 , III^* , I_1	
B1	1 - 1 0	-1575			1	[<u> </u>	25, 11, 1	25, 5, 1	1, 2, 1	I_{25},I_5^*,I_1	5 :2
B2	 		4586220189	! - !	1	<u> </u>	5, 7, 5	[5, 1, 5]	1, 2, 1	$ I_5,I_1^*,I_5 $	5 :1
$\begin{array}{ c c } C1 \\ C2 \end{array}$	$\begin{vmatrix} 1 & -1 & 0 \\ 1 & -1 & 0 \end{vmatrix}$	$-81 \\ -261$	-243 1377		$\frac{2}{4}$	+ +	4, 8, 1 2, 10, 2	4, 2, 1 2, 4, 2	2, 2, 1 2, 4, 2	$egin{array}{c} I_4, I_2^*, I_1 \ I_2, I_4^*, I_2 \end{array}$	$egin{array}{ c c c c c c c c c c c c c c c c c c c$
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	-201 -3951	96579	0	2	+	1, 14, 1	1, 8, 1	1, 4, 1	I_{1},I_{8}^{*},I_{1}	2:1,3,4 2:2
C4	1 - 1 0	549			2	_	1, 8, 4	1, 2, 4	1, 4, 2	I_1, I_2^*, I_4	2 :2
D1	1 - 1 0	-2430	46732	1	1		3, 13, 1	[3, 7, 1]	1, 4, 1	I_3,I_7^*,I_1	
E1	1-1 1	7	-7	1	1	[<u> </u>	5, 3, 1	[5, 0, 1]	5, 2, 1	$\mid I_5, III, I_1 \mid$	
F1	1-1 1	-374	2949	$\bar{1}$	1	<u> </u>	11, 7, 1	[11, 1, 1]	11, 4, 1	$ I_{11}, I_1^*, I_1 $	
G1	1-1 1	-599			2	+	6, 10, 1	6, 4, 1	6, 2, 1	I_6,I_4^*,I_1	2 :2
G2	1-1 1	-239		<u> </u>	2	<u> </u>	3, 14, 2	3,8,2	3, 4, 2	I_3,I_8^*,I_2	2 :1
H1			3178971893		2		14, 18, 1	14, 12, 1		I_{14},I_{12}^*,I_1	2 :2
H2	<u> </u> -		3188379125	<u> </u>	2	<u>'</u>	7,30,2			$ I_7,I_{24}^*,I_2 $	2 : 1
I1 I2	$ \begin{array}{c cccc} 1 & -1 & 1 \\ 1 & -1 & 1 \end{array} $	-14 -104			$\frac{2}{2}$	+++	2, 6, 1 $1, 6, 2$	2, 0, 1 $1, 0, 2$	2, 2, 1 $1, 2, 2$	$ \begin{array}{c c} I_2, I_0^*, I_1 \\ I_1, I_0^*, I_2 \end{array} $	2:2 2:1
J1	$\begin{bmatrix} 1 & 1 & 1 \\ 1 & -1 & 1 \end{bmatrix}$	-14		<u> </u>	- - 1		1,0,2 1,9,1	$\begin{bmatrix} 1, 0, 2 \\ 1, 3, 1 \end{bmatrix}$	1, 2, 2 1, 2, 1	$\begin{bmatrix} 1_1, 1_0, 1_2 \\ -1_1, 1_3^*, I_1 \end{bmatrix}$	$ \frac{2}{3} : 2 $
J2	1 - 1 1 1 1 - 1 1	$\frac{-14}{121}$	-51 1559		3	_	3, 7, 3	3, 1, 3	3, 2, 3	I_{3},I_{1}^{*},I_{3}	3 :1
739	9		N = 739	9 =	739		(1 isogen	y class)		l	739
A1	0 0 1	1	1	0	1	_	1	1	1	I_1	
740	0		N = 740 =	2^2	. 5 . 3	37	(3 isog	eny classe	es)		740
A1	0 0 0	-219448	39364772	0	1	+	8, 8, 5	0, 8, 5		IV^*,I_8,I_5	
B1	0 1 0	-181	-425	1	3	+	8, 2, 3	0, 2, 3	3, 2, 3	$ IV^*,I_2,I_3 $	3 :2
B2	0 1 0	-12021	-511321	1	1	+	8, 6, 1	0, 6, 1	1, 2, 1	IV^*,I_6,I_1	3 :1
C1	0 - 1 0	-45	25	1	1	+	8, 4, 1	0, 4, 1	3, 4, 1	IV^*,I_4,I_1	
74 2	1		N = 741 =	3 ·	13 ·	19	(5 isog	eny classe	es)		741
A1	1 1 0	-2	-3	0	1	_	1, 1, 1	1, 1, 1	1, 1, 1	I_1,I_1,I_1	
B1	1 1 0	5571	-41634	0	1	[<u> </u>	7, 3, 5	7, 3, 5	1, 3, 1	I_7,I_3,I_5	
$\bar{C1}$	1 0 1	-5227	-155497	0	1		11, 5, 1	11, 5, 1	11, 1, 1	$ I_{11},I_{5},I_{1} $	
D1	0 1 1	101470	57781877	0	1	 —	10, 4, 7	10, 4, 7	10, 2, 1	$ I_{10},I_4,I_7 $	
Ē1	0 1 1	-5	23	1	1	 -	4, 2, 1	4, 2, 1	4, 2, 1	I_4, I_2, I_1	
742	2		N = 742 =	2 ·	$7 \cdot 5$	3	(7 isoge	eny classe	s)	ı	742
A1	1 -1 0	-5		1	1	_	1, 2, 1	1, 2, 1	1, 2, 1	I_1, I_2, I_1	
B1	1 1 0	-63	245	0	2	_	$\frac{1}{4}, \frac{1}{3}, \frac{1}{2}$	$\begin{bmatrix} -4, 3, 2 \end{bmatrix}$	$\frac{1}{2}, \frac{1}{1}, \frac{2}{2}$	$ I_4, I_3, I_2 $	2 :2
B2	1 1 0	-1123			2	+	2, 6, 1	2, 6, 1	2, 2, 1	I_2, I_6, I_1	2 : 1
$\overline{\text{C1}}$	1 - 1 0	727	11853	0	1	_ _	25, 2, 1	25, 2, 1	1, 2, 1	$ I_{25}, I_2, I_1 $	
D1	1 - 1 0	3668	-767536	0	1	[_	8, 4, 5	8, 4, 5	2, 4, 1	I_{8},I_{4},I_{5}	

				1	ı	1		T		1	
	a_1 a_2 a_3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
742	2		N = 7	42	=2	. 7	53 (co	ontinued)			$\bf 742$
E1		-29612	2027600	1	2	_	10, 5, 4	10, 5, 4	2, 5, 4	I_{10}, I_5, I_4	2 :2
E2	1 1 0	-479052	127421360	1	2	+	5, 10, 2	[5, 10, 2]	1, 10, 2	I_5,I_{10},I_2	2 :1
F1	1 –1 1	-81	11797	0	1	_	2, 10, 1	[2, 10, 1]	[2, 2, 1]	I_2,I_{10},I_1	<u> </u>
G1	1 1 1	-14	75	1	1	_	10, 2, 1	10, 2, 1	10, 2, 1	I_{10},I_{2},I_{1}	
74 4	1		N = 744 =	= 2	$3 \cdot 3$. 31	(7 iso	geny clas	ses)		744
A1	0 - 1 0	4	-3	1	1	_	4, 2, 1	0, 2, 1	2, 2, 1	III,I_2,I_1	
B1	0 1 0	-279	-1890	0	2	+	4, 3, 1	[0, 3, 1]	[2, 3, 1]	III,I_3,I_1	2 :2
B2	0 1 0	-284	-1824	_	4	+	8, 6, 2	0, 6, 2	2, 6, 2	I_1^*, I_6, I_2	2:1,3,4
B3	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-904	8096	0			10, 12, 1	, ,	[2, 12, 1]	III^*,I_{12},I_1	
B4	0 1 0	256		0	<u>-</u>	— 	$\frac{10, 3, 4}{10, 10}$	$\begin{bmatrix} 0, 3, 4 \\ -2, -2, -1 \end{bmatrix}$	$\begin{bmatrix} 2, 3, 2 \\ -2, -1 \end{bmatrix}$		2 : 2
C1	0 1 0	8	89	<u> </u>	1		4,8,1	0,8,1	[2, 8, 1]	III,I ₈ ,I ₁	
D1	0 - 1 0	936	-25839	0	1		4, 6, 5	[0, 6, 5]	[2, 2, 1]	III,I_6,I_5	
E1	0 - 1 0	-32	-84	0	1	_	11, 3, 1	0,3,1	1,1,1	II^*,I_3,I_1	<u> </u>
F1	0 - 1 0	-140	753	1	1	_	4,4,3	[0,4,3]	[2, 2, 3]	III,I_4,I_3	<u> </u>
G1	0 1 0	-96	333	1	1	_	4, 6, 1	0, 6, 1	2, 6, 1	III,I_6,I_1	
747	7		N = 747	· =	$3^2 \cdot$	83	(5 isog	eny classe	es)		747
A1	1 -1 1	-56	-134	1	2	+	9, 1	0,1	2, 1	III^*,I_1	2 :2
A2	1 - 1 1	-191	892	1	2	+	9, 2	0, 2	2, 2	III^*,I_2	2 :1
B1	1 - 1 0	-6	7	0	2	+	3, 1	0, 1	2,1	III,I_1	2 :2
B2	1 - 1 0	-21	-26	0	2	+	3,2	0, 2	$\begin{bmatrix} 2,2 \\ \end{bmatrix}$		2 :1
C1	1 - 1 0	-495	-4118	1	1	_	9,1	3,1	[2, 1]	I_3^*,I_1	<u> </u>
D1	1 - 1 0	9	4	1	1	_	6,1	0,1	$\begin{bmatrix} 1,1 \end{bmatrix}$	I_0^*,I_1	<u> </u>
E1	1 - 1 1	13	-12	1	1	_	7,1	1,1	2,1	I_1^*,I_1	
748	3		N = 748	= 2	$2^2 \cdot 1$	1 • 1	17 (1 is	sogeny cla	ass)		748
A1	0 0 0	-496	-4252	0	1	_	8, 1, 2	0, 1, 2	3, 1, 2	IV^*,I_1,I_2	
749)		N = 74	9 =	= 7 ·]	107	(1 iso	geny class	s)		749
A1	1 0 0	-4	-5	1	1	_	2,1	2, 1	2,1	I_2,I_1	
752	2		N = 75	2 =	= 24	. 47	(1 iso	geny class	s)		752
A1	0 0 0	5	42	1	2	_	14, 1	2,1	4,1	I_{6}^{*},I_{1}	2 :2
A2	0 0 0	-155	714	1	2	+	13, 2	1, 2	4, 2	I_5^*, I_2	2 :1
753	3		N = 753	=	$3 \cdot 2$	51	(3 isog	eny classe	es)		753
A1	0 - 1 1	-4	-3	0	1	_	2,1	2,1	2, 1	I_2,I_1	
B1	0 1 1		20	0	3		6, 1	[6, 1]	6,1	I_6,I_1	3 :2
B2	0 1 1	81	-475	0	1	_	2,3	2,3	2,1	I_2,I_3	3 :1
C1	0 1 1	5	7	1	1	_	4,1	4,1	4,1	I_4,I_1	
75 4	1		N = 754 =	= 2	. 13	. 29	(4 iso	geny clas	ses)		754
A1	1 0 1	-377	2782	0	3	_	1, 3, 2	1, 3, 2	1, 3, 2	I_1, I_3, I_2	3 :2
A2	1 0 1	338	11752	0	1	_	3, 1, 6	3, 1, 6	1, 1, 2	I_3, I_1, I_6	3 : 1

							Imi		1/A)	1 (1)		V . l	T	
		a_2	a_3	a_4	a_6	r	T	<u> </u>	$\overline{\operatorname{ord}(\Delta)}$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenie	
75 ⁴	4				N = 75		= 2 ·	1		ontinued	1		75	4
B1	1	0	1	-10758	428760	1	1	<u> </u>	13, 1, 4	13, 1, 4	$\begin{vmatrix} 1,1,4 \\ \end{vmatrix}$	I_{13}, I_{1}, I_{4}	<u> </u>	
C1	1	0	1	-7	-6		2	+	4, 1, 1	4, 1, 1	2, 1, 1	I_4,I_1,I_1	2 :2	
C2	1		1	13	-30	<u>'</u>	2	— 	2,2,2	[2, 2, 2]	$\frac{1}{1}, \frac{2}{1}, \frac{2}{1}, \frac{2}{1}$	I_2,I_2,I_2	2 : 1	
D1	1	0	0	43	-31	1	1	_	9, 1, 2	9, 1, 2	9, 1, 2	I_9,I_1,I_2		
75 !	5				N = 755	= 5	$5 \cdot 15$	51	(6 isog	eny class	es)		75	<u>5</u>
A1	0	0	1	2	-1	1	1	<u> </u>	1, 1	1,1	1,1	I_1,I_1	<u> </u>	
В1	1	0	1	1	1	1	1	-	1, 1	1, 1	1, 1	I_1,I_1		
$\overline{\text{C1}}$	1	0	1	1	-3	0	2	-	2, 1	2,1	2,1	I_2,I_1	2:2	-
C2	1	0	1	-24	-43	0	2	+	1, 2	1,2	1,2	I_1,I_2	2 :1	
D1	0	1	1	0	1	0	1	-	1, 1	1,1	1,1	I_1,I_1		
E1	0	0	1	-7	7	0	1	-	1, 1	1,1	$\begin{vmatrix} 1 & 1 \end{vmatrix}$	$ ule{I_1,I_1}$	Ī	
F1	0	0	1	-56917	-5226543	0	1	-	13, 1	13, 1	13, 1	I_{13} , I_1	<u>-</u>	-
750	3				N = 756 =	2^{2}	$2 \cdot 3^3$. 7	(6 isc	geny clas	sses)		75	6
A1	0	0	0	-432	3348	1	1	1	8,11,1	1	1,1,1	IV^*,II^*,I_1		
B1	0	0	0	-24	-44	1	1	- +	8, 3, 1	0, 0, 1	1, 1, 1	IV^*,II,I_1	3:2	-
B2	0	0	0	-264	1636	1	3	+	8, 5, 3	0, 0, 3	3, 3, 3	IV^* , IV , I_3	3 : 1	
$\overline{\text{C1}}$	0	0	0	-48	-124	1	1	+	8, 5, 1	0, 0, 1	[3, 1, 1]	$ $ IV^*, IV, I_1	 	-
D1	0	0	0	-216	1188	0	3	+	8,9,1	0, 0, 1	3, 3, 1	$ \overline{\mathrm{IV}^*},\overline{\mathrm{IV}^*},\overline{\mathrm{I}_1} $	3:2	-
D2	0	0	0	-2376	-44172	0	1	+	8, 11, 3	0, 0, 3	1, 1, 3	IV^*,II^*,I_3	3 :1	
E1	0	0	0	9	-2		1	-	8, 3, 1	0, 0, 1	1, 1, 1	IV^*,II,I_1	3:2	
E2	0	0	0	-111 	502	0	3	<u> </u>	8, 5, 3	[0,0,3]	[3, 1, 3]	IV*,IV,I ₃	3 :1	
F1	0		0	81			3					IV^*,IV^*,I_1		
F2	0	0	0	<u>-999</u>	-13554	U	1	_	8, 11, 3	0,0,3	1, 1, 3	IV^*,II^*,I_3	3:1	
758	3				N = 758	= 2	$2 \cdot 37$	79	(2 isog	eny class	es)		75	8
A1	1	0	1	11	0	1	1	<u> </u>	8,1	8,1	2,1	I_8,I_1	<u> </u> 	
B1	1	1	1	-44	-131	0	1	_	4,1	4,1	4, 1	I_4,I_1		
759	9				N = 759 =	3	. 11 .	23	(2 isc	geny clas	sses)		7 5	9
A1	1	1	1	-23	-628	1	2	_	10, 2, 1	10, 2, 1	2, 2, 1	I_{10}, I_2, I_1	2 :2	
A2	1	1	1	-1238	-17152	1	2	+	5, 4, 2	5, 4, 2	1, 4, 2	I_5,I_4,I_2	2:1	
B1	1		0	31	-192		4		8, 2, 1	8, 2, 1	8, 2, 1	I_8,I_2,I_1	2:2	
B2	1		0	-374	-2541	1	8		4, 4, 2	4, 4, 2	4, 4, 2	I_4,I_4,I_2	2:1,3,	
B3 B4	1 1		0	-5819 -1409	-171336 17538	1	$\begin{array}{ c c }\hline 4 \\ 4 \end{array}$		2, 2, 4 2, 8, 1	2, 2, 4 $2, 8, 1$	$\begin{bmatrix} 2, 2, 2 \\ 2, 8, 1 \end{bmatrix}$	$egin{array}{c} { m I}_2, { m I}_2, { m I}_4 \ { m I}_2, { m I}_8, { m I}_1 \end{array}$	$2:2,5, \\ 2:2$	O
B5	1		0	-93104	-10942305		2		1, 1, 2	1, 1, 2	$\begin{bmatrix} 2, 0, 1 \\ 1, 1, 2 \end{bmatrix}$	I_{1},I_{1},I_{2}	2:3	
B6	1	0	0	-5654	-181467		2		1, 1, 8	1, 1, 8	1, 1, 2	I_1, I_1, I_8	2 :3	
760)				N = 760 =	2^{3}	. 5	19	(5 isc	geny clas	sses)		76	60
A1		-1	0	5		0	2	1	4, 2, 1		2, 2, 1	III,I_2,I_1	2 :2	
A2	0	-1	0	-20	20	0	2		8, 1, 2	0, 1, 2	2, 1, 2	I_1^*, I_1, I_2	2:1	
B1	0			-26035	-1626942			Ī —	4, 14, 1	0, 14, 1	[2, 14, 1]	$ $ III, I_{14} , I_{1}	2:2	-
B2	0	1	0 -	-416660	-103658192	0	2	+	8, 7, 2	0, 7, 2	2, 7, 2	${ m I}_{1}^{*}, { m I}_{7}, { m I}_{2}$	2:1	

	a_1	$a_2 a_3$	a_4	a_6	r	T	s ($\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
7 6	0			N = 760 =	= 2	$3 \cdot 5$	5 · 19	9 (coi	ntinued)			7 60
C1	0	0 0	-67	926	0	1	_]	11, 2, 3	0, 2, 3	1, 2, 1	II^{*},I_{2},I_{3}	
D1	0	1 0	-35	58	1	$\frac{1}{2}$	 +	4, 3, 2	[0, 3, 2]	2, 3, 2	$ III,I_3,I_2 $	2:2
D2	0	1 0	60	400	1	2	_	8, 6, 1	0, 6, 1	2, 6, 1		2 :1
E1	0	0 0	-2	21		$\overline{4}$		4, 4, 1	[0, 4, 1]	2, 4, 1	$ $ III, I_4 , I_1	2 :2
E2	0	0 0	-127	546		4		8, 2, 2	0, 2, 2	4, 2, 2		[2:1,3,4]
E3 E4	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$\begin{array}{cc} 0 & 0 \\ 0 & 0 \end{array}$	$-227 \\ -2027$	$ -434 \\ 35126 $		$\frac{2}{2}$		10, 1, 4 $10, 1, 1$	$0, 1, 4 \ 0, 1, 1$		$\begin{array}{c} III^*,I_1,I_4 \\ III^*,I_1,I_1 \end{array}$	
							'	-))	-))	, ,	, 1, 1	
76				$N = 762 = 2 \cdot$			7	(7 isog	eny classe	es)	<u> </u>	762
A1	1	0 1	-6 	-8	0	1		5, 1, 1	$\begin{bmatrix} 5, 1, 1 \end{bmatrix}$	1,1,1	I_5,I_1,I_1	
B1	1	0 1	-17677	-9208	0	1	+ 3	35, 4, 1	35, 4, 1	1,4,1	I_{35}, I_4, I_1	
C1	1	0 1	-10	-10	1	1	+	1,4,1	$\begin{bmatrix} 1, 4, 1 \end{bmatrix}$	1,4,1	I_1,I_4,I_1	
D1	1	1 1	-21	27	1	1	+	5, 2, 1	5, 2, 1	5, 2, 1	I_5,I_2,I_1	
E1	1	0 0	-267	1521	1	1	+ 1	11, 6, 1	11, 6, 1	11, 6, 1	I_{11}, I_{6}, I_{1}	
F1		0 0	-8	-216				3, 9, 1	, ,	3, 9, 1	I_3,I_9,I_1	3 :2
F2	1	0 0	-2978	'	- '-			1,3,3	' !		'	3 :1
G1		0 0		12401892								
G2	1	0 0-	-22301100	-40701264948	U	1	+	3, 2, 7	3, 2, 7	3, 2, 7	I_3, I_2, I_7	7 :1
7 6	3			N = 763 = 7	7 ·	109)	(1 isoge	eny class)			763
A1	0	0 1	-5	10	1	1	_	3, 1	3, 1	3, 1	I_3,I_1	
7 6	5			$N = 765 = 3^2$. 5	$5 \cdot 1'$	7	(3 isoge	eny classe	es)		765
A1		-1 0	-150	791		2	_	9, 1, 2	0, 1, 2	2 1 2	ттт* т	_
A2	$\begin{bmatrix} 1 \end{bmatrix}$	$-1 \ 0$			\cap			•, -, -	, , ,		III^*, I_1, I_2	
B1	1		-2445	47150	- '-			9, 2, 1	, ,		$ III^*,I_1,I_2 $ $ III^*,I_2,I_1 $	
		$-1 \ 1$	-17	-24	0	2	+ -	9, 2, 1	$\begin{array}{ c c } \hline 0,2,1 \\ \hline 0,1,2 \\ \hline \end{array}$	$\frac{2,2,1}{2,1,2}$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	2 : 1 2 : 2
B2	1	$-1 \ 1$	-17 -272	$ \begin{array}{c c} -24 \\ -1656 \end{array} $	0	$\begin{bmatrix} 2 \\ 2 \end{bmatrix}$	+ - - +	9, 2, 1 $3, 1, 2$ $3, 2, 1$	$ \begin{array}{c c} 0, 2, 1 \\ 0, 1, 2 \\ 0, 2, 1 \end{array} $	$ \begin{array}{c} 2, 2, 1 \\ 2, 1, 2 \\ 2, 2, 1 \end{array} $	$\begin{bmatrix} III^*, I_2, I_1 \\ III, I_1, I_2 \\ III, I_2, I_1 \end{bmatrix}$	2 : 1
B2 C1	1 1	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{r} -17 \\ -272 \\ \hline -77 \end{array} $	$ \begin{array}{c c} -24 \\ -1656 \end{array} $ 276	$\begin{bmatrix} 0 \\ 0 \\ 1 \end{bmatrix}$	$\begin{bmatrix} 2 \\ 2 \\ 2 \end{bmatrix}$	+ - - + - +	$\begin{array}{c} 9, 2, 1 \\ \hline 3, 1, 2 \\ \hline 3, 2, 1 \\ \hline 6, 2, 1 \end{array}$	$\begin{array}{c c} 0, 2, 1 \\ 0, 1, 2 \\ 0, 2, 1 \\ \hline 0, 2, 1 \end{array}$	$\begin{array}{c} 2, 2, 1 \\ \hline 2, 1, 2 \\ 2, 2, 1 \\ \hline -2, 2, 1 \\ \hline 2, 2, 1 \\ \end{array}$	$ \begin{vmatrix} III^*, I_2, I_1 \\ III, I_1, I_2 \\ III, I_2, I_1 \\ \hline I_0^*, I_2, I_1 \end{vmatrix} $	2 : 1
B2	1 1	$-1 \ 1$	-17 -272	$ \begin{array}{c c} -24 \\ -1656 \end{array} $	$\begin{bmatrix} 0 \\ 0 \\ 1 \end{bmatrix}$	$\begin{bmatrix} 2 \\ 2 \\ 2 \end{bmatrix}$	+ - - + - +	$\begin{array}{c} 9, 2, 1 \\ \hline 3, 1, 2 \\ \hline 3, 2, 1 \\ \hline 6, 2, 1 \end{array}$	$ \begin{array}{c c} 0, 2, 1 \\ 0, 1, 2 \\ 0, 2, 1 \end{array} $	$\begin{array}{c} 2, 2, 1 \\ \hline 2, 1, 2 \\ 2, 2, 1 \\ \hline -2, 2, 1 \\ \hline 2, 2, 1 \\ \end{array}$	$\begin{bmatrix} III^*, I_2, I_1 \\ III, I_1, I_2 \\ III, I_2, I_1 \end{bmatrix}$	2 : 1
B2 C1 C2		$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{r} -17 \\ -272 \\ \hline -77 \end{array} $	$ \begin{array}{c c} -24 \\ -1656 \end{array} $ 276	0 0 1 1	$\begin{bmatrix} 2 \\ 2 \\ 2 \\ 2 \end{bmatrix}$	+ + +	9, 2, 1 3, 1, 2 3, 2, 1 6, 2, 1 6, 4, 2	$\begin{array}{c c} 0, 2, 1 \\ 0, 1, 2 \\ 0, 2, 1 \\ \hline 0, 2, 1 \end{array}$	$\begin{array}{c} 2, 2, 1 \\ \hline 2, 1, 2 \\ 2, 2, 1 \\ \hline -2, 2, 1 \\ \hline 2, 2, 1 \\ 2, 4, 2 \end{array}$	$ \begin{vmatrix} III^*, I_2, I_1 \\ III, I_1, I_2 \\ III, I_2, I_1 \\ \hline I_0^*, I_2, I_1 \end{vmatrix} $	2 : 1
B2 C1	6	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{r} -17 \\ -272 \\ \hline -77 \end{array} $		$\begin{bmatrix} 0 & 0 & 0 \\ 0 & 1 & 1 \\ 1 & 1 & 1 \end{bmatrix}$	$\begin{bmatrix} 2 \\ 2 \\ 2 \\ 2 \end{bmatrix}$	+ + +	9, 2, 1 3, 1, 2 3, 2, 1 6, 2, 1 6, 4, 2	$ \begin{array}{c c} 0, 2, 1 \\ 0, 1, 2 \\ 0, 2, 1 \\ 0, 2, 1 \\ 0, 4, 2 \end{array} $	$\begin{array}{c} 2, 2, 1 \\ \hline 2, 1, 2 \\ 2, 2, 1 \\ \hline -2, 2, 1 \\ \hline 2, 2, 1 \\ 2, 4, 2 \end{array}$	$ \begin{vmatrix} III^*, I_2, I_1 \\ III, I_1, I_2 \\ III, I_2, I_1 \\ \hline I_0^*, I_2, I_1 \end{vmatrix} $	2:1 2:2 2:1 2:2 2:1
B2 C1 C2	6 1	-1 1 -1 1 -1 1	$ \begin{array}{r} -17 \\ -272 \\ \hline -77 \\ -32 \end{array} $		$\begin{bmatrix} 0 & 0 & 0 \\ 0 & 1 & 1 \\ 1 & 1 & 0 \end{bmatrix}$	2 2 2 2 383 1	+ +	$\begin{array}{c} 9, 2, 1 \\ \hline 3, 1, 2 \\ \hline 3, 2, 1 \\ \hline 6, 2, 1 \\ \hline 6, 4, 2 \\ \hline \\ (1 \text{ isoge} \\ \hline 11, 1 \\ \end{array}$	0, 2, 1 0, 1, 2 0, 2, 1 0, 2, 1 0, 4, 2 eny class)	$ \begin{array}{c} 2, 2, 1 \\ 2, 1, 2 \\ 2, 2, 1 \\ \hline 2, 2, 1 \\ 2, 2, 1 \\ 2, 4, 2 \end{array} $ $ 1, 1$	$\begin{array}{c c} III^*,I_2,I_1 \\ \hline III,I_1,I_2 \\ III,I_2,I_1 \\ \hline I_0^*,I_2,I_1 \\ I_0^*,I_4,I_2 \\ \end{array}$	2:1 2:2 2:1 2:2 2:1
B2 C1 C2 76 A1	6 1 8	-1 1 -1 1 -1 1	$ \begin{array}{r} -17 \\ -272 \\ \hline -77 \\ -32 \end{array} $		$ \begin{array}{c c} 0 & 0 \\ 0 & 1 \\ 1 & 1 \end{array} $ $ \begin{array}{c c} 2 & \cdot \\ 0 & 0 \end{array} $	$ \begin{array}{c c} 2 \\ 2 \\ 2 \\ 2 \end{array} $ $ \begin{array}{c} 383 \\ 1 \end{array} $	+ +	$\begin{array}{c} 9, 2, 1 \\ \hline 3, 1, 2 \\ \hline 3, 2, 1 \\ \hline 6, 2, 1 \\ \hline 6, 4, 2 \\ \hline \\ (1 \text{ isoge} \\ \hline 11, 1 \\ \end{array}$	0, 2, 1 0, 1, 2 0, 2, 1 0, 2, 1 0, 4, 2 eny class)	$ \begin{array}{c} 2, 2, 1 \\ 2, 1, 2 \\ 2, 2, 1 \\ \hline 2, 2, 1 \\ 2, 2, 1 \\ 2, 4, 2 \end{array} $ $ 1, 1$	$\begin{array}{c} \text{III*,I}_{2},\text{I}_{1} \\ \text{III,I}_{1},\text{I}_{2} \\ \text{III,I}_{2},\text{I}_{1} \\ \hline I_{0}^{*},\text{I}_{2},\text{I}_{1} \\ I_{0}^{*},\text{I}_{4},\text{I}_{2} \\ \end{array}$	2:1 2:2 2:1 2:2 2:1
B2 C1 C2 76 A1	6 1 8	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{r} -17 \\ -272 \\ \hline -77 \\ -32 \end{array} $		$ \begin{array}{c c} 0 & \\ 0 & \\ 1 & \\ 1 & \\ \end{array} $ $ \begin{array}{c c} 2 & \\ 0 & \\ \end{array} $	$\begin{bmatrix} 2 \\ 2 \\ 2 \\ 2 \end{bmatrix}$ $\begin{bmatrix} 2 \\ 383 \\ 1 \end{bmatrix}$	+ +	9,2,1 3,1,2 3,2,1 6,2,1 6,4,2 (1 isoge 11,1	0, 2, 1 0, 1, 2 0, 2, 1 0, 2, 1 0, 4, 2 eny class) 11, 1	$ \begin{array}{c} 2,2,1\\ 2,1,2\\ 2,2,1\\ -2,2,1\\ 2,4,2 \end{array} $ $ 1,1$	$\begin{array}{c c} III^*,I_2,I_1\\ \hline III,I_1,I_2\\ III,I_2,I_1\\ \hline I_0^*,I_2,I_1\\ I_0^*,I_4,I_2\\ \hline \\ I_{11},I_1\\ \end{array}$	$egin{array}{c cccc} 2 : 1 & & & \\ \hline 2 : 2 & & & \\ \hline 2 : 1 & & & \\ \hline 2 : 2 & & & \\ \hline 2 : 1 & & & \\ \hline 766 & & & & \\ \hline \end{array}$
B2 C1 C2 76 A1 A1 A2 B1	6 1 8 0 0	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{r} $		$ \begin{array}{c c} 0 & 0 \\ 0 & 1 \\ 1 & 1 \end{array} $ $ \begin{array}{c c} 2 & \cdot & \\ \hline 0 & & \\ \hline 1 & 1 & \\ 1 & 1 & \\ \hline 1 & 1 & \\ 1 & 1 & \\ \hline 1 & 1 & \\ 1 & 1 & \\ \hline 1 & 1 & \\ 1 & 1 & \\ \hline 1 & 1 & \\ \hline 1 & 1 & \\ \hline 1 & 1 & \\ 1 & 1 & \\ \hline 1 & 1 & \\ 1 & 1 & \\ \hline 1 & 1 & \\ 1 & 1 & \\ \hline 1 & 1 & \\ 1 & 1 & \\ \hline 1 & 1 & \\ 1 & 1 & \\ \hline 1 & 1 & \\ 1 & 1 &$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	+ + + (8	9,2,1 3,1,2 3,2,1 6,2,1 6,4,2 (1 isogether) 11,1 8 isogenter) 9,2 15,4 9,2	$\begin{array}{c c} 0, 2, 1 \\ 0, 1, 2 \\ 0, 2, 1 \\ 0, 2, 1 \\ 0, 4, 2 \end{array}$ eny class) $\begin{array}{c c} 11, 1 \\ y \text{ classes} \\ 0, 2 \\ 0, 4 \\ 0, 2 \end{array}$	$ \begin{array}{c} 2,2,1\\ 2,1,2\\ 2,2,1\\ 2,2,1\\ 2,4,2 \end{array} $ $ \begin{array}{c} 1,1\\ 2,2\\ 2,2\\ 2,2\\ 2,2 \end{array} $	$\begin{array}{c c} III^*,I_2,I_1 \\ III,I_1,I_2 \\ III,I_2,I_1 \\ \hline I_0^*,I_2,I_1 \\ I_0^*,I_4,I_2 \\ \hline \\ I_{11},I_1 \\ \hline \\ III,I_2 \\ III^*,I_4 \\ \hline \\ III,I_2 \\ \hline \\ III,I_2 \\ \hline \end{array}$	$ \begin{array}{c c} 2:1 \\ \hline 2:2 \\ 2:1 \\ \hline 2:2 \\ 2:1 \\ \hline 766 \\ \hline 2:2 \\ 2:1 \\ \hline 2:2;5:3 \\ \hline \end{array} $
B2 C1 C2 76 A1 A1 A2 B1 B2	6 1 8 0 0 0	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{r} -17 \\ -272 \\ \hline -77 \\ -32 \end{array} $ $ \begin{array}{r} -13 \\ \hline -13 \\ \hline 1 \\ -29 \\ \end{array} $		$ \begin{array}{c c} 0 & \\ 0 & \\ 1 & \\ 1 & \\ 0 & \\ 2^8 & \\ 1 & \\ $	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	+ - + - - - - - + - - - - - - - - - - -	9,2,1 $3,1,2$ $3,2,1$ $6,2,1$ $6,4,2$ (1 isogeomorphises) $9,2$ $15,4$ $9,2$ $15,1$	$\begin{array}{c c} 0, 2, 1 \\ 0, 1, 2 \\ 0, 2, 1 \\ 0, 2, 1 \\ 0, 4, 2 \end{array}$ eny class) $\begin{array}{c} 11, 1 \\ y \text{ classes} \\ 0, 2 \\ 0, 4 \\ 0, 2 \\ 0, 1 \end{array}$	$ \begin{array}{c} 2,2,1\\ 2,1,2\\ 2,2,1\\ -2,2,1\\ 2,4,2 \end{array} $ $ \begin{array}{c} 1,1\\ 2,2\\ 2,2\\ -2,2\\ 2,1 \end{array} $	$\begin{array}{c c} III^*,I_2,I_1\\ \hline III,I_1,I_2\\ III,I_2,I_1\\ \hline I_0^*,I_2,I_1\\ I_0^*,I_4,I_2\\ \hline \\ I_{11},I_1\\ \hline \\ III,I_2\\ III^*,I_4\\ \hline \\ III,I_2\\ III^*,I_1\\ \hline \end{array}$	768 2:2 2:1 766 2:2 2:1 2:1 2:4 2:4 2:4 2:4 2:4 2:4 2:4 2:4 2:4 2:4
B2 C1 C2 76 A1 A1 A2 B1	6 1 8 0 0 0 0	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{r} -17 \\ -272 \\ \hline -77 \\ -32 \end{array} $ $ \begin{array}{r} -13 \\ \hline -13 \\ \hline -29 \\ -159 \end{array} $		$\begin{bmatrix} 0 & 0 & 0 \\ 0 & 0 & 1 \\ 1 & 1 & 1 \\ 1 & 1 & 1 \\ 1 & 1 & 1$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	+ + + (8	9,2,1 3,1,2 3,2,1 6,2,1 6,4,2 (1 isogether) 11,1 8 isogenher) 9,2 15,4 9,2 15,1 9,10	$\begin{array}{c c} 0, 2, 1 \\ 0, 1, 2 \\ 0, 2, 1 \\ 0, 2, 1 \\ 0, 4, 2 \end{array}$ eny class) $\begin{array}{c c} 11, 1 \\ y \text{ classes} \\ 0, 2 \\ 0, 4 \\ 0, 2 \\ 0, 1 \\ 0, 10 \end{array}$	$ \begin{array}{c} 2,2,1\\ 2,1,2\\ 2,2,1\\ 2,2,1\\ 2,4,2 \end{array} $ $ \begin{array}{c} 1,1\\ 2,2\\ 2,2\\ 2,2\\ 2,1\\ 2,2 \end{array} $	$\begin{array}{c c} III^*,I_2,I_1\\ III,I_1,I_2\\ III,I_2,I_1\\ \hline I_0^*,I_2,I_1\\ I_0^*,I_4,I_2\\ \hline\\ I_{11},I_{1}\\ \hline\\ III,I_{2}\\ III^*,I_{4}\\ \hline\\ III,I_{2}\\ III^*,I_{1}\\ III,I_{10}\\ \end{array}$	$\begin{array}{c c} 2:1 \\ \hline 2:2 \\ 2:1 \\ \hline 2:2 \\ 2:1 \\ \hline \\ 766 \\ \hline \\ 2:2 \\ 2:1 \\ \hline \\ 2:2; 5:3 \\ 2:1; 5:4 \\ 2:4; 5:1 \\ \end{array}$
B2 C1 C2 76 A1 A1 A2 B1 B2 B3	6 1 8 0 0 0 0 0 0	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{r} -17 \\ -272 \\ \hline -77 \\ -32 \end{array} $ $ \begin{array}{r} -13 \\ \hline -13 \\ \hline 1 \\ -29 \\ \end{array} $		$\begin{bmatrix} 0 & 0 & 0 \\ 0 & 0 & 1 \\ 1 & 1 & 1 \\ 1 & 1 & 1 \\ 1 & 1 & 1$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	+ (8	9,2,1 $3,1,2$ $3,2,1$ $6,2,1$ $6,4,2$ (1 isogeomorphises) $9,2$ $15,4$ $9,2$ $15,1$	$\begin{array}{c c} 0, 2, 1 \\ 0, 1, 2 \\ 0, 2, 1 \\ 0, 2, 1 \\ 0, 4, 2 \end{array}$ eny class) $\begin{array}{c} 11, 1 \\ y \text{ classes} \\ 0, 2 \\ 0, 4 \\ 0, 2 \\ 0, 1 \end{array}$	$ \begin{array}{c} 2,2,1\\ 2,1,2\\ 2,2,1\\ -2,2,1\\ 2,4,2 \end{array} $ $ \begin{array}{c} 1,1\\ 2,2\\ 2,2\\ -2,2\\ 2,1 \end{array} $	$\begin{array}{c c} III^*,I_2,I_1\\ \hline III,I_1,I_2\\ III,I_2,I_1\\ \hline I_0^*,I_2,I_1\\ \hline I_0^*,I_4,I_2\\ \hline \\ I_{11},I_{1}\\ \hline \\ I_{11},I_{1}\\ \hline \\ III,I_{2}\\ \hline \\ III,I_{2}\\ \hline \\ III,I_{10}\\ \hline \\ III,I_{10}\\ \hline \\ III,I_{10}\\ \hline \\ III^*,I_{5}\\ \hline \end{array}$	768 2:2 2:1 766 2:2 2:1 2:1 2:4 2:4 2:4 2:4 2:4 2:4 2:4 2:4 2:4 2:4

								1	- (.)			T	1 1
	a_1	a_2	a_3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
76	8				N =	76	i8 =	= 2	$8 \cdot 3$ (co	ontinued)			768
D1	0	1	0	-7	5	0	2	+	9,1	0,1	2,1	III,I_1	2:2;5:3
D2	0	1	0	3	27	0	2	_	15, 2	0, 2	2, 2	$\mathrm{III}^*, \mathrm{I}_2$	2:1; 5:4
D3	0		0	-647	-6555			+	9,5	0, 5	2,5	III,I_5	2:4;5:1
D4	0	1	0	-637	-6757	0	2	<u> -</u>	15, 10	0, 10	[2, 10]	III^*,I_{10}	2:3;5:2
E1	0 -	-1	0	-3	- 9			-	9,4	0, 4	2, 2	$_{ m III,I_4}$	2:2
E2	0 -	-1	0	-93	-315	0	2	+	15, 2	0, 2	2, 2	III^*,I_2	2:1
$\overline{F1}$	0	-1^{-1}	0	-7	-5	0	2	+	9,1	[0, 1]	[2,1]	$ $ III, I_1	2:2;5:3
F2	0 -	-1	0	3	-27	0	2	_	15, 2	0, 2	2, 2	$\mathrm{III}^*, \mathrm{I}_2$	2:1;5:4
F3		-1		-647	6555			+	9,5	0,5	2, 1	III,I_5	2:4;5:1
F4	0	-1	0	-637	6757	0	2	<u> </u> -	15, 10	[0, 10]	$\begin{bmatrix} 2,2 \end{bmatrix}$	$\prod_{i=1}^{n} III^*, I_{10}$	2:3;5:2
G1	0	1	0	-3	9	1	2	-	9,4	0, 4	2,4	$_{ m III,I_4}$	2:2
G2	0	1	0	-93	315	1	2	+	15, 2	0, 2	2, 2	III^*,I_2	2:1
H1	0	1	0	1	-3	$\overline{1}$	2	Ī-	9, 2	0, 2	2,2	$_{ m III,I_2}$	2:2;5:3
H2	0	1	0	-29	-69	1	2	+	15, 1	0, 1	2, 1	$\mathrm{III}^*,\!\mathrm{I}_1$	2:1;5:4
H3	0		0	-159	765	1	2	_	9, 10	0, 10	2, 10	III,I_{10}	2:4;5:1
H4	0	1	0	-2589	49851	1	2	+	15, 5	0, 5	2,5	III^*,I_5	2:3;5:2
77	0				N = 770 =	2	. 5 .	7 .	11 (7)	isogeny cl	asses)		770
A1	1	1	0	-3	-7	1		· 	2, 1, 2, 1	2, 1, 2, 1	<u> </u>	I_2, I_1, I_2, I_1	2 :2
A2	1		0	-73	-273			$ _{+}$	1, 2, 1, 2	$\begin{bmatrix} 2, 1, 2, 1 \\ 1, 2, 1, 2 \end{bmatrix}$		I_1, I_2, I_1, I_2	
B1	1		1	 -914	10596	-		<u>'</u> –	6, 1, 6, 1	$\begin{bmatrix} 6, 1, 6, 1 \end{bmatrix}$	<u> </u>		
B1 B2	1	0	1	-914 -14634	680132				3, 2, 3, 2	$\begin{bmatrix} 0, 1, 0, 1 \\ 3, 2, 3, 2 \end{bmatrix}$	$\begin{bmatrix} 2, 1, 6, 1 \\ 1, 2, 3, 2 \end{bmatrix}$		2 :2; 3 :3 2 :1; 3 :4
B3	1	0	1	2271	56852					$\begin{bmatrix} 3, 2, 3, 2 \\ 18, 3, 2, 3 \end{bmatrix}$		$I_{18}, I_{3}, I_{2}, I_{3}$	
B4	1	0	1	-15649	580116				9, 6, 1, 6	9, 6, 1, 6		I_9,I_6,I_1,I_6	
$\bar{C}1$	1 - 1	-1^{-1}		-12089	-612755	' - '		<u>'</u> –		'	'	$ I_8,I_5,I_8,I_1 $	
C2				-204169	-35456067								
C3					-2271693567								
C4					-31495495								
D1		0		32	558	- :						I_{8},I_{4},I_{1},I_{2}	
D2		0		-848								I_4, I_8, I_2, I_1	
E1	' - -	 -1		-29		· - ·		<u> </u>		'	'	$ I_{16},I_1,I_2,I_1 $	
E2		$-1 \\ -1$		-29 -1309					, , ,	, , ,	, , ,	I_{8},I_{2},I_{4},I_{2}	
E3		-1		-20909								I_4,I_1,I_2,I_4	
E4	1 -	-1	0	-2189								I_4, I_4, I_8, I_1	
F1	1	0	0	-56		-				<u> </u>		I_{12}, I_2, I_3, I_2	
F2	1			-3576	81280							$I_{6}, I_{4}, I_{6}, I_{1}$	
F3	1		0	504	-84560			ı				I_4, I_6, I_1, I_6	
F4	1	0	0	-26116	-1580604	1	2					I_2, I_{12}, I_2, I_3	
G1	1	0	0	10	100	0	6	Ī_	6, 3, 2, 1	[6, 3, 2, 1]	[6, 3, 2, 1]	I_{6},I_{3},I_{2},I_{1}	[2:2;3:3]
G2			0	-270	1612			ı				I_3, I_6, I_1, I_2	
G3			0	-90				_	2, 1, 6, 3	2, 1, 6, 3	2, 1, 6, 1	I_2, I_1, I_6, I_3	2:4;3:1
G4	1	0	0	-3520	-80238	0	2	+	1, 2, 3, 6	1, 2, 3, 6	1, 2, 3, 2	I_1, I_2, I_3, I_6	2:3;3:2
77	4				N = 774 =	- 9	. 3	2.	43 (9 is	sogeny cla	sses)		774
A1		${-1}$	Ω	57		_			$\frac{43}{4,3,3}$		2, 2, 3	I_4 , III , I_3	1
A1 A2		$-1 \\ -1$		-1878				ı		12, 0, 3		I_{12},III^*,I_1	
114	1	1	J	1010	90300				, o, r	12,0,1	-, -, ·	-12,,-1	3.1

				Imi	1	1/4)	1 (1)		T7 1 ·	
$a_1 \ a_2 \ a_3$	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
774		N = 774	l =	$2 \cdot 3$	8^2 .	43 (co	ntinued)			774
B1 1 -1 0	-216	832	0	2	+	12, 7, 1	12, 1, 1	2, 2, 1	I_{12},I_1^*,I_1	2 :2
$\begin{bmatrix} B2 & 1 & -1 & 0 \\ B2 & 1 & 1 & 0 \end{bmatrix}$	-3096	67072		4	+		6, 2, 2	2, 4, 2	I_6, I_2^*, I_2	2:1,3,4
B3 1 -1 0 B4 1 -1 0	-49536 -2736	4255960 82984		$\begin{array}{c c} 2 \\ 2 \end{array}$	+	3, 7, 1 $3, 10, 4$	$\frac{3,1,1}{3,4,4}$	$\begin{bmatrix} 1, 4, 1 \\ 1, 4, 2 \end{bmatrix}$	I_3,I_1^*,I_1	2:2 2:2
!			<u> </u>	 -	 		$\begin{bmatrix} 3, 4, 4 \\ 2, 10, 1 \end{bmatrix}$	$\begin{bmatrix} 1, 4, 2 \\ 2, 4, 1 \end{bmatrix}$	$ I_3, I_4^*, I_4 $	2 .
!		-96224252 	<u> </u>	1	<u>'</u>	2,25,1	$\begin{bmatrix} 2, 19, 1 \\ \\ 14, 7 \end{bmatrix}$	$\begin{bmatrix} 2, 4, 1 \\ - & - \end{bmatrix}$	$ I_2,I_{19}^*,I_1$	
$\begin{array}{c cccc} D1 & 1 & -1 & 0 \\ D2 & 1 & -1 & 0 \end{array}$	1431 _539109	-46899 152510121	1 1	$\begin{array}{ c c } 1 \\ 1 \end{array}$	_	14, 13, 1 2, 7, 7	$egin{array}{c} 14,7,1 \ 2,1,7 \end{array}$	$2, 2, 1 \\ 2, 2, 7$	$egin{array}{c} I_{14}, I_7^*, I_1 \ I_2, I_1^*, I_7 \end{array}$	7:2 7:1
$\begin{bmatrix} E1 & 1 & 1 & 0 \\ E1 & 1 & -1 & 0 \end{bmatrix}$	-18	0	1	$\begin{bmatrix} 1\\2 \end{bmatrix}$	 +		$\begin{bmatrix} 2, 1, 1 \\ 2, 1, 1 \end{bmatrix}$	$\begin{bmatrix} 2, 2, 1 \\ 2, 4, 1 \end{bmatrix}$	<u> </u>	2 : 2
$\begin{bmatrix} E1 & 1 - 1 & 0 \\ E2 & 1 - 1 & 0 \end{bmatrix}$	-13	-54		$\frac{2}{2}$	_	1, 8, 2	1, 2, 2	1,4,2	$\begin{array}{c c} I_2, I_1^*, I_1 \\ I_1, I_2^*, I_2 \end{array}$	2 : 2 2 : 1
F1 1 –1 1	-209	1217	! - 1	3	<u>'</u>	12, 3, 1	$\begin{array}{c c} 1 & 2 & 2 & 2 & 2 & 2 & 2 & 2 & 2 & 2 &$	12, 2, 1	$ I_{12},III,I_{1} $	3 : 2
F2 1 -1 1	511	6049		1	_	4, 9, 3	4,0,3	4, 2, 3	I_{4},III^{*},I_{3}	
G1 1 –1 1	22	105	1	1	· —	6, 7, 1	[6, 1, 1]	6, 4, 1	$ I_6, I_1^*, I_1 $	<u>:</u>
H1 1 –1 1	-17249	-866127	<u> </u>	2	' +	14, 13, 1	$\begin{bmatrix} 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 $	14, 2, 1	<u> </u>	2 : 2
H2 1 - 1 1	-11489			$\frac{1}{2}$		7, 20, 2	7, 14, 2	7, 4, 2	I_7,I_{14}^*,I_2	2 :1
I1 1 –1 1	-131	-601	0	1	 —	2, 11, 1	2, 5, 1	2, 2, 1	I_2,I_5^*,I_1	:
		••		2 -	<u> </u>		_			
775	99	N = 775 =		Ι.	L I	·	ny classes	<u> </u>	T + T	775
A1 0 1 1	-33 	94	1	1	— 	7, 1	$\begin{bmatrix} 1, 1 \\ \end{bmatrix}$	2,1	$\begin{bmatrix} I_1^*, I_1 \\ \end{bmatrix}$	
B1 1 0 1	-26	-177		$\begin{array}{c c} 2 \\ 2 \end{array}$	_	8, 1	2,1	4,1	I_2^*, I_1	2 :2
B2 1 0 1	-651		0	<u> </u> 	+ 	7,2	1,2	2,2	$\begin{bmatrix} I_1^*, I_2 \\ - I_2^* \end{bmatrix}$	2 : 1
$ \begin{array}{c ccccc} C1 & 0 & 1 & 1 \\ C2 & 0 & 1 & 1 \end{array} $	242 -21008	1269 -1181231	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$\begin{bmatrix} 1 \\ 1 \end{bmatrix}$	_	$11, 1 \\ 7, 5$	$5, 1 \\ 1, 5$	$4, 1 \\ 4, 5$	$I_5^*, I_1 \ I_1^*, I_5$	5 :2 5 :1
	21000					<u> </u>	,	<u> </u>	11,15	
776		N = 776					I		T	776
A1 0 0 0	-31	66		2	+	8,1	0, 1	4, 1	I_1^*, I_1	2 :2
A2 0 0 0	-11	150	1	2	_	10, 2	0,2	2,2	III^*,I_2	2 :1
777		N = 777 =	3 ·	$7 \cdot 3$	37	(7 isoge	eny classe	s)		777
A1 1 1 0	-16	19	0	2	+	1, 1, 1	1, 1, 1	1, 1, 1	I_1,I_1,I_1	2 :2
A2 1 1 0	-21	0		4		2, 2, 2	, , ,	2, 2, 2		2:1,3,4
A3 1 1 0 A4 1 1 0	$-206 \\ 84$	-1221 105		$\begin{array}{ c c } 2 \\ 4 \end{array}$		$4, 4, 1 \\ 1, 1, 4$		2, 2, 1 $1, 1, 4$	$egin{array}{c} I_4, I_4, I_1 \ I_1, I_1, I_4 \end{array}$	2:2 2:2
'		 1551713040	<u> </u>	<u> </u> -	<u>'</u>		!		! :	!
!			! -	<u>-</u>	— 		10, 13, 1		$ I_{10},I_{13},I_{1} $	
$\begin{bmatrix} C1 & 0 & -1 & 1 \\ 0 & -1 & 1 \end{bmatrix}$	-169 	-792		1	— 	4, 1, 1	4,1,1		$\begin{bmatrix} I_4,I_1,I_1 \\ -\overline{} & -\overline{} \end{bmatrix}$	
D1 1 1 1 D2 1 1 1	$-14 \\ -259$	26 1496		$\begin{array}{ c c }\hline 4\\ 4\end{array}$		1, 4, 1	1, 4, 1 $2, 2, 2$	1, 4, 1	I_1,I_4,I_1	2 :2
$\begin{bmatrix} D2 & 1 & 1 & 1 \\ D3 & 1 & 1 & 1 \end{bmatrix}$	-259 -294			$\frac{4}{2}$		2, 2, 2 $4, 1, 4$, ,	2, 2, 2 2, 1, 4	$egin{array}{c} I_2, I_2, I_2 \\ I_4, I_1, I_4 \end{array}$	
D4 1 1 1	-4144			$\frac{2}{2}$		1, 1, 1		1, 1, 1		2:2
E1 1 0 1	-1312	-18391		2		5, 1, 1	5, 1, 1	5, 1, 1	I_5,I_1,I_1	2 :2
E2 1 0 1	-1317	-18245	1	4	+	10, 2, 2	10, 2, 2	10, 2, 2		2:1,3,4
E3 1 0 1	-2612			4	+	20, 1, 1	20, 1, 1	20, 1, 1		2 :2
:	-102		! -	2	- -	5, 4, 4	$\begin{bmatrix} 5,4,4 \\ -2,-1 \end{bmatrix}$	5, 2, 4	<u>'</u>	2 :2
F1 0 1 1	0	2	<u> </u>	1	<u> </u>	2, 1, 1	[2, 1, 1]		$ I_2,I_1,I_1$	
G1 0 1 1	9	344	1	1	_	4, 5, 1	4, 5, 1	4, 5, 1	I_4, I_5, I_1	

	$a_1 \ a_2 \ a_3$	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
7 8	0		N = 780	=	2^2	. 3 .	$5 \cdot 13$	(4 isogeny	classes)		780
A1 A2		$-105 \\ -60$	450 792	1	2	+	4, 4, 2, 1	0, 4, 2, 1	3, 2, 2, 1	$IV, I_4, I_2, I_1 \\ IV^*, I_2, I_4, I_2$	2:2 2:1
B1	! :	195	-195975	-		-:			<u></u>	$ IV^*,I_{13},I_5,I_1 $:
$\bar{C}1$	$\begin{bmatrix} 0 & 1 & 0 \end{bmatrix}$	 -81	0	1	2	-'	4, 8, 2, 1		!	:	2:2
C2	0 1 0	324	324	1	2	-	8, 4, 4, 2			$ \text{IV}^*, \text{I}_4, \text{I}_4, \text{I}_2 $	2 : 1
D1		19	15							$ $ IV^*,I_3,I_1,I_1	
D2	0 1 0	-221	-1521	0	1	_	8, 1, 3, 3	0, 1, 3, 3	1, 1, 1, 3	IV^*, I_1, I_3, I_3	3 : 1
7 8	1		N = 7	81	=	11 ·	71 (2 i	isogeny cla	asses)		781
A1	0 0 1	-1378	347	0	1	+	9, 1	9,1	1,1	I_9,I_1	
B1	0 0 1	-808	8840	$\overline{1}$	1	+	3, 1	3,1	3,1	I_3,I_1	
78	2		N = 78	2 =	= 2	. 17	$7 \cdot 23$ (5	isogeny c	lasses)		782
A1	1 0 1	5	6	1	2	_	6, 1, 1	6,1,1	2, 1, 1	I_6,I_1,I_1	2 :2
A2	1 0 1	-35	54	1	2	+	3, 2, 2	3, 2, 2	[1, 2, 2]	I_3,I_2,I_2	2 :1
B1	1 0 0	-60	-184	0	1	<u> -</u>	3, 1, 1	3,1,1	$\begin{bmatrix} 3,1,1 \\ -2,-2 \end{bmatrix}$	I_3,I_1,I_1	
C1			-12025559				14, 1, 4	14, 1, 4	14, 1, 2	I_{14},I_1,I_4	2 :2
C2	! :		-11862615	- '		+ 	7,2,8	7,2,8	7,2,2	I_7,I_2,I_8	2 :1
D1	! :	0		0		- 	1,1,1	$\frac{1}{1}$, 1, 1	1,1,1	$\begin{bmatrix} I_1,I_1,I_1 \\ I_2,I_3,I_4 \end{bmatrix}$	
E1 E2	$ \begin{array}{c cccc} 1 & -1 & 1 \\ 1 & -1 & 1 \end{array} $	-529 -5640	385 -161407		$\frac{4}{4}$	++	20, 1, 2 $10, 2, 4$	20, 1, 2 $10, 2, 4$	$\begin{bmatrix} 20, 1, 2 \\ 10, 2, 4 \end{bmatrix}$	$I_{20},I_1,I_2 \ I_{10},I_2,I_4$	$egin{array}{c} {f 2}:2 \ {f 2}:1,3,4 \end{array}$
E3			-101407 -10419775				5, 4, 2	5, 4, 2	5, 4, 2	I_{10},I_{2},I_{4} I_{5},I_{4},I_{2}	2:1,5,4 2:2
E4	1 - 1 1	-2929	-319167	0	2	_	5, 1, 8	5, 1, 8	5, 1, 8	I_5, I_1, I_8	2 :2
78	f 4		N = 78	84	= 2	2^4 .	7^2 (10	isogeny cl	asses)		784
A1	0 1 0	-16	-29	1	1	+	$\overline{4,4}$	0,0	1,1	II,IV	
B1	0 0 0	-343	2401	1	1	+	4,8	0,0	1, 3	II,IV*	<u> </u>
$\bar{C}1$	0 0 0	49	686	0	2	; —	8,7	[0,1]	[2, 2]	$egin{array}{cccccccccccccccccccccccccccccccccccc$	2 :2
C2	0 0 0	-931	10290		4	+	10, 8	0, 2	4, 4	$\mathrm{I}_2^*,\!\mathrm{I}_2^*$	2:1,3,4
C3	$\begin{bmatrix} 0 & 0 & 0 \\ 0 & 0 & 0 \end{bmatrix}$	-2891	-47334		2	+	11, 10	0,4	2,4	I_3^*, I_4^*	2 :2
C4	! :	-14651 	682570	' - '		+ 	11,7	$\begin{bmatrix} 0, 1 \\ \end{bmatrix}$	$\begin{bmatrix} 4,4 \\ \end{bmatrix}$	I ₃ ,I ₁ 	2 :2
D1	!	-800	8359	_ '		+ 	4,10	$\frac{ }{ }$ 0,0	$\begin{bmatrix} 1,1 \\ \end{bmatrix}$	II,II* 	 0 0
E1 E2	$ \begin{array}{c ccc} 0 & -1 & 0 \\ 0 & -1 & 0 \end{array} $	-16 -1976	-1392 -32752		$\frac{2}{2}$	+	10, 7 $11, 8$	$0, 1 \\ 0, 2$	$\begin{array}{c c} 4,4 \\ 4,4 \end{array}$	$egin{array}{c} { m I}_2^*, { m I}_1^* \ { m I}_3^*, { m I}_2^* \end{array}$	2:2 2:1
F1	0 0 0	-7	-7	- :		.' <u>-</u> ' - +	4, 2	0,0	$\begin{bmatrix} 1 & 1 & 1 & 1 \\ 1 & 1 & 1 \end{bmatrix}$		<u>'</u>
G1	$\begin{vmatrix} 0 & -1 & 0 \\ 0 & -1 & 0 \end{vmatrix}$	-114	127	0	1	 +	4,8	$\begin{bmatrix} -0, 0 \end{bmatrix}$	$\begin{bmatrix} 1,1 \end{bmatrix}$	 II,IV*	3 :2
G2	0 - 1 0	-6974	226507	0	1	+	4,8	0,0	1,1	II,IV*	3 :1
H1	0 0 0	-35	98		2	-	12, 3	0,0	4, 2	I_4^* ,III	2:2;7:3
H2	$\begin{bmatrix} 0 & 0 & 0 \\ 0 & 0 & 0 \end{bmatrix}$	-595	5586		2	+	12, 3	0,0	2,2	I*,III ********************************	2:1;7:4
H3 H4	$\begin{bmatrix} 0 & 0 & 0 \\ 0 & 0 & 0 \end{bmatrix}$	-1715 -29155	-33614 -1915998		$\frac{2}{2}$	+	$12, 9 \\ 12, 9$	$0,0 \\ 0,0$	$\begin{array}{c c} 4,2 \\ 2,2 \end{array}$	$I_4^*,III^* \ I_4^*,III^*$	$egin{array}{c} {f 2}:4;{f 7}:1 \ {f 2}:3;{f 7}:2 \end{array}$
I1	$\begin{bmatrix} 0 & 0 & 0 \\ 0 & 1 & 0 \end{bmatrix}$	-2	-1	- :	1	! <u>'</u>	4,2	$\begin{bmatrix} 1 & 0, 0 \\ 0, 0 \end{bmatrix}$;		3 :2
I2	$\begin{bmatrix} 0 & 1 & 0 \\ 0 & 1 & 0 \end{bmatrix}$	-142	-701		1	+	4, 2	0,0	1,1	II,II	3 :1

	a		<i>a</i>		a (m	T		$\frac{1}{\operatorname{ord}(\Lambda)}$	$\operatorname{ord}_{-}(j)$		Kodaira	Isoge	mios
		a_2	a_3	a_4	a_6		' '		<u>`</u>	$\operatorname{ord}_{-}(j)$	c_p	Rodana	Isoge	
78	4				N = 78	4	= 2	4 .	7^2 (c	ontinued)	Γ	T	784
J1	0		0	-408		1	2	_	14,7	2, 1	4,4	I_6^*, I_1^*	2:2;3	
J2 J3	0	1	0	-8248	285396		$\frac{2}{2}$	+	13,8	1,2	2,4	I_5^*, I_2^*	2:1;3	
$\frac{J5}{J4}$	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	1 1	0	3512 -27848	-133260 -1475468	1 1	$\frac{2}{2}$	+	18,9 $15,12$	6, 3 3, 6	4,4 $2,4$	$I_{10}^*, I_3^* \ I_7^*, I_6^*$	$egin{array}{c} {f 2}:4;{f 3} \ {f 2}:3;{f 3} \end{array}$,
J5	0	1	0	-133688	-18913196		2	 -	30,7	18, 1	4, 4	I_{22}^*, I_1^*	2:6;3	
J6	0	1	0 -	-2140728	-1206278060	1	2	+	21,8	9, 2	2, 4	I_{13}^*, I_2^*	2:5;3	
780	6				N = 786 = 2		$3 \cdot 1$.31	(13 i	sogeny cl	lasses)			786
A1	1	1	0	-8	6	1	1	+	1, 1, 1	1, 1, 1	1, 1, 1	I_1,I_1,I_1		
B1	1	1	0	-281	1701	- 1	1	<u>-</u> -	6, 3, 1	[6, 3, 1]	2, 1, 1	I_6,I_3,I_1	:	
$\bar{C}1$	1	1	0	1217	6622405	- 1	1	<u>-</u> -	9,24,1	9,24,1	1, 2, 1	${f I}_{9}, {f I}_{24}, {f I}_{1}$:	
D1	1	 1	0	-3418	-78356	0	1	<u>-</u> -	3, 7, 1	[3, 7, 1]	1, 1, 1	I_3,I_7,I_1	!	
E1	1	 1	0	-29	-3 0	'۔ ا 0		<u> </u>	12, 1, 1	12,1,1	$\begin{array}{c c} 2, 1, 1 \\ 2, 1, 1 \end{array}$	$\left \begin{array}{cccccccccccccccccccccccccccccccccccc$	2:2	
E2	1		0	-349	2365		$\overline{4}$		6, 2, 2	6, 2, 2	2, 2, 2	I_6, I_2, I_2	$[{f 2}:1,3]$	3, 4
E3	1	1	0	-5589	158517			+	3, 4, 1	3, 4, 1	1, 2, 1	$\mathrm{I}_3,\!\mathrm{I}_4,\!\mathrm{I}_1$	2:2	
E4	1	1	0	-229	4165	0	2	<u> </u> -	[3, 1, 4]	$\begin{bmatrix} 3, 1, 4 \end{bmatrix}$	1, 1, 4	I_3,I_1,I_4	2 :2	
F1	1	0	1	-40	92				1, 3, 1	1, 3, 1	1, 3, 1	I_1,I_3,I_1	3 :2	
F2	1	_ 0	1	-145		0	1	+	3, 1, 3	$\begin{bmatrix} 3, 1, 3 \\ \end{bmatrix}$	$\lfloor 1, 1, 1 \rfloor$	I_3,I_1,I_3	3 :1	
G1	1	0	1	-103	-406	1	1	+	11, 1, 1	11, 1, 1	1, 1, 1	I_{11},I_1,I_1		
H1	1	0	1	-17	56	1	1	-	2, 7, 1	2,7,1	2, 7, 1	I_2, I_7, I_1		
I1	1	1	1	-71	-259 0	$\bar{0}$	2	Ī+	6, 3, 1	[6, 3, 1]	6, 1, 1	I_6,I_3,I_1	2:2	
I2	1	1	1	-31	-499	0	2	<u> </u> –	[3, 6, 2]	[3, 6, 2]	3, 2, 2	I_3,I_6,I_2	2:1	
J1	1	1	1	-861	9267	1	1	+	21, 1, 1	21, 1, 1	21, 1, 1	I_{21},I_1,I_1		
K1	1	1	1	10	11	$\overline{1}$	1	Ī-	3, 4, 1	3, 4, 1	3, 2, 1	I_3,I_4,I_1		
L1	1	0	0	-42	36	$\overline{1}$	1	+	7, 5, 1	[7, 5, 1]	7, 5, 1	I_7,I_5,I_1		
$\overline{M1}$	1	0	0	-2135	35913	0	5	Ī+	5, 15, 1	[5, 15, 1]	[5, 15, 1]	I_5, I_{15}, I_1	5:2	
M2	1	0	0	-227045	-41659377	0	1	+	1, 3, 5	1, 3, 5	1, 3, 5	I_1, I_3, I_5	5 : 1	
790	0				N = 790 =	2	$2 \cdot 5$. 7	9 (1 is	sogeny cl	ass)			790
A1	1	0	0	-25	57	1	2	_	8, 2, 1	8, 2, 1	8, 2, 1	I_8,I_2,I_1	2 :2	
A2	1	0	0	-425	3337	1	2	+	4, 1, 2	4, 1, 2	4, 1, 2	I_4,I_1,I_2	2 :1	
79	1				N = 791 =	7	· 1	13	(3 iso	geny clas	sses)			791
A1	1		1	-31	117			_	3, 2	3, 2	1, 2	I_3,I_2	2 :2	
A2	1	0	1	-596	5541	0	2	+	6,1	$\begin{bmatrix} 6,1 \end{bmatrix}$	2,1	I_6,I_1	2:1	
B1	1		1	-38	-93			-	1, 2	1, 2	1, 2	I_1,I_2	2:2	
B2	1	0	1	-603	-5743	0	2	+	2,1	$\begin{bmatrix} 2,1 \end{bmatrix}$	2,1	I_2,I_1	2:1	
C1		-1		-19	-14		4	+	4, 1	4, 1	4, 1	I_4,I_1	2 :2	. ,
C2 C3		$-1_{_{1}}$		-264	-1582			+	2,2	2,2	2,2	I_2,I_2	2:1,3	3, 4
C3 C4		-1 -1		-4219 -229	$ \begin{array}{c c} -104412 \\ -2044 \end{array} $			+	1, 1 $1, 4$	1, 1 $1, 4$	1,1 $1,4$	$egin{array}{c} \mathrm{I}_1, \mathrm{I}_1 \ \mathrm{I}_1, \mathrm{I}_4 \end{array}$	2:2 2:2	
792				- - -	$N = 792 = 2^{5}$. 1	· · · · · · · · · · · · · · · · · · ·	,	<u> </u>	1,7—4	<u> </u>	792
A1	0	Ω	0	-135	-486	- 1		1	$\frac{1}{8,9,1}$	1	2,2,1	I_1^* , III^* , I_1	2 . 2	104
A1 $A2$	0	0		-135 -675	$\frac{-480}{6318}$				0, 9, 1 10, 9, 2		, , ,	$ I_1,III ,I_1$ $ III^*,III^*,I_2 $		
				5.5	3323			L	- , ~ , ~	- , - , -	, -, -	, ,-2		

	a_1	$a_2 a_3$	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
792	2			N = 79	2 =	= 2 ³	$\cdot 3^2$	· 11 (c	continued))		792
B1 B2	0	$\begin{array}{ccc} 0 & 0 \\ 0 & 0 \end{array}$	$-75 \\ 285$	$-74 \\ -578$	0	2 2		10, 7, 1 $11, 8, 2$	$0, 1, 1 \\ 0, 2, 2$	$\begin{bmatrix} 2, 2, 1 \\ 1, 4, 2 \end{bmatrix}$	III^*, I_1^*, I_1 $II^* I^* I_2$	2:2 2:1
C1	0	0 0	 -15	 18	1	$\frac{1}{2}$	<u> </u>		$\begin{bmatrix} 0, 2, 2 \\ -2, -2 \\ 0, 0, 1 \end{bmatrix}$	$\begin{bmatrix} 1, 4, 2 \\ 4, 2, 1 \end{bmatrix}$	$egin{array}{c c} II^*,I_2^*,I_2 \ \hline I_1^*,III,I_1 \end{array}$	$egin{array}{ c c c c c c c c c c c c c c c c c c c$
C2	0	0 0		-234	1	2	+	10, 3, 2	0,0,2	2,2,2	$ III^*,III,I_2 $	
D1 D2	$0 \\ 0$	$\begin{array}{ccc} 0 & 0 \\ 0 & 0 \end{array}$	$-111 \\ -291$	434 -1330	1 1	$\begin{array}{ c c }\hline 4 \\ 4 \end{array}$	+++++++++++++++++++++++++++++++++++++++	8, 7, 1 $10, 8, 2$	$0, 1, 1 \\ 0, 2, 2$	$\begin{bmatrix} 4, 4, 1 \\ 2, 4, 2 \end{bmatrix}$	$egin{array}{c} I_1^*, I_1^*, I_1 \ III^*, I_2^*, I_2 \ \end{array}$	$egin{array}{ c c c c c c c c c c c c c c c c c c c$
D3	0	0 0	-4251	-106666	1	2	+	11, 10, 1	0, 4, 1	1, 4, 1	II^*,I_4^*,I_1	2 :2
D4 E1	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$\begin{array}{ccc} 0 & 0 \\ \hline 0 & 0 \end{array}$	789	$ \begin{array}{r} -8890 \\ -155 \end{array} $	$\begin{bmatrix} 1 \\ 0 \end{bmatrix}$	$\frac{2}{1}$	<u>-</u> -	$ \begin{array}{c} 11,7,4 \\ 4,10,1 \end{array} $	$\begin{bmatrix} 0, 1, 4 \\ -2, -2, -2 \\ 0, 4, 1 \end{bmatrix}$	$\begin{bmatrix} 1, 2, 2 \\ 2, 4, 1 \end{bmatrix}$	$egin{array}{c c} II^*,I_1^*,I_4 \ \hline III,I_4^*,I_1 \end{array}$	$egin{array}{ c c c c c c c c c c c c c c c c c c c$
E2	0	0 0	-399	-2990	0	$\frac{2}{4}$	+		$0, 4, 1 \\ 0, 2, 2$	4, 4, 2	I_1^*, I_2^*, I_2	$\begin{bmatrix} {f 2} : 2 \\ {f 2} : 1, 3, 4 \end{bmatrix}$
E3 E4	$0 \\ 0$	$\begin{array}{cc} 0 & 0 \\ 0 & 0 \end{array}$	$-6339 \\ -939$	-194258 6838	0	2		10, 7, 1 $10, 7, 4$	0, 1, 1	2, 2, 1	\prod_{111*}, I_1^*, I_1	2 :2
F1	0	0 0	-939 -36	 -108	!	$\begin{array}{c c} 4 \\ \hline 1 \end{array}$	 - _	$\frac{10, 7, 4}{8, 6, 1}$	$\begin{bmatrix} 0, 1, 4 \\ -2, -2, -2 \end{bmatrix}$	$\begin{bmatrix} 2, 4, 4 \\ 2, 1, 1 \end{bmatrix}$	$\frac{\left \begin{array}{ccccccccccccccccccccccccccccccccccc$	2 : 2
G1	0	0 0	-72147	7458910	0	$\frac{1}{2}$	<u> </u>	10, 13, 1	!	$\begin{bmatrix} 2, 2, 1 \\ 2, 2, 1 \end{bmatrix}$	$\mid \text{III*,I*,I*}_{7}$	2 : 2
G2	0	0 0	-71787	7537030	0	2		11, 20, 2	0, 14, 2	1, 4, 2	II^*, I_{14}^*, I_2	2 : 1
793	3			N = 793	3 =	: 13 ·	61	(1 isog	geny class)		793
A1		-1 0	-16	-21	1	2	+	1,1	1,1	1,1	I_1,I_1	2 :2
A2	1	-1 0	-11	-38	1	2	_	2,2	2,2	2, 2	I_2,I_2	2 :1
79 4	1			N = 794	=	$2 \cdot 39$	97	(4 isoge	eny classe	s)		794
A1	1	0 1	3	2	2	1	<u></u>	2,1	2,1	2,1	I_2,I_1	
B1 B2	1 1	$\begin{array}{cc} 0 & 0 \\ 0 & 0 \end{array}$	-57 13	161 539	1 1	3	_	$3, 1 \\ 1, 3$	$3, 1 \\ 1, 3$	3,1 $1,3$	$egin{array}{c} I_3,I_1 \ I_1,I_3 \end{array}$	3:2 3:1
C1	1	1 1	4	 -3	!	1	<u> </u>	5,1	$\begin{bmatrix} -1, & 5 \\ 5, & 1 \end{bmatrix}$	$\begin{bmatrix} -1, & 0 \\ 5, & 1 \end{bmatrix}$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	
D1	1	0 0	47	-471	1	3	<u>-</u>	18,1	18,1	18, 1	I_{18},I_1	$ {f 3} : 2 $
D2 D3	1 1	$\begin{array}{ccc} 0 & 0 \\ 0 & 0 \end{array}$	-3473	-79127 -57471035	1 1	3	_	6, 3	6, 3	6, 3	I_6,I_3	3:1,3
Ъэ	1	0 0	-201313	-01411000	1	L		2,1	2,1	2,1	I_2,I_1	3 :2
795				N = 795		1	1	` `	geny class		ı	795
A1 A2	1 1	$\begin{array}{cc} 1 & 0 \\ 1 & 0 \end{array}$	$-8 \\ -53$	$\frac{3}{-168}$		$\begin{array}{ c c }\hline 2\\ 4 \end{array}$	+++++++++++++++++++++++++++++++++++++++	4, 1, 1	4, 1, 1 2, 2, 2	$\begin{bmatrix} 2, 1, 1 \\ 2, 2, 2 \end{bmatrix}$	$egin{array}{c} I_4, I_1, I_1 \ I_2, I_2, I_2 \end{array}$	$egin{array}{c} {f 2}:2 \ {f 2}:1,3,4 \end{array}$
A3	1	1 0	-848	-9867		2	+	1, 4, 1	1 1	1, 2, 1	I_{1},I_{4},I_{1}	2:1,3,4 $2:2$
A4	1	1 0	22	-513	1	2	_	1,1,4	1,1,4	1,1,2	I_1,I_1,I_4	2 :2
B1	0	-1 1	-221	-1198	0	1	_	3,5,1	3, 5, 1	1,1,1	I_3,I_5,I_1	
C1	0	1 1 1 1	-491	15251		3	_		15, 3, 1	15, 1, 1	I_{15}, I_{3}, I_{1}	3:2
C2 D1	$\begin{bmatrix} 0 \\ 1 \end{bmatrix}$	$\begin{array}{ccc} 1 & 1 \\ \hline 0 & 1 \end{array}$	4369 21	$ \begin{array}{r} -387400 \\ -23 \end{array} $!	$\frac{1}{1}$	— _	$\begin{array}{c} 5, 9, 3 \\ -3, 4, 1 \end{array}$	$\begin{bmatrix} 5, 9, 3 \\ -3, 4, 1 \end{bmatrix}$	$\begin{bmatrix} 5, 1, 1 \\ -2, -2 \end{bmatrix}$	$rac{\left \begin{array}{ccc} ext{I}_{5}, ext{I}_{9}, ext{I}_{3} & & \ ext{I}_{3}, ext{I}_{4}, ext{I}_{1} \end{array} ight }{\left \begin{array}{ccc} ext{I}_{3}, ext{I}_{4}, ext{I}_{1} & & \ ext{I}_{3}, ext{I}_{4}, ext{I}_$	$\begin{vmatrix} 3 : 1 \\ 2 : 2 \end{vmatrix}$
D1 $D2$	1	$\begin{array}{ccc} 0 & 1 \\ 0 & 1 \end{array}$	-104	-23 -223		$\frac{2}{4}$	+		$\begin{bmatrix} 3, 4, 1 \\ 6, 2, 2 \end{bmatrix}$	$\begin{bmatrix} 3, 2, 1 \\ 6, 2, 2 \end{bmatrix}$		$\begin{vmatrix} 2 & 2 \\ 2 & 1, 3, 4 \end{vmatrix}$
D3	1	0 1	-1429	-20893	0	2	+	12, 1, 1	12, 1, 1	12, 1, 1	I_{12},I_1,I_1	2 :2
D4	1	0 1	-779	8147	0	2	+	3, 1, 4	3, 1, 4	3, 1, 2	I_3,I_1,I_4	2 :2
797	7			N = 79	97	= 79	7	(1 isoge	eny class)			797

1 1

1

1

1

 I_1

1 0 0

2

A1

	a_1	a_2	a_3	a_4	a_6	- -	Γs	3	ord	(Δ)	ord	$I_{-}(j)$	c_p	Kodaira	-	Isoge	enies
7 9	8				N = 798 = 1	2 ·	3 · '	7 -	. 19	(9	isos	geny (classes)		•		798
A1		1	0	-10	4 1					2,1		$\frac{1}{1,2,1}$	· · · · · ·	I_4, I_1, I_2, I_1	2	: 2	
A2	1	1	0	-150	648				, ,	,	1 '	2, 1, 2		I_2, I_2, I_1, I_2			
B1	1	0	1	-80	-226 0) 2	2 +	- 1	12, 1	, 2, 1	12, 1	1, 2, 1	[2, 1, 2, 1]	$ I_{12},I_1,I_2,I_1 $	2	: 2	
B2	1	_		-400	2846						1	2, 4, 2		I_6, I_2, I_4, I_2			3, 4
B3		0		-6280	191006						1 '	1, 2, 4		I_3,I_1,I_2,I_4			
B4	!	0	-	360	12574 0	- ' -					· – –		:	$ I_3,I_4,I_8,I_1 $			
C1 C2		0		$-92 \\ -22$	326 1 830 1									$I_2,I_5,I_2,I_1 \\ I_1,I_{10},I_1,I_2$			
	¦		-			- ' -					·		:	:	-		
D1 D2		0		-162 -1142	$-476 \begin{vmatrix} 1 \\ 14420 \end{vmatrix}$									${ m I}_4, { m I}_5, { m I}_4, { m I}_1 \ { m I}_2, { m I}_10, { m I}_2, { m I}_2$			R 4
D_3		0		-18152	939764									I_1, I_5, I_1, I_4			J, T
D4				188	46340				, ,	,	1 1	, ,		I_1, I_{20}, I_1, I_1			
E1	1	0	1	-7801	264524	-					·		:	$ I_4,I_9,I_2,I_1 $			3:3
E2	1	_		-7941	254500		6 +	- 2	2, 18	, 1, 2	2, 18	8, 1, 2	2, 18, 1, 2	I_2, I_{18}, I_1, I_2	2	: 1; 3	3 : 4
E3		0		-11176	13046									I_{12}, I_3, I_6, I_3			
E4			1 1	-120936	-16143626							5, 3, 6		$I_{6}, I_{6}, I_{3}, I_{6}$			
E5 E6				-611671 -9786711	-184179718 0 $-11785100294 0$									I_{36}, I_1, I_2, I_1 I_{18}, I_2, I_1, I_2			
F1	!	0	-	-39	-86 0	- ' -					·	$\frac{2}{1}, \frac{1}{2}, \frac{2}{1}$:	$ I_8,I_1,I_2,I_1 $	-:-		
F_2		0		-599	-5686									$\begin{bmatrix} I_8,I_1,I_2,I_1 \\ I_4,I_2,I_1,I_2 \end{bmatrix}$			
G1	!	1	-	-354	-2193 1	- ' -					:		:	$ I_{10},I_{1},I_{2},I_{3} $	-:-		
G_2		1		766	-12049		1 1							I_{5},I_{2},I_{1},I_{6}			
H1	' - <i>-</i>	0	-	-1015		- ' -					· – –		:	$ I_{12},I_7,I_2,I_1 $			
	1			-3255										I_6, I_{14}, I_1, I_2			
I1	1	0	0	3		- ' -					·		·	$ I_8,I_1,I_1,I_1 $			
I2		0		-77	-255 (2, 2, 2		I_4, I_2, I_2, I_2			3, 4
I3		0		-1217	-16443								2, 1, 2, 1	I_2, I_1, I_4, I_1	2	: 2	
I4	1	0	0	-217	893) 4	4 +	- :	2, 4,	1,4	2,4	4, 1, 4	2, 4, 1, 4	I_2, I_4, I_1, I_4	2	: 2	
7 9	9				N = 799	= 1	$17 \cdot$	4	7	(2 is	oger	ny cla	sses)				799
A1	1	1	1	-16	16 (2 +	-	1,	2	1	.,2	1, 2	I_1,I_2	2	: 2	
A2	1	1	1	-251	1426) :	2 +	-	2,	1	2	2, 1	$\begin{bmatrix} 2,1 \end{bmatrix}$	I_2,I_1	2	: 1	
В1		1		-118	418		1 1		3,			3, 2	3, 2	I_3,I_2		: 2	
B2	1	1	1	-353	-2120		2 +	-	6,	1	6	5, 1	6, 1	I_6,I_1	2	: 1	
80	0				N = 800	= 1	2^5 .	5	2	(9 is	oger	ny cla	sses)				800
A1		0		-25	0 1		4 +		6,	6	0	0,0	2,4	III,I_0^*	2	: 2,3	3, 4
	0			-275	-1750				9,			0,0	1, 2	I_0^*, I_0^*		: 1	
	0			-275 100	1750 1		$\begin{bmatrix} 2 & + \\ 2 & - \end{bmatrix}$	-	9,			0, 0	2,2	I_0^*, I_0^* I^* I^*		: 1	
	0		-		0 1	- '	-		12		<u>'</u> – –), 0 	$\frac{1}{1}$ 2, 4	I ₃ ,I ₀ 	" -	: 1	
	0		-		8 1	- ' -	-	- 	9,		: – –), 0 	$\begin{vmatrix} 2,1 \\ -2,2 \end{vmatrix}$	I*,II	<u> </u>		
	0			-158	-812			-	6,			0, 1	2,2	III,I ₁ * ***********************************		: 2	
	0		-	-33 	-1937 1	- '-		- 	12		: – –), 2 	$\frac{1}{1} - \frac{4}{2} - \frac{4}$	$\begin{array}{c c} & I_3^*, I_2^* \\ \hline & \vdots \\ & $: 1	
	0			-125	0 0		1 1		6,			0, 0	2,2	III,III*		: 2	
D_2	0	U	U	500	U	7 4	2 -		12	, <i>9</i>	U	0,0	4,2	I_3^* , III^*	4	: 1	

			11100			11 110 COILV	25 0002 0	002		221
	a_1 a_2 a_3	a_4	a_6	r	T	$s \operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
800)		N =	= 8	00 =	$2^5 \cdot 5^2$ (c	ontinued)			800
E1	0 1 0	-208	-1412	0	1	- 9,8	0,0	1,3	I_0^* , IV^*	
F1	0 -1 0	-8	-8	0	1	-9,2	0,0	1, 1	I_0^* ,II	<u> </u>
$\overline{G1}$	0 -1 0	-158	812	0	2	+6,7	0,1	$\frac{1}{2}, \frac{1}{2}$	III,I*	2 :2
G2	0 - 1 0	-33	1937	0	2	-12,8	0, 2	2, 4	I_3^*, I_2^*	2 :1
H1	0 0 0	-5	0	1	2	+6,3	0,0	2,2	III,III	2 :2
H2	0 0 0	20	0	1	2	-12,3	0,0	2,2	I ₃ ,III	2 :1
I1	0 - 1 0	-208	1412	1	1	-9,8	0,0	2,3	I_0^* , IV^*	
801	L		N = 80)1 =	$=3^{2}$	89 (4 iso	geny class	ses)		801
A1	0 0 1	-3972	-169349	0	1	-23,1	17,1	2,1	I_{17}^*, I_1	
B1	1 –1 1	-14	-12	0	2	+6,1	[0,1]	2,1	$oxed{I_0^*,I_1}$	2 :2
B2	1 –1 1	31	-102	0	2	-6,2	0, 2	2,2	I_0^*, I_2	2 :1
C1	0 0 1	-30	-90	1	1	- 9,1	3, 1	4, 1	I_3^*, I_1	3 :2
C2	0 0 1	240	1233	1	3	-7,3	1,3	4,3	I ₁ ,I ₃	3 :1
D1	1 - 1 0	<u>-9</u>	-14	1	1	-6,1	0,1	1,1	$\mathrm{I}_0^*,\!\mathrm{I}_1$	
802	2		N = 80)2 =	= 2 ·	401 (2 isc	geny class	ses)		802
A1	1 -1 1	2	-1	0	1	- 1,1	1,1	1, 1	${ m I_1,I_1}$	
B1	1 0 0	-9	-11	0	2	+ 2, 1	2,1	2,1	I_2,I_1	2 :2
B2	1 0 0	-19	15	0	2	+ 1,2	1,2	1, 2	I_1,I_2	2 :1
804	1		N = 804	l =	$2^2 \cdot 3$	$3 \cdot 67$ (4 is	sogeny cla	sses)		804
A1	0 -1 0	59	-122	0		-4, 5, 2		3, 1, 2	IV,I_5,I_2	2 :2
A2	0 -1 0	-276	-792		2	<u>:</u>	'		IV^*, I_{10}, I_1	2 :1
B1	0 - 1 0	-1373	-19191	1	1	-8,10,1	0, 10, 1	3, 2, 1	IV^*, I_{10}, I_1	
C1	0 -1 0	-12	24	1	1	-8,1,1	[0, 1, 1]	[3, 1, 1]	IV^*,I_1,I_1	
D1	0 1 0	84	36	1	1	-8,7,1	0, 7, 1	3, 7, 1	IV^*, I_7, I_1	
805	5		N = 80	5 =	$5 \cdot 7$	· 23 (4 is	ogeny clas	sses)		805
A1	0 -1 1	23004	2393001	1	1	-5,11,2		1,1,2	I_5, I_{11}, I_2	
B1	1 –1 1	-163	-758	0	2	+2,3,1	[2, 3, 1]	[2, 1, 1]	I_2,I_3,I_1	2 :2
B2	1 -1 1	-138	-1018	0	2	-1,6,2	1, 6, 2	1, 2, 2	I_1,I_6,I_2	2 :1
C1	1 -1 1	2	2356	0	4	-2, 3, 4		2, 1, 4		2 :2
C2	$ \begin{array}{c cccc} 1 & -1 & 1 \\ 1 & -1 & 1 \end{array} $	-2643	52082	0		+4,6,2		2, 2, 2		2:1,3,4
C3 C4	$\begin{bmatrix} 1 & -1 & 1 \\ 1 & -1 & 1 \end{bmatrix}$	-5518 -42088	-79018 3333906	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$		$\begin{vmatrix} + & 2 & 12 & 1 \\ + & 8 & 3 & 1 \end{vmatrix}$		$\begin{bmatrix} 2, 2, 1 \\ 2, 1, 1 \end{bmatrix}$		2:2 2:2
D1	$\begin{bmatrix} 0 & 0 & 1 \end{bmatrix}$	-13	49	<u>-</u> -	<u>-</u> :	-1,3,2	<u>'</u>	$\begin{bmatrix} 1 & -7 & -7 & -7 \\ 1 & 1, 1, 2 \end{bmatrix}$		<u> </u>
									1, 0, 2	206
806 A1	T	-3		$\frac{\delta}{1}$	$\frac{2\cdot 13}{1}$	$\frac{3 \cdot 31}{ -5,1,2 }$ (6 is			Ţ, Ţ, Ţ,	806
				<u>-</u> -	<u>-</u>	<u>-</u>		$\begin{bmatrix} 1, 1, 2 \\ 1 & 1 & 2 \end{bmatrix}$	¦	<u> </u>
B1	1 1 0	52		<u>-</u> -	1	-11,1,2	<u>' </u>	$\begin{bmatrix} 1, 1, 2 \\ 7, 1, 2 \end{bmatrix}$	$ I_{11}, I_1, I_2 $	<u> </u>
C1	1 0 0	-97 	361	1	1	-5,1,2	!	$\frac{ 5,1,2 }{ 5,1,2 }$	I_5,I_1,I_2	
D1	1 - 1 1	318	-2367	1	1	-11, 3, 2	11, 3, 2	11, 3, 2	I_{11},I_3,I_2	

	a_1 a_2 a_3	a_4	a_6	r T	$s \operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
80	6		N = 806 =	$= 2 \cdot 1$	$3 \cdot 31$ (con	ntinued)			806
E1 E2 E3	1 0 0 1 0 0 1 0 0 -	$ 2511 \\ -25649 \\ -2293609 $	$ \begin{array}{r} 39401 \\ -2195479 \\ -1337178239 \end{array} $		$ \begin{vmatrix} -27, 1, 2 \\ -9, 3, 6 \\ -3, 9, 2 \end{vmatrix} $	27, 1, 2 9, 3, 6 3, 9, 2	$\begin{bmatrix} 27, 1, 2 \\ 9, 3, 6 \\ 3, 9, 2 \end{bmatrix}$	$I_{27},I_1,I_2\\I_9,I_3,I_6\\I_3,I_9,I_2$	3:2 3:1,3 3:2
F1 F2	1 1 1 1 1 1 1	-14105 66885	638919 2264179		$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		$\begin{bmatrix} 5, 5, 2 \\ 1, 1, 10 \end{bmatrix}$	$ \begin{array}{c c} I_5, I_5, I_2 \\ I_1, I_1, I_{10} \end{array} $	5 :2 5 :1
80'	7		N = 807 =	3 · 26	9 (1 isoge	eny class)	T		807
A1 A2	$\begin{bmatrix} 0 & 1 & 1 \\ 0 & 1 & 1 \end{bmatrix}$	-49 -409	$ \begin{array}{c c} 115 \\ -3260 \end{array} $		$\begin{array}{cccc} + & 6, 1 \\ + & 2, 3 \end{array}$	6, 1 2, 3	6, 1 2, 1	$I_6, I_1 \\ I_2, I_3$	3 :2 3 :1
808	8		N = 808 = 2	$2^3 \cdot 10^3$	1 (2 isoge	ny classe	s)		808
A1	0 0 0	-11	-26		- 11,1	0,1	1,1	II^*,I_1	
B1	0 - 1 0	-129	-523	0 1	+ 8,1	0,1	2, 1	$\mathrm{I}_1^*,\!\mathrm{I}_1$	
810	0		N = 810 = 2	$2 \cdot 3^4 \cdot$	5 (8 isoge)	eny classe	s)		810
A1 A2	<u> </u>	-9 66	$ \begin{array}{c c} 15 \\ -100 \end{array} $	0 1	$\begin{vmatrix} - & 1, 4, 3 \\ - & 3, 12, 1 \\ \hline - & - & - & - \end{vmatrix}$	3, 0, 1	$\begin{bmatrix} 1, 1, 3 \\ 1, 1, 1 \end{bmatrix}$	$\begin{matrix} I_1, II, I_3 \\ I_3, II^*, I_1 \end{matrix}$	3:2 3:1
B1 B2		$ \begin{array}{r} 36 \\ -339 \\ \end{array} $	$ \begin{array}{c c} 120 \\ -4555 \end{array} $		$\begin{bmatrix} -3, 4, 6 \\ -9, 12, 2 \end{bmatrix}$	$\begin{vmatrix} 3, 0, 6 \\ 9, 0, 2 \end{vmatrix}$	$\begin{vmatrix} 1, 1, 6 \\ 1, 1, 2 \end{vmatrix}$	$\begin{array}{ c c c c }\hline I_3,II,I_6\\I_9,II^*,I_2\\\hline \end{array}$	3 :2 3 :1
C1 C2		-114 -39489			$\begin{bmatrix} -5, 6, 9 \\ -15, 10, 3 \end{bmatrix}$, ,	$\begin{vmatrix} 1, 3, 9 \\ 1, 3, 3 \end{vmatrix}$	I_{5} , IV, I_{9} I_{15} , IV*, I_{3}	3 :2 3 :1
D1 D2		$-24 \\ 201$	$ \begin{array}{c c} 80 \\ -1315 \end{array} $		$\begin{vmatrix} -4, 6, 3 \\ -12, 10, 1 \end{vmatrix}$	$\begin{vmatrix} 4, 0, 3 \\ 12, 0, 1 \end{vmatrix}$	$\begin{bmatrix} 2, 3, 3 \\ 2, 1, 1 \end{bmatrix}$	$\begin{vmatrix} I_4, IV, I_3 \\ I_{12}, IV^*, I_1 \end{vmatrix}$	3 :2 3 :1
E1 E2	$\begin{vmatrix} 1 & -1 & 1 \\ 1 & -1 & 1 \end{vmatrix}$	7 -83			$\begin{bmatrix} -3, 6, 1 \\ -1, 10, 3 \end{bmatrix}$			$\begin{vmatrix} I_3,IV,I_1\\I_1,IV^*,I_3\end{vmatrix}$	
F1 F2	$\begin{vmatrix} 1 & -1 & 1 \\ 1 & -1 & 1 \end{vmatrix}$	$ \begin{array}{r} 22 \\ -218 \end{array} $			$ \begin{vmatrix} -12, 4, 1 \\ -4, 12, 3 \end{vmatrix} $	′ ′		, , _	$\begin{vmatrix} {f 3}:2\\ {f 3}:1 \end{vmatrix}$
G1 G2			112967 277831		$ \begin{vmatrix} - & 15, 4, 3 \\ - & 5, 12, 9 \end{vmatrix} $, ,	, ,	_ , , ,	$\begin{vmatrix} {f 3} : 2 \\ {f 3} : 1 \end{vmatrix}$
H1 H2		-38 322	$ \begin{array}{c c} 181 \\ -3563 \end{array} $		$ \begin{vmatrix} - & 9, 6, 2 \\ - & 3, 10, 6 \end{vmatrix} $	· · ·		$ \ I_9, IV, I_2 \ \ I_3, IV^*, I_6$	$\begin{vmatrix} 3 : 2 \\ 3 : 1 \end{vmatrix}$
81	1		N = 811	= 811	(1 isogen	ny class)			811
A1	0 0 1	-2	-2	1 1	- 1	1	1	I_1	
813	2		$N = 812 = 2^{2}$	$2 \cdot 7 \cdot 2$	29 (2 isog	eny classe	es)		812
A1	<u> </u>		'-		- 8, 3, 1	!		IV^*,I_3,I_1	
B1	0 - 1 0	-36	232	1 1	- 8,4,1	0,4,1	3, 4, 1	IV^*,I_4,I_1	
813	3		N = 813 = 3	$3 \cdot 271$	(2 isoger	ny classes	s)		813
A1	0 1 1	-2	-1		+ 1,1	1,1	1,1	I_1,I_1	
B1 B2 B3	$\begin{bmatrix} 0 & 1 & 1 \\ 0 & 1 & 1 \\ 0 & 1 & 1 \end{bmatrix}$	-73 -1423 -115243	$ \begin{array}{c} 190 \\ -21113 \\ -15096572 \end{array} $	1 3	$\begin{vmatrix} + & 9, 1 \\ + & 3, 3 \\ + & 1, 1 \end{vmatrix}$	$9, 1 \\ 3, 3 \\ 1, 1$	$9,1 \\ 3,3 \\ 1,1$	$egin{array}{c} I_9, I_1 \ I_3, I_3 \ I_1, I_1 \end{array}$	3:2 3:1,3 3:2

	a_1 a_2 a_3	i_3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
814	4			N = 814 =	= 2	2 · 11	. 37	' (2 iso	geny clas	ses)		814
A1	1 0	1	5	30	1	3	_	3, 3, 1	3, 3, 1	1, 3, 1	I_3, I_3, I_1	3 :2
A2	1 0	1	-50	-828	1	1	_	9,1,3	9, 1, 3	1, 1, 3	I_9,I_1,I_3	3 :1
B1	1 -1	1	-28	63	1	1		5, 1, 1	5, 1, 1	5, 1, 1	I_5,I_1,I_1	
815	5			N = 81	5 =	= 5 ·	163	(1 isos	geny class	3)		815
A1	0 1	1	15	-69	1	3	_	6, 1	6, 1	6, 1	I_6,I_1	3 :2
A2	0 1	1	-985	-12244	1	1	_	2,3	2,3	2,3	I_2,I_3	3 :1
816	3			N = 816 =	= 2	$4 \cdot 3$	· 17	(10 iso	ogeny clas	sses)		816
A1	0 - 1	0	-48	144	1		+	10, 2, 1	0, 2, 1	4, 2, 1	I_2^*, I_2, I_1	2 :2
A2	0 - 1	0		336	1	2	_	11, 4, 2	0, 4, 2	[2, 2, 2]	I_3^*, I_4, I_2	2 :1
B1	0 - 1	0	-52	-128	0	2	+	8, 2, 1	0, 2, 1	2, 2, 1	I_0^*, I_2, I_1	2:2
B2		0	-72	0	0	4	+	10, 4, 2	0, 4, 2	4, 2, 2	I_2^*, I_4, I_2	2:1,3,4
В3		0	-752	8160	0	2	+	11, 8, 1	0, 8, 1	2, 2, 1	I_3^*, I_8, I_1	2 :2
B4	0 - 1	0	288	-288	0	$\begin{vmatrix} 4 \end{vmatrix}$	<u> </u>	11, 2, 4	0, 2, 4	[4, 2, 4]	I_3^*, I_2, I_4	2 :2
C1	0 - 1	0	-17	-51	0	1	-	8, 5, 1	0, 5, 1	1, 1, 1	I_0^*, I_5, I_1	
D1	0 1	0	511	1899	0	1	-	8, 3, 5	0, 3, 5	1, 3, 1	I_0^*, I_3, I_5	
E1	0 - 1	0	-4088	-99216	0	2	+	18, 6, 1	[6, 6, 1]	[4, 2, 1]	I_{10}^*, I_6, I_1	2:2;3:3
E2	0 - 1	0	-3448	-131984	0	2	_	15, 12, 2	3, 12, 2	4, 2, 2	I_7^*, I_{12}, I_2	2:1;3:4
E3	0 - 1	0 -	-12008	386928	0	2	+	30, 2, 3	18, 2, 3	4, 2, 1	I_{22}^*,I_2,I_3	2:4;3:1
E4	0 - 1	0	28952	2418544	0	2	_	21, 4, 6	9, 4, 6	4, 2, 2	I_{13}^*, I_4, I_6	2:3;3:2
F1	0 - 1	0	11	61	0	1	Ī-	12, 3, 1	[0, 3, 1]	1, 1, 1	II^*,I_3,I_1	3 :2
F2	0 - 1	0	-949	11581	0	1	_	12, 1, 3	0, 1, 3	1, 1, 1	II^*,I_1,I_3	3 :1
$\overline{G1}$	0 -1	0	-5	9	1	1	-	8, 1, 1	0,1,1	[2, 1, 1]	I_0^*, I_1, I_1	<u> </u>
H1	0 -1	0	-544	-4352	1	2	<u>-</u> -	20, 4, 1	8,4,1	4, 2, 1	$oxed{I_{12}^*,I_4,I_1}$	2 :2
H2			-1824	25344		4		16, 8, 2	4, 8, 2	4, 2, 2	I_{8}^{*},I_{8},I_{2}	2:1,3,4
НЗ	0 - 1		-27744	1787904		8		14, 4, 4	2, 4, 4	4, 2, 4	I_6^*, I_4, I_4	2:2,5,6
H4	0 - 1	0	3616	142848	1	2	_	14, 16, 1		2, 2, 1	I_6^*, I_{16}, I_1	2 :2
Н5	0 - 1	0 -	443904	113984640	1	4	+	13, 2, 2	1, 2, 2	4, 2, 2	I_5^*, I_2, I_2	2 :3
Н6	0 - 1	0 -	-26304	1980288	1	4	_	13, 2, 8	1, 2, 8	2, 2, 8	I_5^*, I_2, I_8	2 :3
I1	0 1	0	-1621	24623	1	1	-	8, 11, 1	0, 11, 1	[2, 11, 1]	I_0^*, I_{11}, I_1	
$\overline{J1}$	0 1	0	-40	-76	Ī 1	2	<u> </u>	14, 2, 1	[2, 2, 1]	[4, 2, 1]	I_{6}^{*}, I_{2}, I_{1}	2 :2
J2	0 1	0	120			2	-	13, 4, 2	1, 4, 2	4, 4, 2	I_5^*, I_4, I_2	2 :1
817	7			N = 817	<i>'</i> =	19 ·	43	(2 isog	eny classe	es)		817
A1	0 1	1	1	6	2	1	_	2, 1	2,1	2,1	I_2,I_1	
B1	0 1	1 -	-16649	821406	1	1	-	$\frac{1}{2}, \frac{1}{5}$	2, 5	2,5	I_2,I_5	
819	9			N = 819 =	= 3	$3^2 \cdot 7$. 13	6 iso	geny class	ses)	I	819
A1	1 -1	0	-42	-73		1	+		0, 1, 1	2, 1, 1	III^*, I_1, I_1	2 :2
A2	1 - 1		93	-532			-	9, 2, 2	0, 2, 2	2, 2, 2	III^*,I_1,I_1 III^*,I_2,I_2	
B1	' 1 –1		 -5		<u> </u>	'	 +	$\frac{1}{3}, \frac{1}{1}, \frac{1}{1}$:	$\begin{bmatrix} 2 & 2 & 2 & 2 \\ 2 & 1 & 1 \end{bmatrix}$	$ III,I_1,I_1 $	2 : 2
B1 B2	1 - 1 1 - 1		-3 10	16				$3, 1, 1 \\ 3, 2, 2$	$0, 1, 1 \\ 0, 2, 2$	$2, 1, 1 \\ 2, 2, 2$	$ III,I_1,I_1 $ $ III,I_2,I_2 $	$\begin{vmatrix} 2 & \vdots & 2 \\ 2 & \vdots & 1 \end{vmatrix}$
	<u>-</u>				<u>-</u> -	<u>'</u>	1 -				<u>-</u>	-
C1	0 0		9		<u>-</u> -	!		6, 1, 1	$\begin{bmatrix} 0, 1, 1 \\ -\frac{1}{2}, -\frac{1}{2} \end{bmatrix}$	[2, 1, 1]	I_0^*,I_1,I_1	
D1	0 0	1	22857	4273542	0	1	-	14, 7, 3	8, 7, 3	2, 1, 1	I_8^*, I_7, I_3	

	1					I						
	a_1	a_2	a_3	a_4	a_6	r	T	$s \operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
819)				N =	819	0 = 3	$2 \cdot 7 \cdot 13$ (continued	l)		819
E1	0	0	1	-66	-207	0	1	-6, 1, 1	0, 1, 1	2, 1, 1	I_0^*,I_1,I_1	3 :2
E2	0	0	1	114	-1026	0	3	-6, 3, 3	0, 3, 3	2, 3, 3	I_0^*, I_3, I_3	3:1,3
E3	0	0	1	-1056	32553	0	3	[-6, 9, 1]	[0, 9, 1]	[2, 9, 1]	I_0^*, I_9, I_1	3 :2
F1	0	0	1	-237	-1607	0	1	-10, 3, 1	4, 3, 1	2, 3, 1	I_4^*, I_3, I_1	
822	2				N = 822	=	$2 \cdot 3$	· 137 (6 is	sogeny cla	sses)		822
A1	1	1	0	-3	-9	1	1	-1, 4, 1	1, 4, 1	1, 2, 1	$\mathrm{I}_1,\!\mathrm{I}_4,\!\mathrm{I}_1$	
B1	1	0	1	-18716	-987046	0	2	+10, 8, 1	10, 8, 1	[2, 8, 1]	I_{10},I_{8},I_{1}	2 :2
B2	1	0	1	-18556 -	-1004710	0	2	-5, 16, 2	5, 16, 2	1, 16, 2	I_5, I_{16}, I_2	2 :1
$\overline{C1}$	1	0	1	-1122	14548	0	3	[-5, 12, 1]	[5, 12, 1]	[1, 12, 1]	I_5,I_{12},I_1	3 :2
C2	1	0	1	4143	72868	0	1	-15, 4, 3	15, 4, 3	1, 4, 1	I_{15}, I_4, I_3	3 :1
D1	1	0	1	31	20	1	1	[-6, 5, 1]	[6, 5, 1]	2, 5, 1	I_6,I_5,I_1	
E1	1	0	0	-47	57	0	4	+12, 2, 1	12, 2, 1	12, 2, 1	I_{12},I_{2},I_{1}	2 :2
E2	1	0	0	-367	-2695	0	4	+6,4,2	6, 4, 2	6, 4, 2	I_6, I_4, I_2	2:1,3,4
E3	1	0	0	-5847	-172575	0	2	+ 3,8,1	3, 8, 1	3, 8, 1	I_3,I_8,I_1	2 :2
E4	1	0	0		-7663	0	2	[-3, 2, 4]	3, 2, 4	[3, 2, 4]	I_3,I_2,I_4	2 :2
F1	1	0	0	-4	-4	0	1	-2,1,1	2, 1, 1	2, 1, 1	I_2,I_1,I_1	
825	5				N = 825	=	$3 \cdot 5^2$	· 11 (3 is	sogeny cla	sses)		825
A1	0	-1	1	-23	53	1	1	-3, 2, 2	3, 0, 2	1, 1, 2	I_3 , II , I_2	3 :2
A2	0	-1	1	127	38	1	1	-1, 2, 6	1, 0, 6	1, 1, 2	I_1,II,I_6	3 :1
B1	1	0	0	-163	-808	1	2	+ 3, 6, 1	3, 0, 1	3, 2, 1	I_3,I_0^*,I_1	2 :2
B2	1	0	0	-288	567	1	4	+6,6,2	6, 0, 2	6, 4, 2	I_6,I_0^*,I_2	2:1,3,4
B3	1	0	0	-3663	84942	1	2	+ 3, 6, 4	3, 0, 4	3, 2, 4	I_3, I_0^*, I_4	2 :2
B4	1	0	0	1087	4692	1	2	-12, 6, 1	12, 0, 1	12, 4, 1	<u> </u>	2 :2
C1	0	1	1	-583	5494	1	3	-3,8,2	3, 0, 2	3, 3, 2	I_3,IV^*,I_2	3 :2
C2	0	1	1	3167	11119	1	1	-1,8,6	1,0,6	1, 1, 2	I_1,IV^*,I_6	3 :1
826	3				N = 826	$\dot{i} =$	$2 \cdot 7$	· 59 (2 is	ogeny clas	sses)		826
A1	1	1	0	21	-49	0	1	-1, 5, 1	1, 5, 1	$\begin{bmatrix} 1, 1, 1 \end{bmatrix}$	I_1,I_5,I_1	
B1	1	1	0	-136	-672	0	1	[-5, 3, 1]	5, 3, 1	1, 3, 1	I_5, I_3, I_1	
827	7				N =	82'	7 = 8	27 (1 isos	geny class	s)		827
A1	0	0	1	-10	12	1	1	- 1	1	1	I_1	
828	3				N = 828	= :	$2^2 \cdot 3$	$^{2} \cdot 23$ (4 i	sogeny cla	asses)		828
A1	0	0	0	-24	$\frac{17 - 020}{45}$	0	2	+4,3,1	0,0,1	1, 2, 1	IV,III,I_1	2 :2
A1 A2	0	0	0	$-24 \\ -39$	-18	0	$\frac{2}{2}$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$0, 0, 1 \\ 0, 0, 2$	1, 2, 1 $1, 2, 2$	IV,III,I_1 IV^*,III,I_2	2 · 2 2 · 1
B1	 0	0	0	-216	-1215	1	2	:	[0,0,1]	3, 2, 1	$ \text{IV,III*,I}_1 $	2 :2
B2	0		0	-351	486	1	2	+8,9,2	0, 0, 2	3, 2, 2	IV^*,III^*,I_2	2 :1
$\bar{C}1$	0	0	0	 -9	-27	1	1	$\begin{bmatrix} - & 4 & 6 & 1 \end{bmatrix}$	[0,0,1]	1,1,1	$ ext{IV}, ext{I}_0^*, ext{I}_1 ext{}$:
D1	 0		0	15	 -11	0	! 1	$\begin{bmatrix} - & - & - & - & - & - & - & - & - & - $	$\begin{bmatrix} 0, 0, 1 \end{bmatrix}$	[1, 1, 1, 1]	$ IV, I_0^*, I_1 $	3 : 2
D_2	0		0	-165	997	0	3	$\begin{bmatrix} 1, 6, 1 \\ -4, 6, 3 \end{bmatrix}$	$0,0,1 \\ 0,0,3$	3, 1, 3	IV,I_0^*,I_3	3 : 1
						<u> </u>		, ,	, ,	, ,	, 0, 0	

		TABLE I	. Е	TITIL	110	CORVE	829A-834	C		225
a_1 a_2 a_3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
829		N = 82	9 =	= 829	9	(1 isogei	ny class)			829
A1 0 0 1	-4	-3	1	1	+	1	1	1	I_1	
830		N = 830 =	= 2	. 5 . 8	83	(3 isog	eny classe	es)		830
A1 1 0 1	37	-62		3	_	2, 6, 1		2, 6, 1	I_2, I_6, I_1	3 :2
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	-838			1	_	6, 2, 3	6, 2, 3	2, 0, 1 $2, 2, 1$	I_6, I_2, I_3	3 :1
B1 1 1 1	-11185	456015	1	1		16, 8, 1	16, 8, 1	16, 8, 1	I_{16}, I_{8}, I_{1}	
C1 1 -1 1	3	69	1	1	_	10, 2, 1	10, 2, 1	10, 2, 1	I_{10},I_{2},I_{1}	
831		N = 831	=	$3\cdot 2$	77	(1 isog	eny class)	ı		831
A1 1 0 0	-68	285		1	_	10,1	10,1	10, 1	I_{10} , I_1	
832		N = 832 =	= 2	⁶ · 1:	}	(10 isoge	eny classe	s)		832
A1 0 1 0	-1	31	1	1	_	15, 1	0, 1	4,1	$\mathrm{I}_{5}^{st},\!\mathrm{I}_{1}$	
B1 0 -1 0	-1	-31	1	1	' —	15, 1	0,1	4, 1	$\left \begin{array}{ccc} \mathrm{I}_{5}^{*}, \mathrm{I}_{1} \end{array} \right $	<u>-</u>
$C1 \mid 0 - 1 \mid 0$	31	97	1	1	_	19, 1	1,1	4, 1	I_9^*, I_1	3 :2
$C2 \mid 0 - 1 \mid 0$	-289	-3679	1	1	_	21, 3	3, 3	4, 1	I_{11}^*, I_3	3 :1,3
$\begin{bmatrix} C3 & 0 & -1 & 0 \end{bmatrix}$	-29409	-1931423	1	1	_	27, 1	9,1	4, 1	I_{17}^* , I_1	3 :2
D1 0 0 0	-16	-24	0	2	+	10, 1	0, 1	2,1	I_0^*, I_1	2:2
D2 0 0 0	4	-80	0	2	<u> </u>	14, 2	0, 2	2,2	I_4^*, I_2	2 :1
E1 $0 - 1 0$	-65	-191	0	1	—	17, 1	0,1	2, 1	I_7^*, I_1	
F1 0 0 0	-172	1328	0	1	_	25, 1	7,1	2,1	I_{15}^*, I_1	7:2
F2 0 0 0	-13612	-670672	0	1	—	19, 7	1,7	2,7	$\mathrm{I}_{9}^{st},\!\mathrm{I}_{7}$	7 :1
G1 0 1 0	31	-97	0	1		19, 1	1,1	2,1	I_{9}^{*},I_{1}	3 :2
G2 0 1 0	-289	3679		1	_	21, 3	3,3	2, 1	I_{11}^*, I_3	3 :1,3
G3 0 1 0	-29409	1931423	'	1	— 	27, 1	9,1	[2, 1]	I_{17}^*, I_1	3 :2
H1 0 0 0	-16	24		2	+	10, 1	0, 1	2, 1	I_0^*, I_1	2 :2
H2 0 0 0	4	80		2	— 	14, 2	0, 2	$\frac{4,2}{}$	I_4^*, I_2	2 :1
I1 0 1 0	-65	191	1	1	<u> </u>	17, 1	0,1	4,1	$\left[\begin{smallmatrix} I_7^*,I_1 \\ \end{smallmatrix} \right]$	
J1 0 0 0	-172	-1328		1	_	25, 1	7, 1	4, 1	I_{15}^*, I_1	7 :2
J2 0 0 0	-13612	670672	1	1	_	19,7	1,7	4,7	I_{9}^{*},I_{7}	7 :1
833		N = 833	=	7^2 ·	17	(1 isog	eny class)			833
A1 1 -1 1	-34	-24		2	+	6, 1	0, 1	2, 1	I_0^*, I_1	2 :2
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	-279	1838		4	+	6, 2	0, 2	4,2	I_0^*, I_2	2:1,3,4
A3 1 -1 1 A4 1 -1 1	$-4444 \\ -34$	115126 4778		$\frac{2}{2}$	+	$6, 1 \\ 6, 4$	$0, 1 \\ 0, 4$	2, 1 $2, 2$	$egin{array}{c} { m I}_0^*, { m I}_1 \ { m I}_0^*, { m I}_4 \end{array}$	$egin{array}{c} {f 2}:2 \\ {f 2}:2 \end{array}$
834				9 1	20	·	·		0, 1	834
	-11795	$\frac{N = 834 =}{-233746}$		$\frac{3\cdot 1}{2}$	1	, ,	geny classo		Т Т. Т	2 :2
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	-11795 -93715	-233746 10874606		$\frac{2}{4}$		28, 7, 1 $14, 14, 2$		2, 7, 1 $2, 14, 2$	$egin{array}{c} I_{28}, I_7, I_1 \ I_{14}, I_{14}, I_2 \end{array}$	
		702316526		2		7, 7, 4		1, 7, 2		2:1,0,1 2:2
A4 1 0 1	-4755	30694894	0	2		7, 28, 1			I_7, I_{28}, I_1	2 :2
B1 1 0 1	-60	-182	0	1	-	4, 1, 1	[4, 1, 1]	[2, 1, 1]	$ $ I_4,I_1,I_1	
C1 1 0 1	0	10	1	1	 -	2, 4, 1	[2, 4, 1]	[2, 4, 1]	I_{2},I_{4},I_{1}	

	1					1			T	T	T	
	a_1	a_2	a_3	a_4	$a_6 r$	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
83	4				N =	834	= 2	$2 \cdot 3 \cdot 139$	(continue	ed)		834
D1	1	1	1	-8	5 0	2	+	2, 1, 1	2, 1, 1	2, 1, 1	$\mathrm{I}_2,\!\mathrm{I}_1,\!\mathrm{I}_1$	2 :2
D2	1	1	1	2	$29 \mid 0$	2	-	1, 2, 2	1, 2, 2	1, 2, 2	$\mathrm{I}_1,\!\mathrm{I}_2,\!\mathrm{I}_2$	2 :1
$\bar{\mathrm{E}1}$	$\begin{bmatrix} 1 \end{bmatrix}$	1	1	2	-1	1	[-	2, 1, 1	$\begin{bmatrix} 2, 1, 1 \end{bmatrix}$	[2, 1, 1]	I_2,I_1,I_1	
F1	1	1	1	-1027	12257 1	1	-	14, 4, 1	14, 4, 1	14, 2, 1	${ m I}_{14}, { m I}_4, { m I}_1$	
$\overline{G1}$	1	0	0	-70	356 1	5	Ī-	10, 5, 1	10, 5, 1	10, 5, 1	I_{10}, I_5, I_1	5 :2
G2	1	0	0	-1090	-40504 1	1	_	2, 1, 5	2, 1, 5	2, 1, 1	I_2, I_1, I_5	5 :1
83	6				N = 836	= 2	$2^2 \cdot 1$	1 · 19 (2	2 isogeny o	classes)		836
A1	1	-1	0	-5		_	_	8, 1, 2	0, 1, 2	1,1,2	IV^*,I_1,I_2	
B1		 -1		3	-10 0	-'	<u> </u>	4, 2, 1	0, 2, 1	$\begin{bmatrix} -1 & 1 & 1 \\ 3, 2, 1 \end{bmatrix}$	$ IV, I_2, I_1 $	2 :2
B2		-1^{-1}		-52	-12000		+	8, 1, 2	$0, 2, 1 \\ 0, 1, 2$	$\begin{bmatrix} 3, 2, 1 \\ 3, 1, 2 \end{bmatrix}$	IV,I_2,I_1 IV^*,I_1,I_2	2:1
							<u> </u>	, ,	, ,	, ,	7 17 2	
84					N = 840	1	1	\	0 isogeny	, , , , , , , , , , , , , , , , , , ,		840
A1		-1		-316	-2060 1			8, 3, 1, 1	0, 3, 1, 1	2, 1, 1, 1	I_1^*, I_3, I_1, I_1	2 :2
A2		-1		-336	-1764 1			10, 6, 2, 2	0, 6, 2, 2	[2, 2, 2, 2]	III^*,I_6,I_2,I_2	2:1,3,4
A3 A4		-1		-1736	$ \begin{array}{c c} 26796 & 1 \\ -11700 & 1 \end{array} $			11, 12, 1, 1			$ II^*,I_{12},I_1,I_1 $	2:2 2:2
		-1		744	;	-¦		11, 3, 4, 4	0, 3, 4, 4	1,1,2,2	$ II^*,I_3,I_4,I_4 $	2 :2
B1		-1		9	-84 0		-	4, 1, 2, 4	0, 1, 2, 4	[2, 1, 2, 4]	III,I_1,I_2,I_4	2 :2
B2 B3		$-1 \\ -1$		$-236 \\ -3736$	$ \begin{array}{c c} -1260 & 0 \\ -86660 & 0 \end{array} $			8, 2, 4, 2 $10, 4, 2, 1$	$\begin{bmatrix} 0, 2, 4, 2 \\ 0, 4, 2, 1 \end{bmatrix}$	$\begin{bmatrix} 2, 2, 2, 2 \\ 2, 2, 2, 1 \end{bmatrix}$	$egin{array}{c} I_1^*, I_2, I_4, I_2 \ III^*, I_4, I_2, I_1 \ \end{array}$	2 :1,3,4 2 :2
B4		-1		-656	4956			10, 4, 2, 1 10, 1, 8, 1	$\begin{bmatrix} 0, 4, 2, 1 \\ 0, 1, 8, 1 \end{bmatrix}$	$\begin{bmatrix} 2, 2, 2, 1 \\ 2, 1, 2, 1 \end{bmatrix}$	III^*, I_4, I_2, I_1 III^*, I_1, I_8, I_1	2:2 2:2
C1	'	- - -1		 -15	12 0			4, 1, 4, 1	0, 1, 4, 1	2,1,4,1	$ III,I_1,I_4,I_1 $	$ {\bf 2}:2$
C1		$-1 \\ -1$		-13 -140	-588			4, 1, 4, 1 8, 2, 2, 2	$\begin{bmatrix} 0, 1, 4, 1 \\ 0, 2, 2, 2 \end{bmatrix}$	$\begin{bmatrix} 2, 1, 4, 1 \\ 2, 2, 2, 2 \end{bmatrix}$	$\begin{bmatrix} III,I_1,I_4,I_1 \\ I_1^*,I_2,I_2,I_2 \end{bmatrix}$	$\begin{bmatrix} 2 & 2 \\ 2 & 1, 3, 4 \end{bmatrix}$
C3		-1		-2240	-40068			0, 2, 2, 2 $10, 1, 1, 1$			$ III^*,I_1,I_1,I_1 $	2:1,5,1 2:2
C4	0	-1	0	-40	-1508 0			10, 4, 1, 4			III^*, I_4, I_1, I_4	
$\overline{D1}$	0	- <u>-</u>	0	-27991	-1811530	$\begin{vmatrix} \cdot & \cdot & \cdot \\ 0 & 2 \end{vmatrix}$	i I+	4, 5, 8, 3	0, 5, 8, 3	[2, 5, 2, 1]	III,I_5,I_8,I_3	2 :2
D2			0		-1385280						I_1^*, I_{10}, I_4, I_6	
D3	0	1	0	-202616	34012320	4					III^*, I_{20}, I_2, I_3	
D4	0	1	0	90384	-9452880 0	2	-	10, 5, 2, 12	0, 5, 2, 12	2, 5, 2, 2	$ III^*, I_5, I_2, I_{12} $	2:2
E1	0	-1	0	9	0 1	$\begin{vmatrix} 1 & 2 \end{vmatrix}$	Ī-	4, 4, 1, 1	0, 4, 1, 1	[2, 2, 1, 1]	$oxed{ } ext{III}, ext{I}_4, ext{I}_1, ext{I}_1$	2 :2
E2		-1		-36	36 1			8, 2, 2, 2		4, 2, 2, 2	I_1^*, I_2, I_2, I_2	2:1,3,4
E3		-1		-336	-2244 1			10, 1, 1, 4				2 :2
E4	0	-1	0	-456	3900 1	$\lfloor 2 \rfloor$	+	10, 1, 4, 1	[0, 1, 4, 1]	[2, 1, 2, 1]	$\prod_{i=1}^{n}\prod_{j=1}^{n}\prod_{i=1}^{n}\prod_{j=1}^{n}\prod_{i=1}^{n}\prod_{j=1}^{n}\prod_{i=1}^{n}\prod_{j=1}^{n}\prod_{i=1}^{n}\prod_{j=1}^{n}\prod_{i=1}^{n}\prod_{j=1}^{n}\prod_{i=1}^{n}\prod_{j=1}^{n}\prod_{i=1}^{n}\prod_{j=1}^{n}\prod_{i=1}^{n}\prod_{j=1}^{n}\prod_{i=1}^{n}\prod_{j=1}^{n}\prod_{i=1}^{n}\prod_{j=1}^{n}\prod_{i=1}^{n}\prod_{j=1}^{n}\prod_{i=1}^{n}\prod_{j=1}^{n}\prod_{i=1}^{n}\prod_{j=1}^{n}\prod_{i=1}^{n}\prod_{j=1}^{n}\prod_{i=1}^{n}\prod_{j=1}^{$	2 :2
F1		-1		-175	952 1			4, 1, 2, 1	0, 1, 2, 1			2:2
F2		-1		-180	900 1			8, 2, 4, 2	0, 2, 4, 2		I_1^*, I_2, I_4, I_2	2:1,3,4
F3		-1		-680	-5700 1			10, 4, 2, 4	$\begin{bmatrix} 0, 4, 2, 4 \\ 0, 1, 2, 1 \end{bmatrix}$			
F4 F5		$-1 \\ -1$		$240 \\ -10480$	$ \begin{array}{c c} 4092 & 1 \\ -409460 & 1 \end{array} $			10, 1, 8, 1 11, 8, 1, 2	$ \begin{array}{c c} 0, 1, 8, 1 \\ 0, 8, 1, 2 \end{array} $	$\begin{bmatrix} 2, 1, 8, 1 \\ 1, 2, 1, 2 \end{bmatrix}$	$ III^*, I_1, I_8, I_1 II^*, I_8, I_1, I_2 $	2:2 2:3
F6		$-1 \\ -1$		-10480 1120	-32340 1			11, 3, 1, 2	$\begin{bmatrix} 0, 8, 1, 2 \\ 0, 2, 1, 8 \end{bmatrix}$	$\begin{bmatrix} 1, 2, 1, 2 \\ 1, 2, 1, 2 \end{bmatrix}$	II^*, I_8, I_1, I_2 II^*, I_2, I_1, I_8	2 : 3 2 : 3
G1	'	 -1		-735	7920	-'		4, 2, 1, 2	0, 2, 1, 2	2,2,1,2	$\left \begin{array}{cccccccccccccccccccccccccccccccccccc$	2 :2
G_2		-1		-740	7812 0			8, 4, 2, 4	$0, 2, 1, 2 \\ 0, 4, 2, 4$		I_1^*, I_2, I_1, I_2 I_1^*, I_4, I_2, I_4	2 : 2
G3		-1		-1720	-16100 0			10, 8, 4, 2	0, 8, 4, 2		III^*, I_8, I_4, I_2	2 : 2, 5, 6
G4		-1	0	160	24732 0			10, 2, 1, 8	0, 2, 1, 8		III^*, I_2, I_1, I_8	2 :2
G5		-1			-1458548 0			11, 4, 8, 1	0, 4, 8, 1		II^*, I_4, I_8, I_1	2 :3
G6	0	-1	0	5280	-119700 0	2	-	11, 16, 2, 1	0, 16, 2, 1	1, 2, 2, 1	II^*, I_{16}, I_2, I_1	2:3

				Ir	D.I	1/ 4)	1 (1)	1	T7 1 ·	т .
	a_1 a_2	a_3 a_4	a_6	r	Γ ε	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
84	0		N =	= 84	0 = 0	$2^3 \cdot 3 \cdot 5 \cdot 7$	(contin	ued)		840
H1	0 1	0 -71	-246	1 2	2 -	+4,3,4,1	0, 3, 4, 1	2, 3, 2, 1	III,I_3,I_4,I_1	2 :2
H2	0 1	0 -196			4 -	+8,6,2,2	0, 6, 2, 2	4, 6, 2, 2	I_1^*, I_6, I_2, I_2	2:1,3,4
Н3	0 1	0 -2896			2 -	, , ,	0, 3, 1, 4	2, 3, 1, 2	III^*,I_3,I_1,I_4	2 :2
H4	0 1	0 504	. – – – – – – –			-10, 12, 1, 1	:	2,12,1,1	<u> </u>	
I1	0 1	0 -36				+8,1,1,1	0, 1, 1, 1	4, 1, 1, 1	I_1^*, I_1, I_1, I_1	2 :2
I2	0 1	0 -56			$4 \mid$, , ,	0, 2, 2, 2	2, 2, 2, 2	III^*,I_2,I_2,I_2	2:1,3,4
I3	0 1	0 -656			2 -	, , ,	0, 1, 1, 4	1, 1, 1, 4	II^*,I_1,I_1,I_4	2 :2
I4	0 1	0 224	224		2 -	- 11, 4, 4, 1	[0,4,4,1]	1,4,2,1	$ II^*, I_4, I_4, I_1 $	2 :2
J1	0 1	0 - 15			4 -	, - , ,	0, 8, 1, 1	2, 8, 1, 1	III,I_8,I_1,I_1	2 :2
J2	0 1	0 -420			8 -	, , ,	0, 4, 2, 2	4, 4, 2, 2	I_1^*, I_4, I_2, I_2	2:1,3,4
J3	0 1	0 -600		_	$\frac{4}{1}$, , ,	0, 2, 4, 4	2, 2, 4, 2	III^*, I_2, I_4, I_4	2:2,5,6
J4	0 1	0 -6720			$\frac{4}{2}$, , ,	0, 2, 1, 1	[2, 2, 1, 1]	III^*,I_2,I_1,I_1	2 :2
J5	$\begin{array}{ccc} 0 & 1 \\ 0 & 1 \end{array}$	0 -6480			$\begin{bmatrix} 2 \\ 2 \end{bmatrix}$, , ,	0, 1, 8, 2	1,1,8,2	II^*, I_1, I_8, I_2	2 :3
J6	0 1	0 2400	2400	0 2	2 -	- 11, 1, 2, 8	0, 1, 2, 8	1, 1, 2, 2	II^*,I_1,I_2,I_8	2 :3
84	2		N =	842	=2	$2 \cdot 421$ (2)	isogeny cl	asses)		842
A1	1 0	1 -10	-12	1	1 -	- 3,1	3,1	1,1	I_3,I_1	
B1	1 0	0 -59	145	1 :	1 -	⊢ 13, 1	13, 1	13,1	I_{13},I_1	
84	3		N =	= 84;	3 =	$3 \cdot 281$ (1	isogeny c	lass)	l	843
A1		0 5				- 3,1	3,1	1,1	I_3,I_1	
							,	,	· · ·	
	_									~
84							isogeny c	· /	T 71	845
A1	1 0	1 -173	171	0 2	2 -	+ 1,7	1,1	1,4	I_1,I_1^*	2 :2
		$ \begin{array}{ccc} 1 & -173 \\ 1 & 672 \end{array} $	171	0 2		+ 1,7		· /	$I_{1},I_{1}^{*} \\ I_{2},I_{2}^{*}$	
A1	1 0 1 0		3 171 2 1523	0 2	2 -	1,7	1,1	1, 4 2, 4		2 :2
A1 A2	1 0 1 0		N = 8 171 1523 $N = 8$	0 2 2 346 =	2 -	1,7	1,1 2,2	1, 4 2, 4		2:2 2:1
A1 A2 84	$ \begin{array}{ccc} 1 & 0 \\ 1 & 0 \end{array} $ $ \begin{array}{cccc} 6 & & \\ 1 & -1 & & \\ \end{array} $	1 672	N = 8 $N = 8$ $N = 8$	0 2 0 2 346 =	$\begin{bmatrix} 2 \\ - \end{bmatrix}$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1, 1 2, 2 3 isogeny o	1, 4 2, 4	I_2,I_2^*	2:2 2:1 846
A1 A2 84 A1	$ \begin{array}{ccc} 1 & 0 \\ 1 & 0 \end{array} $ $ \begin{array}{cccc} 6 & & \\ 1 & -1 & & \\ \end{array} $	$ \begin{array}{cccc} 1 & 672 \\ 0 & -135 \\ 0 & -2295 \\ \end{array} $	$ \begin{array}{ccc} & 171 \\ & 1523 \end{array} $ $ N = 8 \\ & -707 \\ & -41747 \end{array} $	0 2 0 2 446 =	$ \begin{array}{c c} 2 & - \\ 2 & - \\ \end{array} $ $ = 2 \cdot \frac{1}{2} $	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	1,1 2,2 3 isogeny (8,2,1	1,4 2,4 classes) 2,4,1	I_{2},I_{2}^{*} I_{8},I_{2}^{*},I_{1} I_{4},I_{1}^{*},I_{2}	2:2 2:1 846 2:2
A1 A2 84 A1 A2	$ \begin{array}{c cccc} 1 & 0 \\ 1 & 0 \end{array} $ $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{cccc} 1 & 672 \\ 0 & -135 \\ 0 & -2295 \\ \hline 0 & 3 \end{array} $	$ \begin{array}{ccc} & 171 \\ & 1523 \end{array} $ $ N = 8 \\ & -707 \\ & -41747 \\ & 17 \end{array} $	0 2 0 2 46 = 0 2 0 2 1 2	$ \begin{array}{c c} 2 & - \\ 2 & - \\ \hline 2 & - \\ 2 & - \\ - & - \\ \end{array} $	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	1,1 2,2 3 isogeny o 8,2,1 4,1,2	1, 4 2, 4 classes) 2, 4, 1 2, 2, 2	I_{2},I_{2}^{*} I_{8},I_{2}^{*},I_{1}	2:2 2:1 846 2:2 2:1
A1 A2 A1 A2 B1 B2	$ \begin{array}{cccc} 1 & 0 \\ 1 & 0 \end{array} $ $ \begin{array}{ccccc} 6 \\ \hline 1 & -1 \\ 1 & -1 \\ 1 & -1 \end{array} $	$ \begin{array}{cccc} 1 & 672 \\ 0 & -135 \\ 0 & -2295 \\ 0 & 3 \\ 0 & -87 \end{array} $	$ \begin{array}{ccc} & 171 \\ & 1523 \end{array} $ $ N = 8 \\ & -707 \\ & -41747 \\ & 323 \end{array} $	0 2 0 2 46 = 0 2 1 2 1 2	$\begin{bmatrix} 2 & -1 \\ 2 & -1 \end{bmatrix}$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	1,1 2,2 3 isogeny o 8,2,1 4,1,2 2,0,1 1,0,2	1,4 2,4 elasses) 2,4,1 2,2,2 2,4,1 1,2,2	I_{2},I_{2}^{*} I_{8},I_{2}^{*},I_{1} I_{4},I_{1}^{*},I_{2} I_{2},I_{0}^{*},I_{1} I_{1},I_{0}^{*},I_{2}	2:2 2:1 846 2:2 2:1 2:2 2:1
A1 A2 A1 A2 B1 B2 C1	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{cccc} 1 & 672 \\ 0 & -135 \\ 0 & -2295 \\ 0 & 522 \\ 0 & 522 \end{array} $	$ \begin{array}{ccc} & 171 \\ & 1523 \\ & N = 8 \\ & -707 \\ & -41747 \\ & 323 \\ & 2164 \\ \end{array} $	0 2 46 = 0 2 1 1 2 1 2 1 2 1 2 1 2 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 2 2 1 1 1 2 2 2 1 1 1 2 2 2 1 1 1 2 2 2 1 1 1 2 2 2 1 1 1 2 2 2 1 1 1 2 2 2 1 1 1 2 2 2 1 1 1 2 2 2 1 1 1 2 2 2 1 1 1 2 2 2 2 1 1 1 2 2 2 2 1 1 1 2 2 2 2 1 1 1 2 2 2 2 1 1 1 2 2 2 2 2 1 1 1 2	2 - 2 - 2 - 2 - 2 - 2 -	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	1,1 2,2 3 isogeny o 8,2,1 4,1,2 2,0,1 1,0,2 12,4,1	$ \begin{array}{c c} 1, 4 \\ 2, 4 \end{array} $ classes) $ \begin{array}{c c} 2, 4, 1 \\ 2, 2, 2 \\ \hline 2, 4, 1 \\ 1, 2, 2 \\ \hline 2, 4, 1 \end{array} $	I_{2},I_{2}^{*} I_{8},I_{2}^{*},I_{1} I_{4},I_{1}^{*},I_{2} I_{2},I_{0}^{*},I_{1} I_{1},I_{0}^{*},I_{2} I_{12},I_{4}^{*},I_{1}	2:2 2:1 846 2:2 2:1 2:2 2:1
A1 A2 A1 A2 B1 B2	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c cccc} 1 & 672 \\ \hline 0 & -135 \\ 0 & -2295 \\ \hline 0 & -87 \\ 0 & 522 \\ 0 & -2358 \\ \end{array} $	$ \begin{array}{ccc} & 171 \\ & 1523 \\ & N = 8 \\ & -707 \\ & -41747 \\ & 323 \\ & 2164 \\ \end{array} $	0 2 0 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2	2 - 2 - 2 - 2 - 2 - 2 -	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	1,1 2,2 3 isogeny o 8,2,1 4,1,2 2,0,1 1,0,2	1,4 2,4 elasses) 2,4,1 2,2,2 -2,4,1 1,2,2 -2,4,1 2,4,2	I_{2},I_{2}^{*} I_{8},I_{2}^{*},I_{1} I_{4},I_{1}^{*},I_{2} I_{2},I_{0}^{*},I_{1} I_{1},I_{0}^{*},I_{2} I_{12},I_{4}^{*},I_{1} I_{6},I_{8}^{*},I_{2}	2:2 2:1 846 2:2 2:1 2:2 2:1
A1 A2 A1 A2 B1 B2 C1 C2	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c cccc} 1 & 672 \\ \hline 0 & -135 \\ 0 & -2295 \\ \hline 0 & -87 \\ 0 & 522 \\ 0 & -2358 \\ \end{array} $	N = 8 $N = 8$ $0 - 707$ $0 - 41747$ $0 - 323$ $0 - 2164$ $0 - 20020$ $0 - 1012100$	0 2 0 2 0 2 1 2 1 2 1 2 1 2 1 2 1 2 2 1 2 2 1 2 2 1 2 2 1 2 2 1 2 2 1 2 2 1 2 2 1 2 2 1 2 2 1 2 2 1 2 2 2 1 2 2 2 2 1 2	2 - 2 - 2 - 2 - 2 - 2 - 2 - 4 -	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1,1 2,2 3 isogeny o 8,2,1 4,1,2 2,0,1 1,0,2 12,4,1 6,8,2	$ \begin{array}{c c} 1, 4 \\ 2, 4 \end{array} $ classes) $ \begin{array}{c c} 2, 4, 1 \\ 2, 2, 2 \\ \hline 2, 4, 1 \\ 1, 2, 2 \\ \hline 2, 4, 1 \end{array} $	I_{2},I_{2}^{*} I_{8},I_{2}^{*},I_{1} I_{4},I_{1}^{*},I_{2} I_{2},I_{0}^{*},I_{1} I_{1},I_{0}^{*},I_{2} I_{12},I_{4}^{*},I_{1}	
A1 A2 A1 A2 B1 B2 C1 C2 C3 C4	1 0 1 0 6 1-1 1-1 1-1 1-1 1-1 1-1 1-1	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	N = 8 $N = 8$ $0 - 707$ $0 - 41747$ $0 - 323$ $0 - 2164$ $0 - 20020$ $0 - 1012100$ $0 - 2160364$	0 2 46 = 0 2 1 1 2 1 1 2 1 1 2 2 1 1 2 2 1	22 22 = 2	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1,1 2,2 3 isogeny o 8,2,1 4,1,2 2,0,1 1,0,2 12,4,1 6,8,2 3,16,1 3,4,4	1,4 2,4 elasses) 2,4,1 2,2,2 2,4,1 1,2,2 2,4,1 2,4,2 1,4,1 1,2,4	I_{2},I_{2}^{*} I_{8},I_{2}^{*},I_{1} I_{4},I_{1}^{*},I_{2} I_{2},I_{0}^{*},I_{1} I_{1},I_{0}^{*},I_{2} I_{12},I_{4}^{*},I_{1} I_{6},I_{8}^{*},I_{2} I_{3},I_{16}^{*},I_{1}	
A1 A2 A1 A2 B1 B2 C1 C2 C3 C4	1 0 1 0 6 1-1 1-1 1-1 1-1 1-1 1-1 1-1	$ \begin{array}{cccc} 1 & 672 \\ \hline 0 & -135 \\ 0 & -2295 \\ \hline 0 & -87 \\ 0 & -87 \\ 0 & -2358 \\ 0 & -19278 \\ 0 & -31518 \\ \end{array} $	N = 8 $N = 8$ $0 - 707$ $0 - 41747$ $0 - 323$ $0 - 2164$ $0 - 20020$ $0 - 1012100$ $0 - 2160364$ $N = 0$	0 2 0 2 1 2 1 2 1 2 1 2 847	22 -	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	1,1 2,2 3 isogeny of 8,2,1 4,1,2 2,0,1 1,0,2 12,4,1 6,8,2 3,16,1 3,4,4 isogeny cla	1,4 2,4 elasses) 2,4,1 2,2,2 2,4,1 1,2,2 2,4,1 2,4,2 1,4,1 1,2,4 asses)	I_{2},I_{2}^{*} I_{8},I_{2}^{*},I_{1} I_{4},I_{1}^{*},I_{2} I_{2},I_{0}^{*},I_{1} I_{1},I_{0}^{*},I_{2} I_{12},I_{4}^{*},I_{1} I_{6},I_{8}^{*},I_{2} I_{3},I_{16}^{*},I_{1} I_{3},I_{4}^{*},I_{4}	
A1 A2 A1 A2 B1 B2 C1 C2 C3 C4 A1	1 0 1 0 6 1 -1 1 -1 1 -1 1 -1 1 -1 1 -1 1 -1 7	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	N = 8 $N = 8$ $0 - 707$ $0 - 41747$ $0 - 41747$ $0 - 2164$ $0 - 436166$ $0 - 436166$	0 2 46 = 0 2 1 2 1 2 1 2 1 2 1 2 1 2 2 1 2 2 1	22	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1,1 2,2 B isogeny of 8,2,1 4,1,2 2,0,1 1,0,2 12,4,1 6,8,2 3,16,1 3,4,4 isogeny classics	1,4 2,4 elasses) 2,4,1 2,2,2 2,4,1 1,2,2 2,4,1 2,4,2 1,4,1 1,2,4 asses) 2,4	I_{2},I_{2}^{*} I_{8},I_{2}^{*},I_{1} I_{4},I_{1}^{*},I_{2} I_{2},I_{0}^{*},I_{1} I_{1},I_{0}^{*},I_{2} I_{12},I_{4}^{*},I_{1} I_{6},I_{8}^{*},I_{2} I_{3},I_{16}^{*},I_{1} I_{3},I_{4}^{*},I_{4} I_{2},I_{1}^{*}	2:2 2:1 846 2:2 2:1 2:2 2:1,3,4 2:2 2:2 3:2
A1 A2 A1 A2 B1 B2 C1 C2 C3 C4 A1 A2	1 0 1 0 6 1-1 1-1 1-1 1-1 1-1 1-1 1-1 1-1 1 0 1	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	N = 8 $N = 8$ $N =$	0 2 46 = 0 2 1 2 1 2 1 2 2 1 2 2 8 4 7 0 2 2 1 2 1 2 1 2 2 1 2	22 -	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1,1 2,2 3 isogeny of 8,2,1 4,1,2 2,0,1 1,0,2 12,4,1 6,8,2 3,16,1 3,4,4 isogeny classics and clas	1,4 2,4 elasses) 2,4,1 2,2,2 2,4,1 1,2,2 2,4,1 2,4,2 1,4,1 1,2,4 easses) 2,4 2,4	I_{2},I_{2}^{*} I_{8},I_{2}^{*},I_{1} I_{4},I_{1}^{*},I_{2} I_{2},I_{0}^{*},I_{1} I_{1},I_{0}^{*},I_{2} I_{12},I_{4}^{*},I_{1} I_{6},I_{8}^{*},I_{2} I_{3},I_{16}^{*},I_{1} I_{3},I_{4}^{*},I_{4} I_{2},I_{1}^{*} I_{6},I_{3}^{*}	
A1 A2 A1 A2 B1 B2 C1 C2 C3 C4 A1	1 0 1 0 6 1-1 1-1 1-1 1-1 1-1 1-1 1-1 1-1 1 0 1	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	N = 8 $N = 8$ $N = 17$ $N = 10$	0 2 46 = 0 2 1 2 1 2 1 2 1 2 2 1 2 2 1 2 1 2 2 1 2 1 2 2 1 2 1 2 2 1 2 1 2 2 1 2 1 2 2 1 2	2	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1,1 2,2 B isogeny of 8,2,1 4,1,2 2,0,1 1,0,2 12,4,1 6,8,2 3,16,1 3,4,4 isogeny classics	1,4 2,4 elasses) 2,4,1 2,2,2 2,4,1 1,2,2 2,4,1 2,4,2 1,4,1 1,2,4 asses) 2,4	I_{2},I_{2}^{*} I_{8},I_{2}^{*},I_{1} I_{4},I_{1}^{*},I_{2} I_{2},I_{0}^{*},I_{1} I_{1},I_{0}^{*},I_{2} I_{12},I_{4}^{*},I_{1} I_{6},I_{8}^{*},I_{2} I_{3},I_{16}^{*},I_{1} I_{3},I_{4}^{*},I_{4} I_{2},I_{1}^{*} I_{6},I_{3}^{*} I_{2},I_{9}^{*}	2:2 2:1 846 2:2 2:1 2:2 2:1,3,4 2:2 2:2 3:2
A1 A2 A1 A2 B1 B2 C1 C2 C3 C4 A1 A2 A3 B1	1 0 1 0 1 0 6 1-1 1-1 1-1 1-1 1-1 1-1 1-1 1-1 1 0 1 0 1 0 1	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	N = 8 $N = 8$ $0 - 707$ $0 - 41747$ $0 - 41747$ $0 - 41747$ $0 - 41747$ $0 - 41747$ $0 - 41747$ $0 - 41747$ $0 - 41747$ $0 - 41747$ $0 - 41747$ $0 - 41747$ $0 - 41747$ $0 - 41747$ $0 - 41747$ $0 - 41747$ $0 - 41747$ $0 - 436166$ $0 - 822761$ $0 - 822761$ $0 - 822764$ $0 - 333$	0	2 - 2 -	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1,1 2,2 B isogeny of 8,2,1 4,1,2 2,0,1 1,0,2 12,4,1 6,8,2 3,16,1 3,4,4 isogeny classics constraints of 1,2,1 6,3 2,9 2,1	1,4 2,4 elasses) 2,4,1 2,2,2 2,4,1 1,2,2 2,4,2 1,4,1 1,2,4 easses) 2,4 2,4 2,4 2,4 2,4	I_{2},I_{2}^{*} I_{8},I_{2}^{*},I_{1} I_{4},I_{1}^{*},I_{2} I_{2},I_{0}^{*},I_{1} I_{1},I_{0}^{*},I_{2} I_{12},I_{4}^{*},I_{1} I_{6},I_{8}^{*},I_{2} I_{3},I_{16}^{*},I_{1} I_{3},I_{4}^{*},I_{4} I_{2},I_{1}^{*} I_{2},I_{2}^{*} I_{2},I_{1}^{*}	2:2 2:1 846 2:2 2:1 2:2 2:1,3,4 2:2 2:2 2:1,3,4 3:2 3:1,3 3:2
84 A1 A2 B1 B2 C1 C2 C3 C4 A1 A2 A3	1 0 1 0 6 1 -1 1 -1 1 -1 1 -1 1 -1 1 -1 1 -1 1	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	N = 8 $N = 8$ $N = 17$ $N = 10$	0 2 46 = 0 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1	2	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1,1 2,2 3 isogeny of 8,2,1 4,1,2 2,0,1 1,0,2 12,4,1 6,8,2 3,16,1 3,4,4 isogeny classics and clas	1,4 2,4 classes) 2,4,1 2,2,2 2,4,1 1,2,2 2,4,1 2,4,2 1,4,1 1,2,4 asses) 2,4 2,4 2,4	I_{2},I_{2}^{*} I_{8},I_{2}^{*},I_{1} I_{4},I_{1}^{*},I_{2} I_{2},I_{0}^{*},I_{1} I_{1},I_{0}^{*},I_{2} I_{12},I_{4}^{*},I_{1} I_{6},I_{8}^{*},I_{2} I_{3},I_{16}^{*},I_{1} I_{3},I_{4}^{*},I_{4} I_{2},I_{1}^{*} I_{6},I_{3}^{*} I_{2},I_{9}^{*}	
A1 A2 B1 B2 C1 C2 C3 C4 A1 A2 A3 B1 C1 C2	1 0 1 0 6 1-1 1-1 1-1 1-1 1-1 1-1 1-1 1-1 1 1 1	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	N = 8 $N = 8$ $0 - 707$ $0 - 41747$ $0 - 41747$ $0 - 41747$ $0 - 41747$ $0 - 41747$ $0 - 41747$ $0 - 41747$ $0 - 41747$ $0 - 41747$ $0 - 41747$ $0 - 41747$ $0 - 41747$ $0 - 41748$ $0 - 41748$ $0 - 436166$ $0 - 822761$ $0 - 822761$ $0 - 822761$ $0 - 822761$ $0 - 822761$ $0 - 822761$ $0 - 822761$ $0 - 822761$ $0 - 822761$ $0 - 822761$ $0 - 822761$ $0 - 822761$ $0 - 822761$ $0 - 822764$	0 2 46 = 0 2 1 2 1 2 1 2 2 1 2 2 1 2 2 1 2 2 1 2 2 1 2 2 1 2 2 2 1 2 2 2 1 2 2 2 1 2	2 - 2 -	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1,1 2,2 3 isogeny of 8,2,1 4,1,2 2,0,1 1,0,2 12,4,1 6,8,2 3,16,1 3,4,4 isogeny classics 2,1 6,3 2,9 2,1 3,2 6,1	1,4 2,4 classes) 2,4,1 2,2,2 2,4,1 1,2,2 2,4,1 2,4,2 1,4,1 1,2,4 asses) 2,4 2,4 2,4 2,4 2,4 3,4 6,4	I_{2},I_{2}^{*} I_{8},I_{2}^{*},I_{1} I_{4},I_{1}^{*},I_{2} I_{2},I_{0}^{*},I_{1} I_{1},I_{0}^{*},I_{2} I_{12},I_{4}^{*},I_{1} I_{6},I_{8}^{*},I_{2} I_{3},I_{16}^{*},I_{1} I_{3},I_{4}^{*},I_{4} I_{2},I_{1}^{*} I_{2},I_{2}^{*} I_{2},I_{1}^{*} I_{3},I_{2}^{*}	
A1 A2 B1 B2 C1 C2 C3 C4 A1 A2 A3 B1 C1	1 0 1 0 6 6 1-1 1-1 1-1 1-1 1-1 1-1 1-1 1 1 1 8	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	N=8 $N=8$ $N=9$	0	2	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1,1 2,2 3 isogeny of 8,2,1 4,1,2 2,0,1 1,0,2 12,4,1 6,8,2 3,16,1 3,4,4 isogeny classics constraints of 1,2,1 6,3 2,9 2,1 3,2	1,4 2,4 classes) 2,4,1 2,2,2 2,4,1 1,2,2 2,4,1 2,4,2 1,4,1 1,2,4 asses) 2,4 2,4 2,4 2,4 2,4 3,4 6,4	I_{2},I_{2}^{*} I_{8},I_{2}^{*},I_{1} I_{4},I_{1}^{*},I_{2} I_{2},I_{0}^{*},I_{1} I_{1},I_{0}^{*},I_{2} I_{12},I_{4}^{*},I_{1} I_{6},I_{8}^{*},I_{2} I_{3},I_{16}^{*},I_{1} I_{3},I_{4}^{*},I_{4} I_{2},I_{1}^{*} I_{2},I_{2}^{*} I_{2},I_{1}^{*} I_{3},I_{2}^{*}	

					111222					20 0102 00			
	a_1	a_2	a_3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
848	3				N = 8	848	3 = 2	2^4 .	53 (coi	ntinued)			848
B1		-1	0	-4528	150464		1	_	36, 1	24, 1	2, 1	I_{28}^*, I_1	3 :2
B2			0	-393648 	95194048	!	1	<u> </u> –	20,3	8,3	2,1	I_{12}^*, I_{3}	3 :1
C1	_	-1	0	16	-64		1	_	15, 1	3,1	2, 1	I_7^*, I_1	3 :2
C2		-1	0	-144 	1856	<u> </u>	1	-	13,3	1,3	$\begin{bmatrix} 2, 1 \\ -1, 0 \end{bmatrix}$	$\begin{bmatrix} I_5^*, I_3 \\ \end{bmatrix}$	3 : 1
D1 D2	$\begin{array}{c} 0 \\ 0 \end{array}$	1 1	$0 \\ 0$	$-12 \\ -17$	40 22		$\begin{array}{c c} 2 \\ 2 \end{array}$	+	8, 2 $4, 1$	$0, 2 \\ 0, 1$	1,2 $1,1$	$I_0^*,I_2 \ II,I_1$	2:2 2:1
E1	 0	0	0	5	-22	<u> </u>	<i>-</i> 1	<u> </u>	$\frac{1}{12,1}$	$\begin{bmatrix} 0, 1 \\ 0, 1 \end{bmatrix}$	$\begin{bmatrix} 2, 1 \\ 2, 1 \end{bmatrix}$	$\begin{bmatrix} & I_{1}, I_{1} \\ & I_{4}, I_{1} \end{bmatrix}$	-
F1	0 0	1	0	 -4	-8	$\frac{1}{1}$		<u> </u>	8,1	$\begin{bmatrix} 0, 1 \\ 0, 1 \end{bmatrix}$	$\begin{bmatrix} -2, 1 \\ -1, 1 \end{bmatrix}$	$\begin{bmatrix} -14, 1\\ -14, 1\\ I_0, I_1 \end{bmatrix}$	'
G1			0	-440	3412	! - :	<u> </u>	<u> </u>	17, 1	$\begin{bmatrix} -5, 1 \\ 5, 1 \end{bmatrix}$	$\begin{bmatrix} -1, 1 \\ -4, 1 \end{bmatrix}$	$\begin{bmatrix} -& -& -& -& -& -& -& -& -& -& -& -& -& $	'
				110		<u> </u>		200	<u> </u>			19,11	940
849 A1) 1	1	1	<u> </u>	N = 849		ı — —		, ,	geny class	<u>í</u>	тт	849
		1	1	5	-4	1	1	_	4,1	4,1	2,1	I_4,I_1	
850)				N = 850 =	1	\cdot 5 ² \cdot	17	(12 iso		sses)	Γ	-850
A1	1	1	0	9975	-114875		1		21, 9, 1	21, 3, 1	1, 2, 1	I_{21},I_3^*,I_1	3 :2
A2	1	1			-26946875	! - :	1	— 	7, 15, 3	7,9,3	1, 2, 3	$\begin{bmatrix} I_7, I_9^*, I_3 \\ \end{bmatrix}$	3:1
B1 B2	1 1	1 1	0	$-75 \\ -1075$	$125 \\ 13125$		$\begin{array}{c c} 2 \\ 2 \end{array}$	++	6, 6, 1 3, 6, 2	$6,0,1 \\ 3,0,2$	$\begin{bmatrix} 2, 2, 1 \\ 1, 2, 2 \end{bmatrix}$	$\begin{bmatrix} I_6, I_0^*, I_1 \\ I_3, I_0^*, I_2 \end{bmatrix}$	2:2;3:3 2:1;3:4
$\begin{array}{ c c } B2 \\ B3 \end{array}$	1	1	0	-2575	-51375		$\frac{2}{2}$	+	3, 6, 2 2, 6, 3	$\begin{bmatrix} 3, 0, 2 \\ 2, 0, 3 \end{bmatrix}$	$\begin{bmatrix} 1, 2, 2 \\ 2, 2, 3 \end{bmatrix}$	I_{2},I_{0}^{*},I_{3}	2 :1, 3 :4 2 :4; 3 :1
B4	1	1	0	-2825	-41125		2	+	1, 6, 6	1, 0, 6	1, 2, 6	I_1, I_0^*, I_6	2:3;3:2
$\overline{\text{C1}}$	1	0	1	-451	4798	1	1	Ī-	7,9,1	7,0,1	1, 2, 1	$\overline{\mid}$ I_7,III^*,I_1	
D1	1	0	1	33924	-387702	$\overline{1}$	1	<u> </u>	4, 8, 7	[4,0,7]	[2, 1, 7]	I_4,IV^*,I_7	`
$\bar{E}1$	1	-1^{-1}	0	8	16	1	1	Ī-	-4, 4, 1	[4,0,1]	[2, 3, 1]	$\overline{\mid}$ I_4 , IV , I_1	
$\overline{F1}$	1	1	1	1357	-2559	0	1	Ī-	-4, 2, 7	[4, 0, 7]	4, 1, 1	$\overline{\mid}$ I_4,II,I_7	
$\overline{G1}$	1	1	1	-188	781	0	2	+	4, 8, 1	[4, 2, 1]	[4, 2, 1]	I_4,I_2^*,I_1	2 :2
G2	1	1	1	312	4781	0	2	_	2, 10, 2	2, 4, 2	2, 4, 2	I_2,I_4^*,I_2	2 :1
H1	1	1	1	-63838	6181531	0	2	+	8, 8, 3	8, 2, 3	[8, 2, 1]	I_8,I_2^*,I_3	2:2;3:3
H2	1	1	1	-61838	6589531		2		4, 10, 6	4, 4, 6	4, 4, 2	I_4, I_4^*, I_6	2:1;3:4
H3	1 1	1 1	1	-104213	-2590469 -19998469		$\begin{array}{c c} 2 \\ 2 \end{array}$		24, 12, 1 $12, 18, 2$	24, 6, 1	24, 2, 1	I_{24},I_{6}^{*},I_{1}	2:4;3:1
H4						! - :	<u> </u>			12, 12, 2	:	$ I_{12},I_{12}^*,I_2 $	2 :3; 3 :2
I1			1	195	2197	!	1 	-	4, 10, 1	4,0,1	$\begin{bmatrix} 4, 1, 1 \\ \end{bmatrix}$	$\left \begin{array}{c} \mathrm{I}_{4}, \mathrm{II}^{*}, \mathrm{I}_{1} \\ \mathrm{I}_{4}, \mathrm{II}^{*}, \mathrm{I}_{1} \end{array} \right $	
J1		-1 	1	$\begin{array}{c} -255 \\ \end{array}$	-1503	<u> </u>	1	-	1,7,1	1,1,1	1,2,1	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	
K1 K2	1 1	1 1	1 1	$-63 \\ 562$	781 -20469		1 1	_	3, 9, 1 9, 7, 3	3, 3, 1 9, 1, 3	$\begin{bmatrix} 3, 4, 1 \\ 9, 4, 3 \end{bmatrix}$	$\begin{bmatrix} I_3, I_3^*, I_1 \\ I_9, I_1^*, I_3 \end{bmatrix}$	3 :2 3 :1
L1	1 1		- <u>-</u> -	 -18	31	<u> </u>	1 1	_ _	$-\frac{3,7,3}{7,3,1}$	$\begin{bmatrix} -3, 1, 3 \\ -7, 0, 1 \end{bmatrix}$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	$\begin{array}{c c} I_{9},I_{1},I_{3} \\ \\ I_{7},III,I_{1} \end{array}$	3 . 1
85				10	N = 851			27		geny class		17,111,11	851
A1	0	1	1	-28	$\frac{N = 831}{48}$	1	1	+	$\frac{(1 \text{ Isog})}{2,1}$	$\frac{2}{2,1}$	2,1	I_2,I_1	001
854	 1				N = 854 =		· 7 ·			geny class		<u> </u>	854
A1	1	0	1	-722	7396	1	1	+	10, 3, 1	10, 3, 1	2, 1, 1	I_{10}, I_{3}, I_{1}	
B1	 1	0	1	-2706	53940	! - :	3	<u> </u>	' 4, 1, 1	$\begin{vmatrix} 1 & 1 & 1 & 1 \\ 1 & 4 & 1 & 1 \end{vmatrix}$	$\begin{bmatrix} 2, 1, 1 \end{bmatrix}$	$\left \begin{array}{cccccccccccccccccccccccccccccccccccc$	3 : 2
B2	1	0	1	-2801	49924		3	+	12, 3, 3	12, 3, 3	2, 3, 3	I_{12},I_3,I_3	3:1,3
В3	1	0	1	-56176	-5122754	1	1	+	36, 1, 1	36, 1, 1	2, 1, 1	I_{36}, I_1, I_1	3 :2

	a_1	a_2	a_3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta$	7)	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
85	4				N =	= 8	54 =	= 2	$\cdot 7 \cdot 61$	_	(continue	ed)		854
C1	1	1	1	-13	3	1	1	+	8, 1,	1	8, 1, 1	8, 1, 1	I_{8},I_{1},I_{1}	
D1	1	1	1	-399	1237	1	1	' +	-6, 7, 1		-6, 7, 1	[6, 7, 1]	$ I_6, I_7, I_1 $	'
85	5				N = 855	- i	- 3 ²	. 5	. 10	(3	isogeny c	laggeg)		855
A1		-1	1	202	$\frac{17 - 336}{4956}$			_	$\frac{13}{14, 3,}$	_	$\frac{180geny}{8,3,1}$	4,1,1	I_8^*, I_3, I_1	2 : 2
A1 A2			1	-3443	73482			+	14, 5, 10, 6,		4, 6, 2	4, 1, 1 4, 2, 2	$I_8,I_3,I_1 \\ I_4^*,I_6,I_2$	$egin{array}{c} {f 2} : 2 \\ {f 2} : 1, 3, 4 \end{array}$
A3			1	-11138	-363594		2	+	8, 12,		2, 12, 1	4, 2, 1	I_2^*, I_{12}, I_1	2:1,5,1 2:2
A4		-1			4852482		2	+	8, 3, 4		2, 3, 4	2, 1, 2	I_2^*, I_3, I_4	2 :2
B1	 1	-1	 1	13	474	- <u>'</u> 1	2	' _	7, 3, 5	2	1, 3, 2	$\begin{bmatrix} 2, 3, 2 \end{bmatrix}$	I_1^*, I_3, I_2	2:2
B2		-1		-842	9366		2	+	8, 6, 1		2, 6, 1	4, 6, 1	I_2^*, I_6, I_1	2 :1
$\bar{C}1$	' 1	-1	0	171	0	0	2	' _	11, 1,		5, 1, 2	$\frac{1}{4}, \frac{1}{4}, \frac{2}{4}$	$ I_5^*, I_1, I_2 $	$ {\bf 2}:2$
C2		-1		-684				+	16, 2,		10, 2, 1	4, 2, 1	I_{10}^*, I_2, I_1	2:1
	_										<u> </u>		107	
85					N = 85		=2	3 . :	107	(4 i	sogeny cla	asses)	T	856
A1	0	1	0	-3	2	1	1	-	4, 1		0, 1	$\begin{vmatrix} 2,1 \end{vmatrix}$	$ $ III,I $_1$	
B1	0	1	0	0	-16	1	1	-	10, 1	-	0, 1	2, 1	$\mathrm{III}^*, \mathrm{I}_1$	
$\overline{\text{C1}}$	0	-1	0	-28	68	1	1	-	8, 1		0, 1	4,1	$oxed{I_1^*,I_1}$	
D1	0	-1	0	-432	-3316	1	1	 -	11, 1	 -	0,1	1,1	$ II^*, I_1 $	<u> </u>
85	Q Q				N = 858 =	_ ') 2	1 .	1 12	(1	2 icogony	alaccas)		858
		1	0	C	1	-				_		· · · · ·	т т т т	1
A1 A2	1 1		0	$ \begin{array}{c} 6 \\ -314 \end{array} $	$ \begin{array}{r} -108 \\ -2220 \end{array} $				6, 4, 2, 1		12, 2, 1, 1 6, 4, 2, 2		$I_{12},I_2,I_1,I_1 I_6,I_4,I_2,I_2$	
$\begin{array}{ c c }\hline A3 \end{array}$	1		0	-4994					$3, 2, 4, \dots$		3, 2, 4, 1			2:1,5,4 2:2
A4	1		0		4732								I_3, I_2, I_4, I_1 I_3, I_8, I_1, I_4	
B1	1	0	1	359	1916	- :	6		8, 6, 1		8, 6, 1, 3	$\begin{bmatrix} 2, 6, 1, 3 \end{bmatrix}$:	$ {\bf 2}:2;{\bf 3}:3 $
B2	1	0	1	-1801	16604		6		4, 3, 2	<i>'</i>	4, 3, 2, 6	$\begin{bmatrix} 2, 3, 1, 3 \\ 2, 3, 2, 6 \end{bmatrix}$	I_4, I_3, I_2, I_6	, , , , , , , , , , , , , , , , , , ,
B3	1	0	1		-117658		2			<i>'</i>	24, 2, 3, 1		I_{24}, I_2, I_3, I_1	
B4	1	0	1	-65176	-6409114	1	2				12, 1, 6, 2		I_{12}, I_1, I_6, I_2	
$\bar{C1}$	1	0	1	-7	-10	0	2	 -	2, 1, 2	[1, 1]	2, 1, 2, 1	[2,1,2,1]	$ I_2,I_1,I_2,I_1 $	2 :2
C2	1	0	1	-117	-494	0	2		1, 2, 1	*	1, 2, 1, 2	1, 2, 1, 2	I_1, I_2, I_1, I_2	2 : 1
D1	1	0	1	-103987	12897998	0	3	i _	13.6.3	 3. 1	13, 6, 3, 1	[1,6,3,1]	I_{13}, I_6, I_3, I_1	3 :2
D2	1	0	1		18827108		1			,	39, 2, 1, 3		I_{39}, I_2, I_1, I_3	
E1	1	1	1	-1067	12953	- :	4				12, 3, 1, 2		$ I_{12},I_3,I_1,I_2 $	<u>' </u>
E2	1	1	1	-1387	4121		$\overline{4}$		6, 6, 2	,	6, 6, 2, 4	6, 2, 2, 2	I_6, I_6, I_2, I_4	
E3	1	1	1	-13267	-589879	0	2	+	3, 3, 1	, 8	3, 3, 1, 8	3, 1, 1, 2		2 :2
E4	1	1	1	5373	39273	0	2	_	3, 12, 4	4, 2	3, 12, 4, 2	3, 2, 2, 2	I_3, I_{12}, I_4, I_2	2 :2
F1	$\begin{bmatrix} 1 \end{bmatrix}$	1	1	-572	118685	$1 \mid$	1	<u> </u>	11, 6, 1	, 5	11, 6, 1, 5	11, 2, 1, 5	$ I_{11},I_{6},I_{1},I_{5} $	
G1	1	1	1	-46	107	1	1	-	9, 2, 1	$,1^{-}$	9, 2, 1, 1	9, 2, 1, 1	I_9,I_2,I_1,I_1	
H1	1	1	1	-154	791	0	4	-	4, 3, 4	1 - 1	4, 3, 4, 1	[4, 1, 4, 1]	$ I_4,I_3,I_4,I_1 $	2 :2
H2	1	1	1	-2574	49191		4		2, 6, 2		2, 6, 2, 2	2, 2, 2, 2		2:1,3,4
Н3	1	1	1	-2684	44615		2				1, 12, 1, 4	1, 2, 1, 4	I_1, I_{12}, I_1, I_4	2 :2
H4	1	1	1	-41184	3199767	0	2	+	1, 3, 1	, 1	1, 3, 1, 1	1,1,1,1	I_1,I_3,I_1,I_1	2 :2
I1	1	1	1	-2301	-43629		2	—	16, 6, 1	, 1	16, 6, 1, 1	16, 2, 1, 1	$ I_{16},I_{6},I_{1},I_{1} $	2 :2
I2	1	1	1	-36861	-2739309	0	2	+	8, 3, 2	, 2	8, 3, 2, 2	8, 1, 2, 2	I_8,I_3,I_2,I_2	2 :1

a_1	$a_{2} a_{3}$	a_4	$a_6 r$	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
858			N = 858 = 2	$2 \cdot 3$. 1	1 · 13 (continued	d)		858
J1 1 J2 1		$ \begin{array}{r} 13 \\ -617 \end{array} $	$ \begin{array}{r r} -39 & 0 \\ -5961 & 0 \end{array} $						$I_3, I_6, I_1, I_1 \\ I_1, I_2, I_3, I_3$	
K1 1 K2 1		-5774401 16353089	$5346023177 \begin{vmatrix} 0 \\ -335543012233 \end{vmatrix} 0$						$egin{array}{l} I_7, I_{14}, I_7, I_3 \\ I_1, I_2, I_1, I_{21} \end{array}$	
$ \begin{array}{c c c} L1 & 1 \\ L2 & 1 \end{array} $		$-332 \\ -7372$							$\begin{vmatrix} I_{14}, I_1, I_2, I_3 \\ I_7, I_2, I_1, I_6 \end{vmatrix}$	
$ \begin{array}{c c} M1 & 1 \\ M2 & 1 \end{array} $		-1 -61	$ \begin{array}{c c} -7 & 0 \\ -187 & 0 \end{array} $						$\begin{vmatrix} I_4, I_2, I_1, I_1 \\ I_2, I_1, I_2, I_2 \end{vmatrix}$	
861			N = 861 = 3	7.	41	(4 isog	geny class	es)		861
A1 1 A2 1 A3 1 A4 1	1 1 1 1 1	$ \begin{array}{r} 3 \\ -42 \\ -657 \\ -147 \end{array} $	$ \begin{array}{r} -60 \\ -1140 \\ -67560 \\ 5160 \end{array} $	$\frac{4}{2}$	- + + +	4, 1, 1 2, 2, 2 1, 4, 1 1, 1, 4	$\begin{array}{c} 4, 1, 1 \\ 2, 2, 2 \\ 1, 4, 1 \\ 1, 1, 4 \end{array}$	$2, 1, 1 \\ 2, 2, 2 \\ 1, 4, 1 \\ 1, 1, 2$	$\begin{matrix} I_4,I_1,I_1\\ I_2,I_2,I_2\\ I_1,I_4,I_1\\ I_1,I_1,I_4 \end{matrix}$	2:2 2:1,3,4 2:2 2:2
B1 1	0 1	706	-64375	1	'- - -	17, 3, 1	17, 3, 1	17, 1, 1	I_{17}, I_3, I_1	! -
!	0 0	2941 -7	$ \begin{array}{c c} & 18606 1 \\ & 14 1 \end{array} $		- -	$ \begin{array}{c} 7,1,5 \\ -2,-2,-3 \\ 5,1,1 \end{array} $	$\begin{bmatrix} 7,1,5\\ 5,1,1 \end{bmatrix}$	$\begin{bmatrix} 7, 1, 5 \\ -5, 1, 1 \end{bmatrix}$	$\left \begin{array}{ccc} I_{7}, I_{1}, I_{5} \\ -I_{5}, I_{1}, I_{1} \end{array} \right $	
862			N = 862 = 2	. 45	31	(6 isog	eny classe	es)		862
A1 1	0 1	1	-2 1	1	_	2,1	2,1	2, 1	I_2,I_1	
B1 1	$-1 \ 0$	-70	244 1	1	<u></u>	6, 1	$\begin{bmatrix} 6,1 \end{bmatrix}$	$\begin{bmatrix} 2, 1 \end{bmatrix}$	$oxed{I_6,I_1}$	
	$ \begin{array}{cccc} -1 & 1 \\ -1 & 1 \end{array} $	6 -34	$ \begin{array}{c c} -7 & 0 \\ -39 & 0 \end{array} $		- +	$6,1\\3,2$	$6, 1 \\ 3, 2$	$6, 1 \\ 3, 2$	$\begin{matrix} I_6,I_1\\I_3,I_2\end{matrix}$	2:2 2:1
D1 1		8	64 0		Ī-	12,1	12,1	12,1	I_{12} , I_1	3:2
$D2 \mid 1$		-72 	-1744 0		<u> </u> -	4,3	4,3	$\begin{bmatrix} 4, 1 \\ \end{bmatrix}$	I ₄ ,I ₃	3 :1
E1 1 E2 1		-2460 15380	$ \begin{array}{c c} 45949 & 1 \\ -102531 & 1 \end{array} $			$20, 1 \\ 4, 5$	20, 1 $4, 5$	20, 1 $4, 5$	$egin{array}{c} { m I}_{20}, { m I}_1 \ { m I}_4, { m I}_5 \end{array}$	5 : 2 5 : 1
F1		-2	15 1		<u> </u>	-	8,1	8,1	$\begin{bmatrix} -14, I_5 \\ I_8, I_1 \end{bmatrix}$	
864			$N = 864 = 2^{5}$		3	<u> </u>	geny classo		0, 1	864
	0 0	-3	6 1		<u> </u>	9,3	0,0	2,1	I_0^* , II	
B1 0		-24	48 1		<u> </u>	$\frac{12,3}{12,3}$	0,0	$\begin{bmatrix} -2 & -2 & -2 & -2 & -2 & -2 & -2 & -2 $	⁰⁷ III*,II	'
$C1 \mid 0$		24	-16 1		<u> </u>	$\frac{12,5}{12}$	0,0	$\begin{bmatrix} -2, 3 \end{bmatrix}$		'
$D1 \mid 0$		-3	-6 0		<u> </u>	9,3	0,0	$\begin{bmatrix} 1 & 1 & 1 & 1 \\ 1 & 1 & 1 \end{bmatrix}$	$\left egin{array}{cccccccccccccccccccccccccccccccccccc$	'
E1 0		216	-432 0		<u> </u>	12,11	0,0	$\begin{bmatrix} - & - & - \\ 2 & 1 \end{bmatrix}$		'
$\begin{bmatrix} -1 & -1 \\ F1 & 0 \end{bmatrix}$	0 0	-24	-48 0		<u> </u>	12,3	0,0	[-2, 1]		
'	0 0	-27	162 0		<u>-</u> -	9,9	0,0	1,1	I_0^*,IV^*	:
H1 0	0 0	216	432 0		<u>-</u>	12,11	0,0	[-2, 1]	 III*,II*	:
I1 0	0 0	-216	-1296 0		<u>-</u>	12,9	0,0	[-2, 1]		:
J1 0	0 0	-27	-162 1	1	<u>-</u>	9,9	0,0	2, 3	I ₀ ,IV*	:
K1 0	0 0	24	16 1	1	<u>-</u>	12,5	0,0	[-2, 1]	III*,IV	[
$L1 \mid 0$	0 0	-216	1296	1	Ī-	12,9	0,0	2, 3	III^*,IV^*	

			INDEL	1.			V ED 00011	0101		231
a	$a_1 \ a_2 \ a_3$	a_4	a_6	r	Γ	$s \operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
866	•		N = 86	66 =	= 2	$2 \cdot 433$ (1 i	sogeny cla	uss)		866
A1	1 0 0	-8	64	1	3	-12,1	12, 1	12, 1	I_{12}, I_{1}	3 :2
A2	1 0 0	72	-1712	1	1	-4,3	4,3	4,3	I_4,I_3	3 : 1
			·							<u> </u>
867	7		N = 867	<i>'</i> =	3	$\cdot 17^2$ (5 is	ogeny clas	sses)		867
A1	0 - 1 1	193	-5023	1	1	- 3,7	3, 1	1,4	I_3,I_1^*	3 :2
A2	0 - 1 1	-17147	-859018	1	1	-1,9	1,3	1, 4	I_1,I_3^*	3 :1
B1	1 1 1	-23	20	1	2	+ 4,3	4,0	2,2	I_4 ,III	2 :2
B2	1 1 1	62	224	1	2	-8,3	8,0	2, 2	I_8 ,III	2 :1
C1	0 - 1 1	1638	-13693	$1 \mid$	$\overline{1}$	-1,9	1,0	1,2	I_1,III^*	5 :2
C2	0 - 1 1	-244012	-46313805	1	1	-5,9	5,0	1, 2	I_5, III^*	5 : 1
D1	1 0 0	-6653	145704	0	$\overline{2}$	+ 4, 9	4,0	4, 2	I ₄ ,III*	2 :2
D2	1 0 0	17912	976001	0	2	- 8,9	8,0	8, 2	I_8 , III^*	2 : 1
E1	0 1 1	6	-1	0	 1	-1,3	1,0	1,2		5 :2
E2	0 1 1	-844	-9725	0	1	- 5,3	5,0	5, 2	I_5 ,III	5 : 1
				<u> </u>			1			
869)		N = 869) =	11	$1 \cdot 79$ (4 is	ogeny clas	sses)		869
	1 0 1	-138	609		1	+ 2,1	2,1	2,1	I_2,I_1	
!-	0 1 1	10	-2	- '-	- 1	$\begin{vmatrix} 1 & 1 & 2 & 1 \\ - & 1 & 2 & 1 \end{vmatrix}$!	$\begin{bmatrix} -2, 1 \\ 1, 2 \end{bmatrix}$	<u>'</u>	
!-				- '-		!	$\frac{1}{1}$ $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$	¦	I_1,I_2	
C1	$\begin{bmatrix} 1 & 0 & 0 \\ 1 & 0 & 0 \end{bmatrix}$	-2	-5		2	$\begin{bmatrix} -&2,1\\ &1,2 \end{bmatrix}$	2,1	2,1	I_2,I_1	2 :2
!-	1 0 0		-170	- '-	2 -	+ 1,2	$\frac{1}{1} - \frac{1}{2} - \frac{2}{3} - \frac{1}{3} - \frac{1}$	1,2	I_1,I_2	2 :1
D1	1 1 0	-512	4237	1	1	+ 2,3	2,3	2,3	I_2,I_3	
870)		N = 870 =	= 2	. 3	$\cdot 5 \cdot 29$ (9	isogeny c	lasses)		870
A1	1 1 0	-87	261	1	2	+4,4,3,1	4, 4, 3, 1	2, 2, 3, 1	I_4, I_4, I_3, I_1	2 :2
	1 1 0	-267	-1431		4	+2,2,6,2	, , ,	, , ,		2:1,3,4
	1 1 0	-4017	-99681		2	+1,1,3,4				
A4	1 1 0	603	-7869	1	2	-1,1,12,1	[1, 1, 12, 1]	1, 1, 12, 1	$ I_1,I_1,I_{12},I_1 $	2 : 2
B1	1 0 1	-2829	55816		6	+10, 6, 1, 3				
	1 0 1	-7149	-156728		6	+5,3,2,6	5, 3, 2, 6	1, 3, 2, 6		[2:1;3:4]
	$\begin{array}{cccc} 1 & 0 & 1 \\ 1 & 0 & 1 \end{array}$	-32844	-2275958 -146193014		$\frac{2}{2}$	+30, 2, 3, 1				
'-			!	- '-		+15,1,6,2		:	$ I_{15},I_1,I_6,I_2 $	
	$\begin{array}{ccc} 1 & 0 & 1 \\ 1 & 0 & 1 \end{array}$	$-58 \\ 212$	56 488		6 6	$\begin{bmatrix} + & 2 & 6 & 3 & 1 \\ - & 1 & 3 & 6 & 2 \end{bmatrix}$				2:2;3:3 $2:1;3:4$
	1 0 1	-2533	-49264		2	$\begin{bmatrix} -1, 3, 6, 2 \\ +6, 2, 1, 3 \end{bmatrix}$		$\begin{bmatrix} 1, 3, 6, 2 \\ 2, 2, 1, 1 \end{bmatrix}$	I_{1},I_{3},I_{6},I_{2} I_{6},I_{2},I_{1},I_{3}	· ·
~ .	1 0 1	-2413	-54112		2	$\begin{bmatrix} -3, 2, 1, 6 \\ -3, 1, 2, 6 \end{bmatrix}$				[2 : 3; 3 : 2]
¦-	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-113	-124	- '-	2	+16, 2, 1, 1				
	1 0 1	-1393	-20092		4	$\begin{vmatrix} +8, 4, 2, 2 \end{vmatrix}$				
	1 0 1	-22273	-1281244		2	+4,2,4,1				
D4	1 0 1	-993	-31772		4	-4, 8, 1, 4				
E1	1 1 1	-11	-7	1	2	+6,2,1,1	[6, 2, 1, 1]	[6, 2, 1, 1]	$ I_6,I_2,I_1,I_1 $	2 :2
	1 1 1	-131	-631		2	+3,1,2,2			I_3, I_1, I_2, I_2	
F1	1 1 1	-1760	27137	1	2	+14, 2, 5, 1	[14, 2, 5, 1]			
F2	1 1 1	160	85505		2	-7, 1, 10, 2				

	$\overline{a_1}$	a_2	a_3	a_4	$a_6 r$	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
87						' '		$\cdot 3 \cdot 5 \cdot 29$	(continue			870
G1	1	1	1	-250	1415 0	1	1	8, 4, 1, 1	8, 4, 1, 1	8, 2, 1, 1	I_{8},I_{4},I_{1},I_{1}	2:2
G2	1	1	1	-330	3270			4, 8, 2, 2	4, 8, 2, 2	4, 2, 2, 2	I_4, I_8, I_2, I_2	
G3	1		1	-3230	-715930			2, 16, 1, 1	2, 16, 1, 1	2, 2, 1, 1	I_2,I_{16},I_1,I_1	
G4	1	1		1290	4215 0	!	<u>'</u> –	2,4,4,4	$\begin{bmatrix} 2, 4, 4, 4 \\ \end{bmatrix}$	$\begin{bmatrix} 2, 2, 4, 4 \\ \end{bmatrix}$	$ I_2, I_4, I_4, I_4 $	2 :2
H1	1	-	0	-5	-3 0			2, 2, 1, 1	2, 2, 1, 1	2, 2, 1, 1	I_2,I_2,I_1,I_1	2:2
H2	1	0	0	-35 	75 0	·	٠	1, 1, 2, 2	1,1,2,2	1,1,2,2	$ I_1,I_1,I_2,I_2 $	2 :1
I1 I2	1	0	0	-4480 -43360					$\begin{bmatrix} 10, 10, 5, 1 \\ 5, 5, 10, 2 \end{bmatrix}$		$egin{array}{l} I_{10}, I_{10}, I_5, I_1 \ I_5, I_5, I_{10}, I_2 \end{array}$	
I3	1				-1202240020 0			2, 2, 1, 5	$\begin{bmatrix} 0, 0, 10, 2 \\ 2, 2, 1, 5 \end{bmatrix}$	$\begin{bmatrix} 0, 0, 10, 2 \\ 2, 2, 1, 1 \end{bmatrix}$	I_2,I_2,I_1,I_5	
I4	1				-1202204578 0						I_1, I_1, I_2, I_{10}	
87	1				N = 87	1 =	13	$3 \cdot 67$ (1)	isogeny cla	ss)		871
A1	0	-1	1	-42	139 0	1	_	4, 1	4, 1	2,1	I_4,I_1	
87	2				N = 872	t = t	2^3	. 109 (1	isogeny cla	ass)		872
A1	0	1	0	0	16 1	1	_	10, 1	0, 1	2,1	$\mathrm{III}^*,\!\mathrm{I}_1$	
87	3				N = 873	=3	3^2	· 97 (4 is	sogeny clas	ses)		873
A1		-1		-27	-32 0		+	,	2,1	4,1	I_2^*,I_1	2 :2
A2	1	-1 	0	-162	805 0	$\frac{2}{2}$	+	7,2	1,2	$\begin{bmatrix} 2,2 \end{bmatrix}$	I_1^*,I_2	2 :1
B1		-1		-1476	-21461 1		+	,	4, 1	4, 1	$\mathrm{I}_{4}^{st},\!\mathrm{I}_{1}$	2 :2
B2		-1		-1521	-20048 1			,	8,2	4,2	I_8^*, I_2	2:1,3,4
B3 B4		-1 -1		-5886 2124	$ \begin{array}{c c} 153679 1 \\ -103883 1 \end{array} $		+	$22, 1 \\ 10, 4$	$16, 1 \\ 4, 4$	4,1 $2,4$	$I_{16}^*,I_1 \ I_4^*,I_4$	2:2 2:2
C1				-19569	-4064513 1	!	 - _	$-\frac{10}{29}, \frac{4}{1}$	$\begin{bmatrix} -23, 4\\ 23, 1 \end{bmatrix}$	$\begin{bmatrix} - & 2 & 4 \\ - & - & - \\ 4 & 1 \end{bmatrix}$	$\begin{bmatrix} I_{23}, I_{1} \\ I_{23}^{*}, I_{1} \end{bmatrix}$	2
D1				-3	22 1	!	 - —		$\begin{bmatrix} -20, 1 \\ 1, 1 \end{bmatrix}$	$\begin{bmatrix} - & -1 & 1 & 1 \\ - & -1 & -1 & -1 & -1 $	$egin{array}{cccccccccccccccccccccccccccccccccccc$	<u> </u>
87					N = 874 =				isogeny cla	·	1/1	874
A1		<u> </u>	0	-19	-130	1		`	1,3,1	1,1,1	I_1,I_3,I_1	
B1		 -1		-13189		:	<u>'</u> _	$\begin{array}{c} -1, 0, 1 \\ 25, 3, 1 \end{array}$	$\begin{bmatrix} 1, 3, 1 \\ 25, 3, 1 \end{bmatrix}$	$\begin{bmatrix} 1, 1, 1, 1 \\ 1, 1, 1 \end{bmatrix}$	I_{25}, I_3, I_1	<u>-</u>
C1	1	1		-38		·	<u>-</u> +		$\begin{bmatrix} 25, 5, 1 \\ -3, 1, 1 \end{bmatrix}$	¦	:	<u> </u>
						!	<u>'</u> -		<u> </u>	$\begin{bmatrix} 1, 1, 1 \\ \end{bmatrix}$	I_3,I_1,I_1	<u> </u>
D1	1	0		-12		!	+ -		5,1,1	$\begin{bmatrix} 5, 1, 1 \\ -2, 1, 2, -1 \end{bmatrix}$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	
$egin{array}{c} ext{E1} \ ext{E2} \end{array}$	1 1	1 1	1	-410 -142320	$ \begin{array}{c c} 903 & 1 \\ -20724857 & 1 \end{array} $		+ +	, ,	5, 1, 5 1, 5, 1	5, 1, 5 1, 1, 1	$egin{array}{c} { m I}_5, { m I}_1, { m I}_5 \ { m I}_1, { m I}_5, { m I}_1 \end{array}$	5 :2 5 :1
$\frac{E_2}{F_1}$	- <u>-</u> -		0		-20724837[1] $-270343[0]$	'	'-		<u>'</u>		!	3 : 2
F1 $F2$	1			-7929 -640889	-27034300 -1975330630			, ,	21, 1, 3 $7, 3, 1$	21, 1, 3 $7, 3, 1$	$egin{array}{c} I_{21}, I_1, I_3 \ I_7, I_3, I_1 \end{array}$	3:2 3:1
87	6				N = 876 =				isogeny cla		1, 2, =	876
A1		-1	0	-48885	4176513 1	1		\	0,11,1	1,1,1	IV^*, I_{11}, I_1	
B1		1		-61	191 1	:	'-		$\begin{bmatrix} 0, 11, 1 \\ 0, 5, 1 \end{bmatrix}$	$\begin{bmatrix} 1, 1, 1 \\ 3, 5, 1 \end{bmatrix}$	$ \text{IV}^*, \text{I}_5, \text{I}_1 $	<u>-</u>
88	0				N = 880 =	2^4	. 5	. 11 (10	isogeny cl	asses)	<u> </u>	880
A1	0	0	0	2	3 1		_	$\frac{11}{4,2,1}$	0, 2, 1	1, 2, 1	II,I_2,I_1	2 :2
A2	-		0	-23	$38 \begin{vmatrix} 1 \\ 1 \end{vmatrix}$		+		0, 1, 2	2, 1, 2	I_0^*, I_1, I_2	2 :1
B1	0	0	0	-38	87 0	· – –	'- +	4, 3, 2	0,3,2	1,1,2	II,I_3,I_2	2 :2
B2	0	0	0	17	318 0	2	-	* *	0, 6, 1	2, 2, 1	I_0^*, I_6, I_1	2 :1

<i>a</i> ₁ <i>a</i> ₂ <i>a</i> ₂	<i>a</i> ,	$q_a r$	ΙΤΙ	$s \operatorname{ord}(\Delta)$	ord (i)	С	Kodaira	Isogenies
a_1 a_2 a_3	a_4	$a_6 \mid r$	1	$s \text{ ora}(\Delta)$	$ora_{-}(j)$	c_p	Kodaira	isogemes

880)				N = 8	80	$= 2^{-1}$	$^4 \cdot $	5 · 11 (continued	d)		880
C1	0	0	0	-5042	-137801	1	2	+	4, 3, 2	0, 3, 2	1, 3, 2	II,I_3,I_2	2 :2
C2	0	0	0	-5047	-137514	1	4	+	8, 6, 4	0, 6, 4	2, 6, 4	I_0^*, I_6, I_4	2:1,3,4
C3	0	0	0	-7547	12986	1	4	+	10, 3, 8	0, 3, 8	4, 3, 8	I_{2}^{*},I_{3},I_{8}	2 :2
C4	0	0	0	-2627	-269646	1	4	-	10,12,2	0, 12, 2	2, 12, 2	I_2^*, I_{12}, I_2	2:2
D1	0	0	0	-67	226	1	1	-	11, 3, 1	0, 3, 1	4, 3, 1	I_3^*, I_3, I_1	
E1	0 -	-1^{-}	0	-1416	-20240	0	1	-	19, 1, 3	7, 1, 3	[2, 1, 1]	I_{11}^*, I_1, I_3	3 :2
E2	0 -	-1	0	4744	-108944	0	1	_	33, 3, 1	21, 3, 1	2, 1, 1	I_{25}^*, I_3, I_1	3 :1
F1	0 -	-1^{-1}	0	-16	-64	1	1	-	15, 1, 1	[3, 1, 1]	[4, 1, 1]	$\mathrm{I}_{7}^{st},\!\mathrm{I}_{1},\!\mathrm{I}_{1}$	3 :2
F2	0 -	-1	0	144	1600	1	1	_	13, 3, 3	1, 3, 3	4, 1, 3	I_5^*, I_3, I_3	3 :1
G1	0	1	0	160	3188	1	1	-	17, 5, 1	[5, 5, 1]	[4, 5, 1]	$\mathrm{I}_9^*,\!\mathrm{I}_5,\!\mathrm{I}_1$	5 :2
G2	0	1	0	-95040	11245748	1	1	_	13, 1, 5	1, 1, 5	4, 1, 1	I_5^*, I_1, I_5	5 :1
H1	0	1	0	-5	-2	1	$\frac{1}{2}$	+	4, 1, 2	[0, 1, 2]	[1, 1, 2]	II,I_1,I_2	2 :2
H2	0	1	0	-60	-200	1	2	+	8, 2, 1	0, 2, 1	1, 2, 1	I_0^*, I_2, I_1	2 :1
I1	0	0	0	13	-14	0	2	-	12, 1, 1	0, 1, 1	[4, 1, 1]	$\mathrm{I}_{4}^{st},\!\mathrm{I}_{1},\!\mathrm{I}_{1}$	2 :2
I2	0	0	0	-67	-126	0	4	+	12, 2, 2	0, 2, 2	4, 2, 2	${ m I}_{4}^{*}, { m I}_{2}, { m I}_{2}$	2:1,3,4
I3	0	0	0	-947	-11214	0	2	+	12, 4, 1	0, 4, 1	2, 4, 1	${ m I}_{4}^{*}, { m I}_{4}, { m I}_{1}$	2 :2
I4	0	0	0	-467	3794	0	4	+	12, 1, 4	0, 1, 4	4, 1, 4	I_4^*, I_1, I_4	2:2
J1	0 -	-1	0	-45	-100	0	2	+	4, 3, 2	0, 3, 2	1, 3, 2	II,I_3,I_2	$ {\bf 2}:2;{\bf 3}:3 $
J2	0 -	-1	0	-100	252	0	2	+	8, 6, 1	0, 6, 1	1, 6, 1	I_0^*, I_6, I_1	2:1;3:4
J3	0 -	-1	0	-445	3720	0	2	+	4, 1, 6	0, 1, 6	1, 1, 6	II,I_1,I_6	2:4;3:1
J4	0 -	-1	0	-7100	232652	0	2	+	8, 2, 3	0, 2, 3	1,2,3	I_0^*, I_2, I_3	2:3;3:2

882	2			N = 882 =		882					
A1	1 - 1	0	-4566	119916	1	3	-3,3,8	3, 0, 0	1, 2, 3	I_3 ,III,IV*	3 :2
A2	1 -1	0	579	366533	1	1	-9,9,8	9, 0, 0	1, 2, 3	I_9 , III^* , IV^*	3 :1
B1	1 - 1	0	-93	-323	0	1	[-3, 3, 2]	[3, 0, 0]	1, 2, 1	I_3,III,II	3 :2
B2	1 - 1	0	12	-1072	0	1	-9, 9, 2	9, 0, 0	1, 2, 1	I_9,III^*,II	3 : 1
C1	1 - 1	0	-450	-8366	0	1	[-1, 7, 8]	1,1,0	[1, 2, 1]	I_1,I_1^*,IV^*	7 :2
C2	1 - 1	0	-62190	6208852	0	1	-7, 13, 8	7, 7, 0	1, 2, 1	I_7,I_7^*,IV^*	7 :1
D1	1 - 1	0	_9	27	1	1	-1,7,2	1, 1, 0	[1, 4, 1]	I_1,I_1^*,II	7 :2
D2	1 - 1	0	-1269	-17739	1	1	-7, 13, 2	7, 7, 0	1, 4, 1	I_7,I_7^*,II	7 : 1
E1	1 –1	0	-1773	63909	1	2	-8, 8, 7	8, 2, 1	[2, 2, 4]	I_8,I_2^*,I_1^*	2 :2
E2	1 - 1	0	-37053	2752245	1	4	+4,10,8	4, 4, 2	2, 4, 4	I_4, I_4^*, I_2^*	2:1,3,4
E3	1 - 1	0	-45873	1349865	1	4	+2,14,10	2, 8, 4	2, 4, 4	I_2,I_8^*,I_4^*	2:2,5,6
E4	1 - 1	0	-592713	175784769	1	2	+ 2, 8, 7	2, 2, 1	2, 4, 2	I_2,I_2^*,I_1^*	2 :2
E5	1 - 1	0	-403083	-97454421	1	2	+1,10,14	1, 4, 8	1, 2, 4	I_1, I_4^*, I_8^*	2 :3
E6	1 - 1	0	170217	10295991	1	2	-1,22,8	1, 16, 2	1, 4, 2	I_1,I_{16}^*,I_2^*	2 :3
$\overline{F1}$	1 - 1	1	64	-13597	0	3	[-9, 3, 8]	9,0,0	9, 2, 3	I_9 ,III,IV*	3 :2
F2	1 - 1	1	-41096	-3196637	0	1	-3, 9, 8	3, 0, 0	3, 2, 3	I_3 , III^* , IV^*	3 : 1
G1	1 - 1	1	1	39	1	1	-9, 3, 2	9,0,0	9, 2, 1	I_9 ,III,II	3 :2
G2	1 - 1	1	-839	9559	1	1	-3, 9, 2	3, 0, 0	3, 2, 1	I_3 , III^* , II	3 : 1
H1	1 - 1	1	211	1397	1	1	[-5, 9, 4]	5,3,0	5, 4, 3	I_5,I_3^*,IV	3 :2
H2	1 - 1	1	-6404	199847	1	3	-15, 7, 4	15, 1, 0	15, 4, 3	I_{15},I_1^*,IV	3 : 1

				Imi	1(A)	l (:)	_	V a daima	T
	a_1 a_2 a_3	a_4	$a_6 \mid r$	T	$s \operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
88	2		N = 882	= 2	$3^2 \cdot 7^2$ (6)	continued)		882
I1	1 - 1 1	-230	2769 0	2	-2, 6, 7	2, 0, 1	2, 2, 2	I_2,I_0^*,I_1^*	2 :2; 3 :3
I2	1 - 1 1	-4640	122721 0		+ 1, 6, 8	1, 0, 2	1, 2, 4	I_1,I_0^*,I_2^*	2:1;3:4
I3	1 - 1 1	1975	-57207 0		-6,6,9	6, 0, 3	6, 2, 2	I_6, I_0^*, I_3^*	2:4;3:1,5
I4 I5	$ \begin{array}{ccccccccccccccccccccccccccccccccc$	-15665	-614631 0		+3,6,12	3,0,6	$\begin{bmatrix} 3, 2, 4 \\ 18, 2, 3 \end{bmatrix}$	I_3,I_0^*,I_6^*	2 :3; 3 :2,6
16 I6		-75200 -1204160 -	$-7941405 \begin{vmatrix} 0 \\ -508296477 \end{vmatrix} 0$		$\begin{bmatrix} -18, 6, 7 \\ +9, 6, 8 \end{bmatrix}$	$\begin{vmatrix} 18, 0, 1 \\ 9, 0, 2 \end{vmatrix}$	$\begin{vmatrix} 18, 2, 2 \\ 9, 2, 4 \end{vmatrix}$	$\begin{bmatrix} I_{18}, I_0^*, I_1^* \\ I_9, I_0^*, I_2^* \end{bmatrix}$	2:6;3:3 2:5;3:4
J1	$\begin{bmatrix} 1 & 1 & 1 \\ 1 & -1 & 1 \end{bmatrix}$	10354	$-499971 \mid 0$! <i>-</i> - 1	[-5, 9, 10]	$\begin{array}{c c} 1 & 5, 3, 0 \\ \hline 1 & 5, 3, 0 \\ \end{array}$	[5, 2, 1]	$ I_5,I_3^*,II^* $	$ {\bf 3}:2$
J_2	1 - 1 1	-313781	-67920051 0		$\begin{bmatrix} -5, 5, 10 \\ -15, 7, 10 \end{bmatrix}$	15, 1, 0		$I_{15},I_3,II*$	3:1
K1	1 - 1 1	22	-871 0	<u> </u>	$\begin{bmatrix} -4, 10, 3 \end{bmatrix}$	$\begin{array}{c c} 1 & -1 & -1 \\ \hline 4, 4, 0 \end{array}$	$\frac{1}{4}, \frac{1}{2}, \frac{1}{2}$	$\mid \mathrm{I}_4, \mathrm{I}_4^*, \mathrm{III} \mid$	$ {\bf 2}:2$
K2	1 - 1 1	-1238	$-15991 \begin{vmatrix} 0 \\ 0 \end{vmatrix}$		+ 2, 14, 3	2, 8, 0	$\begin{bmatrix} 1, 2, 2 \\ 2, 4, 2 \end{bmatrix}$	I_{2},I_{8}^{*},III	2:1
L1	1 - 1 1	1093	296475 0	2	$\begin{bmatrix} -4, 10, 9 \end{bmatrix}$	$\frac{1}{4}, \frac{1}{4}, 0$	<u> </u>	$ I_4,I_4^*,III^* $.'
L2	1 - 1 1	-60647	5606115 0		+ 2, 14, 9	2, 8, 0	2, 4, 2	I_2,I_8^*,III^*	
88	 5		N = 885 = 3	. 5 .	50 (/ isc	geny clas	egg)		885
A1	$0-1 \ 1$	-126	$\frac{17 - 369 - 3}{587}$	1	+ 7, 1, 1	7,1,1	1, 1, 1	I_7,I_1,I_1	
B1	$\begin{bmatrix} -1 & -1 & -1 & -1 \\ 1 & 1 & 0 \end{bmatrix}$	-92	-381 1	$\frac{1}{2}$	+1,2,1	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	[1, 2, 1]	$ I_1, I_2, I_1 $	 2 :2
B2	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$-92 \\ -97$	$-361 1 \\ -344 1$	$\frac{2}{4}$	$\begin{bmatrix} + & 1, 2, 1 \\ + & 2, 4, 2 \end{bmatrix}$	$\begin{bmatrix} 1, 2, 1 \\ 2, 4, 2 \end{bmatrix}$	$\begin{bmatrix} 1, 2, 1 \\ 2, 4, 2 \end{bmatrix}$	$I_1,I_2,I_1 \ I_2,I_4,I_2$	2 : 2 $ 2: 1, 3, 4 $
$^{-}$ B3	1 1 0	-472	3481 1	$\overline{4}$	+ 1, 2, 4	1, 2, 4	1, 2, 4	I_1, I_2, I_4	2:2
B4	1 1 0	198	-1701 1	2	-4, 8, 1	4, 8, 1	2, 8, 1	I_4, I_8, I_1	2 :2
$\overline{\text{C1}}$	0 1 1	-5	$-4 \mid 1$	1	$[+\ 3,1,1]$	3, 1, 1	3, 1, 1	I_3,I_1,I_1	
D1	0 1 1	-280	1684 1	5	+5, 5, 1	[5, 5, 1]	[5, 5, 1]	I_5, I_5, I_1	5 :2
D2	0 1 1	-19330	-1040876 1	1	+ 1, 1, 5	1, 1, 5	1, 1, 1	I_1, I_1, I_5	5 : 1
88	6		N = 886 =	$2 \cdot 4$	43 (5 isos	geny class	ses)		886
A1		-14	24 1		+ 2,1	2,1	2, 1	I_2,I_1	
B1	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-1203	15950 1	1	[- 9, 1]	9,1	1,1	I_9,I_1	;
$\bar{\mathrm{C1}}$	'	-283	'	<u> </u>	+ 20, 1	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	$\begin{bmatrix} 2, 1 \end{bmatrix}$	$\begin{bmatrix} I_{20}, I_{1} \end{bmatrix}$!
D1	'		45705725 1	<u>-</u>	+ 38,1	38,1	38,1	I_{38}, I_1	!
E1		-4	7 1	<u> </u>	$\begin{bmatrix} - & 50, 1 \\ - & 5, 1 \end{bmatrix}$	$\begin{array}{c c} & 50, 1 \\ \hline & 5, 1 \end{array}$	$\begin{bmatrix} 50, 1 \\ 5, 1 \end{bmatrix}$	$\begin{bmatrix} 138,I_1 \\ I_5,I_1 \end{bmatrix}$!
171	1 1 1		1 1	1	0, 1	0,1	0, 1	15,11	
88	8		$N = 888 = 2^{3}$	$3 \cdot 3$	· 37 (4 iso	ogeny cla	sses)		888
A1	0 - 1 0	-200	-1044 0	1	-11, 5, 1	0, 5, 1	1, 1, 1	II^*,I_5,I_1	
B1	0 1 0	-39	-18 1	4	+4,8,1	0, 8, 1	[2, 8, 1]	III,I_8,I_1	2 :2
B2	0 1 0	-444	-3744 1		+ 8, 4, 2	1 ' '	2, 4, 2		2:1,3,4
B3	0 1 0	-7104	-232848 1		+ 10, 2, 1			III^*, I_2, I_1	
B4	0 1 0	-264	-6624 1	!	[-10, 2, 4]	0, 2, 4	[2, 2, 4]	$ III^*,I_2,I_4 $:
C1	0 - 1 0	-3	-36 1		-4,3,2	, ,	2, 1, 2	III,I_3,I_2	
C2	$\begin{bmatrix} 0 & -1 & 0 \\ -\frac{1}{2} & -\frac{1}{2} & -\frac{1}{2} \end{bmatrix}$	-188 		<u> </u>	+8,6,1				
D1 D2	$\begin{array}{cccc} 0 & 1 & 0 \\ 0 & 1 & 0 \end{array}$	-11			+ 4, 2, 1	0, 2, 1			
D2	0 1 0	4	$-48 \mid 0$		-8,1,2	0, 1, 2	4, 1, 2	I_1^*, I_1, I_2	2 :1
89	0		N = 890 = 2	· 5 ·	89 (8 iso	geny clas	ses)		890
A1	1 - 1 0	-5	1 1		+ 2,2,1	2, 2, 1	2, 2, 1	I_2, I_2, I_1	2 :2
A2	1 - 1 0	-55	171 1	2	+ 1, 1, 2	1, 1, 2	1, 1, 2	I_1,I_1,I_2	2 :1

	a_1 a_2 a_3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
890			N = 8	1 390	=2	. 5 .	89 (cc	ontinued)	r		890
B1	1 0 1	-9	-4	1	2	+	4, 2, 1	4, 2, 1	2, 2, 1	I_4, I_2, I_1	2 :2
B2	1 0 1	-109	-444	1	2	+	2, 1, 2	2, 1, 2	2, 1, 2	I_2,I_1,I_2	2 :1
$\bar{C1}$	1 1 0	-418	3072	0	2	<u> </u>	2, 8, 1	2,8,1	[2, 2, 1]	I_2,I_8,I_1	2 :2
C2	1 1 0	-6668	206822	0	2	+	1, 4, 2	1, 4, 2	1, 2, 2	I_1,I_4,I_2	2 :1
D1	1 0 1	-13	16	1	1	Ī —	3, 1, 1	[3, 1, 1]	$\begin{bmatrix} 1,1,1 \end{bmatrix}$	I_3,I_1,I_1	
E1	1 0 1	-1138	-14844	1	2	<u> </u>	12, 4, 1	12, 4, 1	[2, 4, 1]	I_{12}, I_4, I_1	2 :2
E2	1 0 1	-818	-23292	1	2	_	6, 8, 2	6, 8, 2	2, 8, 2	I_6, I_8, I_2	2 :1
$\overline{F1}$	1 -1 1	12	87	1	1	Ī —	13, 1, 1	13, 1, 1	13, 1, 1	I_{13},I_1,I_1	
G1	1 1 1	10	147	1	5	 -	5, 5, 1	[5, 5, 1]	[5, 5, 1]	I_5, I_5, I_1	5 :2
G2	1 1 1	-2040	-38093	1	1	_	1, 1, 5	1, 1, 5	1, 1, 1	I_1,I_1,I_5	5 :1
H1	1 -1 1	-52	151	0	4	+	8, 2, 1	[8, 2, 1]	[8, 2, 1]	I_8,I_2,I_1	2 :2
H2	1 - 1 1	-132	-361	0	4	+	4, 4, 2	4, 4, 2	4, 4, 2	I_4,I_4,I_2	2:1,3,4
H3 H4	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	-1912 368	-31689 -2761	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$\begin{array}{c c} 2 \\ 4 \end{array}$	+	2, 8, 1 2, 2, 4	$\begin{bmatrix} 2, 8, 1 \\ 2, 2, 4 \end{bmatrix}$	2, 8, 1	I_2,I_8,I_1	2:2 2:2
891		300				1		2,2,4	(2, 2, 4)	I_2,I_2,I_4	891
A1	1 -1 1	7	$\frac{N = 891}{10}$	1	$\frac{3}{1}$		$\frac{(8 \text{ isoge})}{6,2}$	$\frac{\text{eny classe}}{0,2}$	1,2	IV,I_2	691
	<u> </u> 			<u>-</u> -	<u>'</u>	 				!	 9 . 0
B1 B2	$\begin{bmatrix} 0 & 0 & 1 \\ 0 & 0 & 1 \end{bmatrix}$	$ \begin{array}{c} 6 \\ -324 \end{array} $	$-15 \\ -2248$	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$\begin{array}{c c} 3 \\ 1 \end{array}$	_	4, 3 $12, 1$	$0, 3 \\ 0, 1$	1, 3 1, 1	$II,I_3 II^*,I_1$	3:2 3:1
$\overline{C1}$	$\begin{bmatrix} 1 & -1 & 0 \\ 1 & -1 & 0 \end{bmatrix}$	66	-343	0	1 1	<u> </u>	12, 2	0, 2	1, 2	$ II^*, I_2 $	<u> </u>
D1	$\begin{bmatrix} 1 & 1 & 1 & 0 \\ 1 & 1 & -1 & 0 \end{bmatrix}$	-339	2492	0		<u> </u>	12, 1	$\begin{bmatrix} 0, 2 \\ 0, 1 \end{bmatrix}$		$ I $ $II*,I_1$	$\begin{bmatrix} {f 7} : 2 \end{bmatrix}$
D_2	1 - 1 0	876	-154729	0	1	_	12, 7	0, 7	1, 7	II^*,I_7	7 :1
E1	0 0 1	-81	-304	0	1	<u>-</u> —	12,1	0,1	1,1	$ II^*,I_1 $	<u>-</u>
F1		-36	83	0	3	<u> </u>	6, 1	[0, 1]	3, 1	$ $ IV,I_1	3 :2
F2	0 0 1	54	398	0	1	_	10, 3	0,3	1, 1	IV^*,I_3	3 :1
G1	1 -1 1	-38	-80	0	1	Ī —	6, 1	[0, 1]	$\begin{bmatrix} 1,1 \end{bmatrix}$	IV,I_1	7:2
G2	1 - 1 1	97	5698	0	1	_	6, 7	0, 7	1, 1	$_{ m IV,I_7}$	7 :1
H1	0 0 1	-9	11	0	1	_	6, 1	0, 1	1, 1	$_{ m IV,I_1}$	
892	2		N = 892	=	$2^2 \cdot 2$	23	(3 isog	geny classe	es)		892
A1	0 0 0	-415	3254	0	1	+	8, 1	0, 1	1,1	IV^*,I_1	
B1	0 1 0	-188	932	1	3	+	8,1	0,1	3, 1	$ IV^*, I_1 $	3 :2
B2	0 1 0	-388	-1580	1	1	+	8, 3	0,3	1, 3	IV^*,I_3	3 :1
$\overline{\text{C1}}$	0 - 1 0	-12	-8	1	1	+	8,1	[0, 1]	3,1	$ $ IV^*,I_1	
894	1		N = 894	= 2	. 3 .	149	(7 iso	geny class	ses)		894
A1	1 1 0	-18630	971028	1	1	_	13, 8, 1	13, 8, 1	1, 2, 1	I_{13}, I_{8}, I_{1}	
B1	1 1 0	-59	-201	1	1	+	1, 5, 1	1,5,1	[1, 1, 1]	I_1, I_5, I_1	
$\bar{C1}$	1 0 1	-407	-268	0	3	- +	1, 15, 1	1, 15, 1	1, 15, 1	I_1, I_{15}, I_1	3 :2
C2	1 0 1		-1387798		1	+	3, 5, 3	3, 5, 3	1,5,1	I_3, I_5, I_3	3 :1
D1	1 0 1	-13	-16	1	1	+	3, 3, 1	3, 3, 1	1, 3, 1	I_{3},I_{3},I_{1}	
E1		-38		<u>-</u> -	1	<u> </u>	23, 4, 1	23, 4, 1	23, 2, 1	I_{23},I_4,I_1	<u> </u>
F1	<u> </u>	-42	87	<u>'</u>	1	<u>-</u> +	 5, 1, 1	$\begin{bmatrix} 5, 1, 1 \end{bmatrix}$	[5, 1, 1]	$ I_5, I_1, I_1 $	<u>-</u>
G1	1 0 0	-247	809	1	1	<u>-</u>	-1, 7, 1	$\begin{bmatrix} 1 & 1 & 7 & 7 & 7 & 7 & 7 & 7 & 7 & 7 &$		$ I_{11}, I_7, I_1 $	<u>-</u>

A1 1 0 1 B1 0 1 1 $\begin{array}{c} -3 \\ -2 \end{array}$

1, 1 1, 1 1, 1 1, 1 1,1 1,1 $\frac{\mathrm{I}_1,\!\mathrm{I}_1}{\mathrm{I}_1,\!\mathrm{I}_1}$

899	9				N = 899 =	= 2	$9 \cdot 3$	1	(2 isoge	eny classes	s)		899
D1	1	1	1	-4	-3	1	1	+	3,1	3, 1	3,1	I_3,I_1	
C2	1	1 	1	-52	109	-	2	+ 	3,2	3,2	3,2	I_3, I_2	2 : 1
C1	1	1		-12	-19		$\begin{bmatrix} 2 \\ 2 \end{bmatrix}$	+	6, 1	6,1	6,1	I_6,I_1	2 :2
B1	1	1	0	-451	3789	0	1		21,1	$\begin{bmatrix} 21,1 \\ \end{bmatrix}$	1,1	I_{21},I_1	
A1	1	0	1	-202	1084	1	1	+	7,1	7,1	1,1	I_7,I_1	
898	8				N = 898 =		• 44	9	(4 isoge	eny classe	s)	1	898
F2	1		0	-65	-204		2	+		4,1,2	4, 1, 2	I_4, I_1, I_2	2 :1
F1	1	0		0		<u> </u>	$\begin{bmatrix} 2 \\ 2 \end{bmatrix}$	 _	$\frac{1}{2}, \frac{1}{2}, \frac{1}{2}$	$\begin{array}{c c} 1 & 2 & 2 & 2 \\ \hline 2 & 2 & 2 & 1 \end{array}$	$\begin{bmatrix} 2, 2, 1 \end{bmatrix}$	$ I_2, I_2, I_1 $	$ {\bf 2}:2$
E3 E4	1 1	$0 \\ 0$	0		67420593 4351465395		$\frac{2}{2}$	+++++++++++++++++++++++++++++++++++++++	5, 8, 4 5, 2, 1	5, 8, 4 5, 2, 1	5, 8, 2 5, 2, 1	$I_5, I_8, I_4 I_5, I_2, I_1$	$\begin{vmatrix} 2 : 2 \\ 2 : 2 \end{vmatrix}$
E2 E3	1	0	0	-314847 -316062	67971960 67420503		$\frac{4}{2}$	+	, ,	10, 4, 2	10, 4, 2	I_{10}, I_4, I_2	$\begin{bmatrix} 2:1,3,4 \\ 2:2 \end{bmatrix}$
E1	1	0	0	-19602	1069443		4	_	20, 2, 1	20, 2, 1	20, 2, 1	I_{20}, I_{2}, I_{1}	2 :2
D2	1	0			-795628249		$\begin{bmatrix} 2\\2\\ -\frac{1}{2}\end{bmatrix}$		24, 5, 2	24, 5, 2	24, 5, 2	$\begin{bmatrix} I_{12}, I_{10}, I_1 \\ I_{24}, I_5, I_2 \end{bmatrix}$	2:1
D1	1	0	1		-59725523	<u> </u>	- - 2	 -		12,10,1		$ I_{12},I_{10},I_{1} $	2 :2
C3 C4	1 1	1 1	1 1	-219 91	$1146 \\ -70$	$\begin{vmatrix} 1 \\ 1 \end{vmatrix}$	$\frac{4}{2}$	+	1, 1, 4 $4, 4, 1$	$\begin{bmatrix} 1, 1, 4 \\ 4, 4, 1 \end{bmatrix}$	$egin{array}{c} 1,1,4 \ 2,4,1 \end{array}$	$egin{array}{c} I_1, I_1, I_4 \ I_4, I_4, I_1 \end{array}$	2:2 2:2
C2	1	1	1	-24	-24	1	4	+	2, 2, 2	2, 2, 2	2, 2, 2	I_2,I_2,I_2	2:1,3,4
$\overline{\text{C1}}$	1	1	1	-19		1	$\frac{1}{2}$	+	1, 1, 1	1,1,1	1, 1, 1	I_1,I_1,I_1	2 :2
B4	1	1	1	-14352	655806	0	2	+	2, 1, 1	2, 1, 1	2, 1, 1	I_2, I_1, I_1	2 :2
В2 В3	1	1	1	-897 -962	8354		$\frac{4}{2}$	+++++++++++++++++++++++++++++++++++++++	4, 2, 2 8, 1, 4	$\begin{bmatrix} 4, 2, 2 \\ 8, 1, 4 \end{bmatrix}$	2, 2, 2 2, 1, 2	$\begin{bmatrix} I_4, I_2, I_2 \\ I_8, I_1, I_4 \end{bmatrix}$	$\begin{vmatrix} 2 : 1, 3, 4 \\ 2 : 2 \end{vmatrix}$
B1 B2	1 1	1 1	1 1	$-52 \\ -897$	164 9966		$\frac{4}{4}$	_ _	2, 4, 1 $4, 2, 2$	2, 4, 1 $4, 2, 2$	2, 4, 1 2, 2, 2	I_2,I_4,I_1	$egin{array}{ c c c c c c c c c c c c c c c c c c c$
A2	1	1 	0	-5362	147715	<u> </u>	2	+	4, 1, 6	4, 1, 6	$\begin{bmatrix} 2, 1, 2 \\ \end{bmatrix}$	I_4,I_1,I_6	2 : 1
A1	1	1	0	-97 - 27	5560	0	2	_	8, 2, 3	8, 2, 3	2, 2, 1	I_8,I_2,I_3	2 :2
89'	7				N = 897 =	3 ·	13 ·	23	(6 isog	geny class	es)		897
D2	0	0	0	-20	-16	1	2	+	13, 2	0,2	4,2	I_2^*, I_2	2 :1
D1	0	0	0	-10	12	١.	$\begin{bmatrix} 2 \end{bmatrix}$	+	8,1	0,1	2,1	III,I_1	2 :2
C2	0	0	0	-40	96		2	+	14, 1	0, 1	2, 1	III^*,I_1	2 :1
C1	0	0	0	-5		<u>!</u>	2	-'- +	7, 2	0, 2	1, 2	$ II,I_2 $	2 :2
B1 B2	0	$0 \\ 0$	0	$-5 \\ -40$	$ \begin{array}{c} 2 \\ -96 \end{array} $	1 1	$\frac{2}{2}$	+++++++++++++++++++++++++++++++++++++++	$7, 2 \\ 14, 1$	$0, 2 \\ 0, 1$	1, 2 $2, 1$	II,I_2 III^*,I_1	2:2 2:1
A2	0	0	0	-20 <u>-</u>	16 	1	$\begin{bmatrix} 2 \\ -\frac{1}{2} \end{bmatrix}$	+	$\frac{13,2}{7,2}$	$\begin{bmatrix} 0,2 \\ -2,-2 \end{bmatrix}$	2,2	I_2^*, I_2	2 : 1
A1	0	0	0	-10	-12	1	2	+	8, 1	0, 1	2,1	III,I_1	2 :2
89	6				N = 896	= 2	$2^7 \cdot 7$	7	(4 isoger	ny classes)		896
חד	1	-1	1	-100		0	1	+	9,1	9,1	1,1	I_9,I_1	
A1 B1	1	$\begin{array}{c} 0 \\ -1 \end{array}$		$ \begin{array}{r} -6 \\ -183 \end{array} $	5 352	<u>!</u>	1 	+ 	1,1	1,1	1,1	I_1,I_1	
89		0	Ω	G	N = 895 =	1			`	eny classes		тт	$\begin{array}{c c} 895 \\ \hline \end{array}$
200	_							_	(_	,	1	005
	a_1	a_2	a_3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies

	a_1	a_2 a_2	a_3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
90	0				N = 900 = 2	\mathbf{p}^2	$\cdot 3^2$	$\cdot 5^2$	(8 is	ogeny cla	asses)		900
A1	0	0	0	0	12500		1		8, 3, 10	0,0,0	1, 2, 1	IV*,III,II*	3 :2
A2	0	0	0	0	-337500	0	1	_	8, 9, 10	0,0,0	3, 2, 1	$ IV^*,III^*,II^* $	3 :1
B1	0		0	0	125		2	-	4, 3, 6	0, 0, 0	1, 2, 2	IV,III,I_0^*	2:2;3:3
B2 B3	0	0	0	-375	2750		$\frac{2}{2}$	+		0, 0, 0	1, 2, 2	IV^*,III,I_0^*	2:1;3:4
B4	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$0 \\ 0$	$0 \\ 0$	$0 \\ -3375$	-3375 -74250		$\frac{2}{2}$	+	4, 9, 6 8, 9, 6	$0, 0, 0 \\ 0, 0, 0$	$\begin{vmatrix} 3, 2, 2 \\ 3, 2, 2 \end{vmatrix}$	$\begin{bmatrix} IV,III^*,I_0^* \\ IV^*,III^*,I_0^* \end{bmatrix}$	$egin{array}{ c c c c c c c c c c c c c c c c c c c$
$\bar{C}1$	0		0	0	100	-	3	<u> </u>	8, 3, 4	$\begin{bmatrix} 0, 0, 0 \end{bmatrix}$	$\begin{vmatrix} 1 & 1 & 1 \\ 3 & 2 & 3 \end{vmatrix}$	IV*,III,IV	3 :2
C2	0	0	0	0	-2700		1	_	8, 9, 4	0, 0, 0	1, 2, 1	$ V^*, III^*, IV $	
D1	0	0	0	-120	740	1	1	- -	8, 9, 2	0,3,0	3, 4, 1	$\overline{\text{IV}^*, \text{I}_3^*, \text{II}}$	3 :2
D2	0	0	0	-10920	439220	1	1	-	8, 7, 2	0, 1, 0	1, 4, 1	IV^*,I_1^*,II	3 :1
E1	0		0	-300	-1375		2	+		0, 0, 1	[3, 2, 4]	IV,I_0^*,I_1^*	2:2;3:3
E2	0	0	0	825	-9250		2	_	8, 6, 8	0, 0, 2	3, 2, 4	IV^*, I_0^*, I_2^*	2:1;3:4
E3 E4	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$0 \\ 0$	0	$-9300 \\ -8175$	345125 431750		$\frac{2}{2}$		4, 6, 9	0,0,3	1, 2, 4	IV,I_0^*,I_3^*	2:4;3:1
	<u>'</u>					-	<u>'</u>	: - -	$\frac{8, 6, 12}{2}$	$\begin{bmatrix} 0,0,6 \\ \end{bmatrix}$	$\begin{bmatrix} 1, 2, 4 \\ - & - \end{bmatrix}$	$ IV^*, I_0^*, I_6^* $	2:3;3:2
F1 F2	$\begin{vmatrix} 0 \\ 0 \end{vmatrix}$	$0 \\ 0$	0	-3000 -273000	92500 54902500		$\begin{array}{ c c }\hline 1\\ 3 \end{array}$	_	8, 9, 8 $8, 7, 8$	$0, 3, 0 \\ 0, 1, 0$	$\begin{bmatrix} 1, 2, 1 \\ 3, 2, 3 \end{bmatrix}$	$ IV^*, I_3^*, IV^* IV^*, I_1^*, IV^* $	3:2 3:1
	<u>'</u>					_	<u>'</u>	!		!		[$\begin{vmatrix} 3 & 1 \\ 2 & 2 \end{vmatrix}$
G1 G2	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$0 \\ 0$	$0 \\ 0$	$-3000 \\ 2625$	-59375 -256250		$\frac{2}{2}$		4, 8, 9 8, 10, 9	$0, 2, 0 \\ 0, 4, 0$	$\begin{vmatrix} 3, 2, 2 \\ 3, 4, 2 \end{vmatrix}$	IV,I_2^*,III^* IV^*,I_4^*,III^*	2:2 2:1
H1			0	-120	-475	-	$\begin{bmatrix} 2 \\ 2 \end{bmatrix}$: - ·	4, 8, 3	$\begin{bmatrix} 0, 1, 0 \\ 0, 2, 0 \end{bmatrix}$	$\begin{bmatrix} 0, 1, 2 \\ 1, 2, 2 \end{bmatrix}$	IV,I*,III	2 :2
H2	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$		0	-120 105	-2050				8, 10, 3	$0, 2, 0 \\ 0, 4, 0$	1, 2, 2 1, 4, 2	IV,I_2,III IV^*,I_4^*,III	$\begin{vmatrix} 2 & \cdot & 2 \\ 2 & \cdot & 1 \end{vmatrix}$
90	1				N = 901 =	: 1	$7 \cdot 5$	3	(6 isog	geny class	ses)		901
A1	1	1	1	-85	-220		2	+	3,2	3,2	1, 2	I_3,I_2	2 :2
	I	-1		-00	220						,		
A2		$-1 \\ -1$		-85 180	-1492	1	2	-	6, 1	6, 1	2, 1	${ m I}_6, { m I}_1$	2 :1
	1		1			-	<u>-</u>	- +	$\frac{6,1}{5,2}$	$\frac{ }{ } - \frac{6,1}{5,2} -$	$\begin{bmatrix} 2,1\\ -1,2 \end{bmatrix}$	$\begin{bmatrix} I_6, I_1 \\ I_5, I_2 \end{bmatrix}$	2 : 1
A2	1 1	-1 $-\frac{1}{1}$	1 1	180	$\begin{array}{c c} -1492 \end{array}$	1	$\frac{1}{2}$	- + +		:		<u>:</u>	·
A2 B1 B2 C1	$\begin{array}{ c c } 1 \\ \hline 1 \\ 1 \\ \hline \end{array}$	-1 -1 1	1 1 1	$ \begin{array}{r} 180 \\ -29598 \\ -29863 \\ -17 \end{array} $	$ \begin{array}{r} -1492 \\ \hline 1947602 \\ 1910608 \\ \hline 7 \end{array} $	$\begin{bmatrix} 1\\1\\1\\ 0 \end{bmatrix}$	$\begin{bmatrix} 2 \\ 2 \\ 3 \end{bmatrix}$		5, 2	5,2	1,2	I_5,I_2	2 :2
A2 B1 B2	$\begin{array}{ c c } 1 \\ \hline 1 \\ 1 \\ \hline \end{array}$	-1 -1 1	1 1 1 1	$ \begin{array}{r} 180 \\ -29598 \\ -29863 \\ \end{array} $	$ \begin{array}{r} -1492 \\ \hline 1947602 \\ 1910608 \end{array} $	$\begin{bmatrix} 1\\1\\1\\ 0 \end{bmatrix}$	$\begin{bmatrix} 2 \\ 2 \\ 3 \end{bmatrix}$	+	5, 2 10, 1	$ \begin{array}{c c} 5,2\\ 10,1 \end{array} $	$\begin{array}{ c c }\hline 1,2\\2,1\\ \end{array}$	$I_5, I_2 \\ I_{10}, I_1$	2 : 2
A2 B1 B2 C1		$ \begin{array}{r} -1 \\ \hline 1 \\ \hline 1 \\ \hline 1 \end{array} $	1 1 1 1 1	$ \begin{array}{r} 180 \\ -29598 \\ -29863 \\ -17 \end{array} $	$ \begin{array}{r} -1492 \\ \hline 1947602 \\ 1910608 \\ \hline 7 \end{array} $	1 1 0 0	$\begin{bmatrix} 2 \\ 2 \\ 2 \\ \end{bmatrix}$	+	5, 2 $10, 1$ $3, 1$	$ \begin{array}{ c c c c c } \hline 5,2\\ 10,1\\ \hline 3,1\\ \hline \end{array} $	$\begin{bmatrix} 1, 2 \\ 2, 1 \\ 3, 1 \end{bmatrix}$	$\begin{bmatrix} I_5, I_2 \\ I_{10}, I_1 \\ I_3, I_1 \end{bmatrix}$	$egin{array}{ c c c c c c c c c c c c c c c c c c c$
A2 B1 B2 C1 C2		-1 1 1 1 1 	1 1 1 1 1 1	$ \begin{array}{r} 180 \\ -29598 \\ -29863 \\ -17 \\ -697 \end{array} $	$ \begin{array}{r} -1492 \\ 1947602 \\ 1910608 \\ \hline 7 \\ -7320 \end{array} $	1 1 0 0	$\begin{bmatrix} 2 \\ 2 \\ 2 \\ \end{bmatrix}$	+	5, 2 10, 1 3, 1 1, 3	$ \begin{array}{ c c c c } \hline 5,2\\ 10,1\\ \hline 3,1\\ 1,3\\ \hline \end{array} $	$ \begin{array}{ c c c c c } \hline 1,2\\2,1\\3,1\\1,1\\\end{array} $	$\begin{bmatrix} I_5,I_2\\I_{10},I_1\\I_3,I_1\\I_1,I_3\\ \end{bmatrix}$	$egin{array}{ c c c c c c c c c c c c c c c c c c c$
A2 B1 B2 C1 C2 D1		-1 1 1 1 1 	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	$ \begin{array}{r} 180 \\ -29598 \\ -29863 \\ -17 \\ -697 \\ -346 \end{array} $	$ \begin{array}{r} -1492 \\ 1947602 \\ 1910608 \\ \hline 7 \\ -7320 \\ -68922 \end{array} $	$\begin{bmatrix} 1 \\ 1 \\ 0 \\ 0 \\ 0 \\ 1 \end{bmatrix}$	$\begin{bmatrix} 2 \\ 2 \\ 2 \\ \end{bmatrix}$	 - + - -	5, 2 10, 1 3, 1 1, 3 3, 5	$ \begin{array}{ c c c c } \hline 5,2\\ 10,1\\ \hline 3,1\\ 1,3\\ \hline 3,5\\ \hline \end{array} $	$ \begin{array}{ c c c c } \hline 1,2\\2,1\\\hline 3,1\\1,1\\\hline 3,1\\\hline 3,1\\\hline \end{array} $	$\begin{bmatrix} I_5, I_2 \\ I_{10}, I_1 \\ I_3, I_1 \\ I_1, I_3 \\ I_3, I_5 \end{bmatrix}$	$egin{array}{ c c c c c c c c c c c c c c c c c c c$
A2 B1 B2 C1 C2 D1 E1		-1 1 1 1 1 -1 	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	$ \begin{array}{r} 180 \\ -29598 \\ -29863 \\ -17 \\ -697 \\ -346 \\ -1507 \end{array} $	$ \begin{array}{r} -1492 \\ 1947602 \\ 1910608 \\ \hline 7 \\ -7320 \\ -68922 \\ \hline 4209 \end{array} $	$\begin{bmatrix} 1 \\ 1 \\ 0 \\ 0 \\ 0 \\ 1 \\ 1 \end{bmatrix}$	$\begin{bmatrix} 2 \\ 2 \\ 3 \\ 1 \\ -1 \\ 1 \\ 1 \end{bmatrix}$	+ + + + + + + + + + + + + + + + + + + +	5, 2 $10, 1$ $3, 1$ $1, 3$ $3, 5$ $5, 3$ $1, 1$	$ \begin{array}{ c c c } \hline 5,2\\ 10,1\\ \hline 3,1\\ 1,3\\ \hline 3,5\\ \hline 5,3\\ \hline 1,1 \end{array} $	$ \begin{array}{c c} 1,2\\ 2,1\\ \hline 3,1\\ 1,1\\ \hline 3,1\\ \hline 5,3\\ \hline 1,1 \end{array} $	$ \begin{vmatrix} I_5, I_2 \\ I_{10}, I_1 \\ I_3, I_1 \\ I_1, I_3 \\ I_3, I_5 \\ I_5, I_3 \end{vmatrix} $	$egin{array}{ c c c c c c c c c c c c c c c c c c c$
A2 B1 B2 C1 C2 D1 E1	$egin{bmatrix} 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 $	-1 1 1 1 1 -1 	1 1 1 1 1 1 1 1 1 1 1 1 1	$ \begin{array}{r} 180 \\ -29598 \\ -29863 \\ -17 \\ -697 \\ -346 \\ -1507 \end{array} $	$ \begin{array}{r} -1492 \\ 1947602 \\ 1910608 \\ \hline 7 \\ -7320 \\ \hline -68922 \\ \hline 4209 \\ \hline -2 \end{array} $	$\begin{bmatrix} 1 \\ 1 \\ 0 \\ 0 \\ 0 \\ 1 \end{bmatrix}$	$\begin{bmatrix} 2 \\ 2 \\ 3 \\ 1 \\ 1 \\ 1 \end{bmatrix}$	+ + + - - + +	5, 2 10, 1 3, 1 1, 3 3, 5 5, 3 1, 1 (2 iso	$ \begin{array}{ c c c } \hline 5,2\\ 10,1\\ \hline 3,1\\ 1,3\\ \hline 3,5\\ \hline 5,3\\ \hline 1,1 \end{array} $	$ \begin{array}{c c} 1,2\\ 2,1\\ \hline 3,1\\ 1,1\\ \hline 3,1\\ \hline 5,3\\ \hline 1,1 \end{array} $	$\begin{matrix} I_5,I_2\\I_{10},I_1\\I_3,I_1\\I_1,I_3\\I_3,I_5\\I_5,I_3\\I_1,I_1\end{matrix}$	2 : 2 2 : 1 3 : 2 3 : 1
A2 B1 B2 C1 C2 D1 E1 F1	$egin{bmatrix} 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 $	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	$ \begin{array}{r} 180 \\ -29598 \\ -29863 \\ -17 \\ -697 \\ -346 \\ -1507 \\ -4 \end{array} $		$\begin{bmatrix} 1 \\ 1 \\ 0 \\ 0 \\ 0 \\ 1 \\ 1 \end{bmatrix}$	$\begin{bmatrix} 2 \\ 2 \end{bmatrix}$	+ + + - + + -	5, 2 10, 1 3, 1 1, 3 3, 5 5, 3 1, 1 (2 iso 18, 5, 1	5, 2 10, 1 3, 1 1, 3 3, 5 5, 3 1, 1	1,2 2,1 3,1 1,1 3,1 5,3 1,1	$\begin{array}{c c} I_5,I_2\\ I_{10},I_1\\ I_3,I_1\\ I_1,I_3\\ I_3,I_5\\ I_5,I_3\\ I_1,I_1\\ \end{array}$	2 : 2 2 : 1 3 : 2 3 : 1
A2 B1 B2 C1 C2 D1 E1 F1	$\begin{bmatrix} 1 \\ 1 \\ 1 \end{bmatrix}$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	1 1 1 1 1 1 1 1 1 1 1 1 1	$ \begin{array}{r} 180 \\ -29598 \\ -29863 \\ -17 \\ -697 \\ -346 \\ -1507 \\ -4 \\ \end{array} $		$\begin{bmatrix} 1 \\ 1 \\ 0 \\ 0 \\ 0 \\ \hline \end{bmatrix}$	$ \begin{array}{c c} 2 \\ 2 \\ 3 \\ 1 \\ 1 \\ 1 \\ 1 \\ 3 \end{array} $	+ + + - + + - -	5, 2 10, 1 3, 1 1, 3 3, 5 5, 3 1, 1 (2 iso 18, 5, 1	$\begin{bmatrix} 5, 2 \\ 10, 1 \\ 3, 1 \\ 1, 3 \\ \hline 3, 5 \\ \hline 5, 3 \\ \hline 1, 1 \end{bmatrix}$ ogeny cla $\begin{bmatrix} 18, 5, 1 \\ \hline 6, 1, 1 \end{bmatrix}$	$ \begin{array}{ c c c } \hline 1,2\\ 2,1\\ \hline 3,1\\ 1,1\\ \hline 3,1\\ \hline 5,3\\ \hline 1,1\\ \hline $sses$) \\ \hline 2,1,1\\ \hline $	$\begin{array}{c c} I_5,I_2\\ I_{10},I_1\\ I_3,I_1\\ I_1,I_3\\ I_5,I_3\\ I_1,I_1\\ I_6,I_1,I_1\\ \end{array}$	2:2 2:1 3:2 3:1
A2 B1 B2 C1 C2 D1 E1 F1	$\begin{array}{c c} & 1 & 1 \\ & 1 & 1 \\ & 1 & 1 \\ & 0 & 0 \\ & & 1 & 1 \\ & & & 1 \\ & & & 1 \\ & & & 1 \\ \end{array}$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	1 1 1 1 1 1 1 1 1 1 1 1 1	$ \begin{array}{r} 180 \\ -29598 \\ -29863 \\ -17 \\ -697 \\ -346 \\ -1507 \\ -4 \\ \end{array} $ $ \begin{array}{r} -2382 \\ -64 \end{array} $		$\begin{bmatrix} 1 \\ 1 \\ 0 \\ 0 \\ 0 \\ 1 \\ 1 \\ 0 \\ 0 \end{bmatrix}$	$ \begin{array}{c c} 2 \\ 2 \\ 3 \\ 1 \\ 1 \\ 1 \\ 3 \\ 1 \end{array} $	+ + + - + + - -	5, 2 10, 1 3, 1 1, 3 3, 5 5, 3 1, 1 (2 iso 18, 5, 1 6, 1, 1 2, 3, 3	5, 2 10, 1 3, 1 1, 3 3, 5 5, 3 1, 1 egeny cla 18, 5, 1 6, 1, 1 2, 3, 3	$ \begin{array}{ c c c }\hline 1,2\\2,1\\3,1\\1,1\\\hline 1,1\\\hline 5,3\\\hline 1,1\\\hline 2,1,1\\\hline 6,1,1\\2,1,1\\\hline \end{array} $	$\begin{array}{c c} I_5,I_2\\ I_{10},I_1\\ I_3,I_1\\ I_1,I_3\\ I_5,I_3\\ I_1,I_1\\ I_6,I_1,I_1\\ \end{array}$	2 : 2 2 : 1 3 : 2 3 : 1
A2 B1 B2 C1 C2 D1 E1 F1 90 A1 B1 B2	$egin{array}{ c c c c c c c c c c c c c c c c c c c$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	1 1 1 1 1 1 1 1 1 0 0	$ \begin{array}{r} 180 \\ -29598 \\ -29863 \\ -17 \\ -697 \\ -346 \\ -1507 \\ -4 \\ \end{array} $ $ \begin{array}{r} -2382 \\ -64 \end{array} $		$\begin{bmatrix} 1 \\ 1 \\ 0 \\ 0 \\ 0 \\ 1 \\ 1 \\ 0 \\ 0 \\ 3 \\ 0 \\ 0 \\ 3 \\ 0 \\ 0 \\ 0 \\ 0$	$ \begin{array}{c c} 2 \\ 2 \\ 3 \\ 1 \\ 1 \\ 1 \\ 3 \\ 1 \end{array} $	+ + + - + + - -	5, 2 10, 1 3, 1 1, 3 3, 5 5, 3 1, 1 (2 iso 18, 5, 1 6, 1, 1 2, 3, 3	5, 2 10, 1 3, 1 1, 3 3, 5 5, 3 1, 1 egeny cla 18, 5, 1 6, 1, 1 2, 3, 3	$ \begin{array}{ c c c }\hline 1,2\\2,1\\3,1\\1,1\\\hline 1,1\\\hline 5,3\\\hline 1,1\\\hline 2,1,1\\\hline 6,1,1\\2,1,1\\\hline \end{array} $	$\begin{array}{c c} I_5,I_2\\ I_{10},I_1\\ I_3,I_1\\ I_1,I_3\\ I_5,I_3\\ I_1,I_1\\ I_6,I_1,I_1\\ \end{array}$	2 : 2 2 : 1 3 : 2 3 : 1
A2 B1 B2 C1 C2 D1 E1 F1 B1 B2	$egin{array}{ c c c c c c c c c c c c c c c c c c c$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	1 1 1 1 1 1 1 1 1 0 0	$ \begin{array}{r} 180 \\ -29598 \\ -29863 \\ -17 \\ -697 \\ -346 \\ -1507 \\ -4 \\ \end{array} $ $ \begin{array}{r} -2382 \\ -64 \\ 76 \end{array} $		$\begin{bmatrix} 1 \\ 1 \\ 0 \\ 0 \\ 0 \\ 1 \\ 1 \\ 0 \\ 0 \end{bmatrix}$	$ \begin{array}{c c} 2 \\ 2 \\ 3 \\ 1 \\ 1 \\ 1 \\ 3 \\ 1 \\ 1 \end{array} $	+ + + - + + - - - - -	5, 2 10, 1 3, 1 1, 3 3, 5 5, 3 1, 1 (2 iso 18, 5, 1 6, 1, 1 2, 3, 3	5, 2 10, 1 3, 1 1, 3 3, 5 5, 3 1, 1 egeny classing equivalent of the second of	1,2 2,1 3,1 1,1 5,3 1,1 sses) 2,1,1 6,1,1 2,1,1	$\begin{array}{c c} I_5,I_2\\ I_{10},I_1\\ I_3,I_1\\ I_1,I_3\\ I_3,I_5\\ I_5,I_3\\ I_1,I_1\\ I_6,I_1,I_1\\ I_2,I_3,I_3\\ \end{array}$	2 : 2 2 : 1 3 : 2 3 : 1
A2 B1 B2 C1 C2 D1 E1 F1 B1 B2 P0	$\begin{array}{c c} & 1 & 1 & 1 \\ \hline & 1 & 1 & 1 \\ \hline & 1 & 0 & 0 \\ \hline & 2 & \hline & 1 & 1 \\ \hline & 1 & 1 & 1 \\ \hline & 3 & \hline & 0 & 0 \\ \hline & 0 & 0 & 0 \\ \hline \end{array}$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	1 1 1 1 1 1 1 0 0	-29598 -29863 -17 -697 -346 -1507 -4 -2382 -64 -76		$\begin{bmatrix} 1 \\ 1 \\ 0 \\ 0 \\ 0 \\ 0 \\ 1 \\ 0 \\ 0 \\ 0 \\$	$ \begin{array}{c c} 2 \\ 2 \\ 3 \\ 1 \\ 1 \\ 1 \\ 3 \\ 1 \\ 3 \\ 3 \end{array} $	+ + + - + - - - - -	5, 2 10, 1 3, 1 1, 3 3, 5 5, 3 1, 1 (2 iso 18, 5, 1 6, 1, 1 2, 3, 3 (2 iso 2, 2, 1 18, 2, 1	5, 2 10, 1 3, 1 1, 3 3, 5 5, 3 1, 1 2, 3, 3 1, 1 1, 1 1, 1 2, 3, 3 1, 1 2, 2, 1 1, 2, 3, 3	$ \begin{vmatrix} 1,2\\2,1\\3,1\\1,1\\3,1\\5,3\\1,1 \end{vmatrix} $ sses) $ \begin{vmatrix} 2,1,1\\6,1,1\\2,1,1 \end{vmatrix} $ sses) $ \begin{vmatrix} 2,2,1\\2,2,1\\2,2,1 \end{vmatrix} $	$\begin{array}{c c} I_5,I_2\\ I_{10},I_1\\ I_3,I_1\\ I_1,I_3\\ I_3,I_5\\ I_5,I_3\\ I_1,I_1\\ I_6,I_1,I_1\\ I_2,I_3,I_3\\ \end{array}$	2:2 2:1 3:2 3:1

			1	.1	- (A)		<u> </u>		I I
$a_1 \ a_2 a_3$	a_4	a_6	r T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
904		N = 904	=2	$3 \cdot 1$	13 (1 is	sogeny class	s)	,	904
A1 0 0 0		78 1		1 '	10, 1	0, 1	2,1	III^*,I_1	2 :2
$\begin{array}{c cccc} A2 & 0 & 0 \end{array}$	5	246	1 2	_	11, 2	0,2	1,2	II^*,I_2	2 : 1
$\underline{905}$		N = 905 =	= 5	· 18	1 (2 iso)	geny classe	es)		905
A1 1 1 0	-	23		1 '	1, 1	1,1	1,1	I_1,I_1	2:2
A2 1 1 0		42	-:	- 	2,2	2,2	2,2	I_2,I_2	2 :1
B1 1 0	$\frac{1}{388}$	-2969) 1	_	5,1	5,1	5,1	I_5,I_1	
906		N = 906 =	$2 \cdot 3$	$3 \cdot 1$	51 (9 is	ogeny class	ses)		906
A1 1 1 0	3395	-211907	1	-	26, 7, 1	26, 7, 1	2, 1, 1	I_{26}, I_7, I_1	
B1 1 1 0	-16	-32	$\lfloor 1 \rfloor$	+	5, 1, 1	[5, 1, 1]	1, 1, 1	I_5,I_1,I_1	
$C1 \mid 1 \mid 0$	1 54	64	1 3	-	2, 9, 1	[2, 9, 1]	[2, 9, 1]	I_2,I_9,I_1	3 :2
C2 1 0		-7064			6, 3, 3	6, 3, 3	2, 3, 3	I_6, I_3, I_3	3:1,3
C3 1 0		-4662998	-'	- '	18, 1, 1	18,1,1	$\begin{bmatrix} 2, 1, 1 \\ \end{bmatrix}$	I_{18}, I_{1}, I_{1}	3 :2
D1 1 0	· -	27182		1	5, 3, 1	5, 3, 1	1, 3, 1	I_5,I_3,I_1	3 :2
D2 1 0		18500	-'	+ -	15, 1, 3	15,1,3	1,1,3	$ I_{15},I_1,I_3 $	3 :1
'		99063769563	-!	+ -	5, 7, 1	5, 7, 1	5, 1, 1	I_5, I_7, I_1	<u> </u>
F1 1 1		-19 0	-¦	<u>-</u> -	2, 1, 1	$\begin{bmatrix} 2, 1, 1 \\ \end{bmatrix}$	$\begin{bmatrix} 2, 1, 1 \\ \end{bmatrix}$	I_2,I_1,I_1	
G1 1 1	1 - 21	-45	[1 	+	3, 3, 1	3, 3, 1	3, 1, 1	I_3,I_3,I_1	
H1 1 0 0	0 -152	576	L 1 	+	11, 5, 1	11, 5, 1	11, 5, 1	I_{11},I_{5},I_{1}	
I1 1 0 (0 - 6	-6	1	+	1, 1, 1	1, 1, 1	1, 1, 1	I_1,I_1,I_1	
909		N = 909 =	$= 3^2$. 10	01 (3 iso	geny class	es)		909
A1 0 0	1 -1776	3834) 1	+	20, 1	14, 1	2,1	I_{14}^*, I_1	
B1 0 0	1 -57	-117 0	$\begin{vmatrix} 1 \end{vmatrix}$	+	10,1	4,1	$\begin{bmatrix} 2,1 \end{bmatrix}$	I_4^*,I_1	[
$C1 \mid 0 \mid 0$	1 -12	9 1	 l 1	+	6, 1	0,1	$\begin{bmatrix} 2,1 \end{bmatrix}$	I_0^*, I_1	<u> </u>
910		N = 910 = 2	. 5	.7.	13 (11	isogeny cla	usses)		910
A1 1-1	-2000	32000	1	1	20, 3, 2, 1	20, 3, 2, 1	2, 1, 2, 1	I_{20},I_3,I_2,I_1	1
A2 1-1	0 -7120	-194304	4		10, 6, 4, 2	10, 6, 4, 2	2, 2, 4, 2	I_{10}, I_6, I_4, I_2	
$\begin{bmatrix} A3 \\ 1 \end{bmatrix} \begin{bmatrix} 1-1 \\ 1 \end{bmatrix}$		-13831200			5, 12, 2, 1	5, 12, 2, 1	1, 2, 2, 1	I_5, I_{12}, I_2, I_1	
A4 1-1 0		-1102304	- - -	-	5, 3, 8, 4	5, 3, 8, 4	1, 1, 8, 2	!	2 :2
B1 1 0 B2 1 0		$egin{array}{c} 42 \ -1154 \ \end{array}$		-	1, 2, 1, 3	1, 2, 1, 3	$\begin{bmatrix} 1, 2, 1, 3 \\ 1, 2, 3, 1 \end{bmatrix}$	I_1,I_2,I_1,I_3	3:2 3:1
			-'	<u>-</u> - -	3, 6, 3, 1	$\begin{bmatrix} 3, 6, 3, 1 \\ 2, 1, 2, 3 \end{bmatrix}$	$\begin{bmatrix} 1, 2, 3, 1 \\ -1, 2, 3, 1 \end{bmatrix}$	$ I_3, I_6, I_3, I_1 $	3:1
		1352 1 456 1			2, 1, 2, 3 1, 2, 1, 6	$\begin{bmatrix} 2, 1, 2, 3 \\ 1, 2, 1, 6 \end{bmatrix}$	$\begin{bmatrix} 2, 1, 2, 3 \\ 1, 2, 1, 6 \end{bmatrix}$	$\begin{bmatrix} I_2,I_1,I_2,I_3 \\ I_1,I_2,I_1,I_6 \end{bmatrix}$	2:2;3:3 2:1;3:4
$\begin{bmatrix} C2 & 1 & 0 \\ C3 & 1 & 0 \end{bmatrix}$		-9984			6, 3, 6, 1	$\begin{bmatrix} 1, 2, 1, 0 \\ 6, 3, 6, 1 \end{bmatrix}$	$\begin{bmatrix} 1, 2, 1, 0 \\ 2, 1, 6, 1 \end{bmatrix}$	$I_{6}, I_{3}, I_{6}, I_{1}$	2 :4; 3 :1
C4 1 0	1 -14669	-685008	$\lfloor 2 \rfloor$		3, 6, 3, 2	3, 6, 3, 2	1, 2, 3, 2	I_3,I_6,I_3,I_2	2:3;3:2
D1 1-1	-29	-47 1	$\lfloor 2 \rfloor$	+	2, 3, 2, 1	[2, 3, 2, 1]	[2, 3, 2, 1]	$ I_2,I_3,I_2,I_1 $	2 :2
D2 1-1	0 41	-285	1 2	-	1, 6, 1, 2	1,6,1,2	1, 6, 1, 2	I_1, I_6, I_1, I_2	2 :1
E1 1 0		183565278			7, 18, 3, 1	7, 18, 3, 1		I_7, I_{18}, I_3, I_1	
E2 1 0		-1681222220			21, 6, 9, 3	$\begin{bmatrix} 21, 6, 9, 3 \\ 62, 2, 2, 1 \end{bmatrix}$	1,6,9,3	I_{21},I_{6},I_{9},I_{3}	
		-146507820272	-'	- '	63, 2, 3, 1	63, 2, 3, 1	$\begin{bmatrix} 1, 2, 3, 1 \\ -2, -1, -2 \end{bmatrix}$	$ I_{63},I_{2},I_{3},I_{1} $	
$ \begin{array}{c cccc} $		2219177 10304681 1						$egin{array}{l} I_{22}, I_1, I_2, I_5 \ I_{11}, I_2, I_1, I_{10} \end{array}$	

$a_1 \ a_2 \ a_3 \ a_4 \ a_5 \ a_6 $	a_3 a_4	$a_6 r $	T s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
910	-	-	· · · · · ·	$\cdot 5 \cdot 7 \cdot 13$	(contin	1		910
G1 1-1	1 -33	81 1			`	·	I_5, I_2, I_1, I_1	010
H1 1 1		5829 1				:	$ I_{17},I_{2},I_{3},I_{1} $	'
I1 1 1	1 -6	-1 0			'	'	$ I_{2},I_{1},I_{2},I_{1} $	'
I2 1 1	1 - 76	223 0					I_1, I_2, I_1, I_2	
J1 1 0		15760 0					I_{18}, I_1, I_2, I_1	
$\begin{vmatrix} J2 & 1 & 0 \\ J3 & 1 & 0 \end{vmatrix}$		$1015696 \ 0 \\ -196784 \ 0$		9, 2, 1, 2			I_9,I_2,I_1,I_2	·
	$ \begin{array}{rrr} 0 & -6636 \\ 0 & -20356 \end{array} $	-1907840		- 6, 3, 6, 3 - 3, 6, 3, 6	$\begin{bmatrix} 0, 3, 0, 3 \\ 3, 6, 3, 6 \end{bmatrix}$			$egin{array}{c} {f 2}:4;{f 3}:1,5 \ {f 2}:3;{f 3}:2,6 \ \end{array}$
		-1481260200		0,0,0,0			I_2, I_9, I_2, I_1	
		-1480848740	1 1					· ·
K1 1 0		12025 1			[:	$ I_{14},I_5,I_2,I_1 $	[
K2 1 0							I_7, I_{10}, I_1, I_2	
912		N = 912 =	$2^4 \cdot 3$	· 19 (12	2 isogeny	classes)	I	912
A1 $0-1$	0 -57	-171 1	1 -	- 8, 6, 1	0, 6, 1	1, 2, 1	I_0^*, I_6, I_1	
B1 0-1	0 -172	928 0	2 +	- 8, 3, 1	0, 3, 1	[2, 1, 1]	I_0^*, I_3, I_1	2 :2
$B2 \mid 0-1$	0 - 192	720 0	4 +	-10, 6, 2	0, 6, 2	4, 2, 2	~	2:1,3,4
B3 0-1		-16560 0		, ,	0, 3, 4	2, 1, 4	I_3^*, I_3, I_4	2 :2
B4 0-1	0 568	4368 0	$2 \mid -$	- 11, 12, 1	0, 12, 1	[4, 2, 1]	$ I_3^*,I_{12},I_1 $	2 :2
$C1 \mid 0 \mid 1$	0 55	-93 0	$1 \mid -$	8, 2, 3	0, 2, 3	1,2,1	I_0^*, I_2, I_3	
$D1 \mid 0 \mid 1$	0 - 16	-28 0	2 +	- 10, 1, 1	[0, 1, 1]	[4, 1, 1]	I_2^*, I_1, I_1	2 :2
$D2 \mid 0 \mid 1$	0 24	-108 0	$2 \mid -$	-11, 2, 2	0, 2, 2	[2, 2, 2]	I_3^*, I_2, I_2	2 :1
$E1 \mid 0-1$		0 0		-18, 3, 1	6, 3, 1	4, 1, 1	-0	2:2;3:3
$\begin{bmatrix} E2 & 0 - 1 \\ E2 & 0 \end{bmatrix}$		-5120		, ,	3, 6, 2	2, 2, 2	I_7^*, I_6, I_2	2:1;3:4
$\begin{bmatrix} E3 & 0 - 1 \\ E4 & 0 & 1 \end{bmatrix}$		220416 0			2, 1, 3	4, 1, 1	0, -, -	2:4;3:1
$\begin{bmatrix} E4 & 0-1 \\ & \end{bmatrix}$		''			1,2,6	2,2,2	'	2 :3; 3 :2
$ \begin{array}{c ccc} F1 & 0-1 \\ F2 & 0-1 \end{array} $				12, 10, 1	, ,	1, 2, 1	,, -	5 :2
'		''			$\begin{bmatrix} 0, 2, 5 \\ -2, -2, -2 \end{bmatrix}$	$\begin{bmatrix} 1, 2, 5 \\ -1, 1, 1 \end{bmatrix}$!	5 :1
$\begin{array}{ c c c c } G1 & 0-1 \\ G2 & 0-1 \end{array}$				-12, 1, 1 $-12, 2, 2$	$0, 1, 1 \\ 0, 2, 2$	4, 1, 1 4, 2, 2	4, 1, 1	$egin{array}{c} {f 2}:2 \ {f 2}:1,3,4 \end{array}$
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$, ,	$0, 2, 2 \ 0, 4, 1$	$\begin{bmatrix} 4, 2, 2 \\ 2, 2, 1 \end{bmatrix}$	_	2:1,3,4 $2:2$
G4 0-1						4, 1, 4	_	2:2
H1 0 1		'- '		-14, 5, 1	$\begin{bmatrix} -2, 5, 1 \end{bmatrix}$	$\begin{bmatrix} -4, 5, 1 \end{bmatrix}$		2:2
H2 0 1				-13, 10, 2	, ,	4, 10, 2	-	2:1
I1 0 1	0 3			8, 2, 1	0, 2, 1	[2, 2, 1]	I_0^*, I_2, I_1	'
J1 0 1	0 3	-18 0	2 -	4, 3, 2	0, 3, 2	1, 3, 2	II,I_3,I_2	$ {f 2}:2$
$J2 \mid 0 \mid 1$	0 -92	-360 0	2 +	- 8, 6, 1	0, 6, 1	1, 6, 1		2:1
K1 0 1	0 -5632	144308 0	2 +	32, 3, 1	20, 3, 1	[4, 3, 1]	I_{24}^*, I_3, I_1	$ {f 2}:2$
K2 0 1					10, 6, 2	4, 6, 2		2:1,3,4
	0 - 1400832				5, 3, 1	4, 3, 1	J / - /	2 :2
	0 -84992				:	$\begin{bmatrix} 2, 12, 4 \\ \end{bmatrix}$	'	2 : 2
L1 0 1	0 -37	-109 0	1 -	12, 2, 1	0, 2, 1	1, 2, 1	II^*,I_2,I_1	
913		N = 913 = 100		· 83 (2 i	sogeny cla	asses)	T	913
A1 $1-1$	1 -115	-476 0	1 -	5,1	5,1	1,1	I_5,I_1	

$a_1 \ a_2 \ a_3$	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
913		N = 9	13	= 1	1 · 8	83 (cor	ntinued)			913
B1 0 0 1	-1	13	0	1	_	1, 2	1,2	1, 2	I_1,I_2	
914		N = 914	= :	$2 \cdot 45$	57	(2 isoge	eny classe	s)		914
A1 1 -1 0	-52	-48	1	2	+	14,1	14, 1	2,1	I_{14},I_1	2 :2
$A2 \mid 1-1 \mid 0$	-692	-6832	1	2	+	7, 2	7,2	1,2	I_7,I_2	2 :1
B1 1 0 1	-2	-2	0	1	_	1,1	1,1	1,1	I_1,I_1	
915		N = 915 =	= 3	. 5 .	61	(4 isog	geny class	es)		915
A1 $0 - 1 1$	-460	-11577	0	1	_	1, 7, 3	1, 7, 3	1, 7, 1	I_1,I_7,I_3	<u> </u>
B1 1 1 0	-57	144		2	+	2, 1, 1	2, 1, 1	2, 1, 1	I_2,I_1,I_1	2 :2
B2 1 1 0	-62	111	1	4	+	4, 2, 2	4, 2, 2	2, 2, 2	I_4,I_2,I_2	2:1,3,4
B3 1 1 0 B4 1 1 0	$-367 \\ 163$	-2756 966	1 1	$\begin{array}{ c c }\hline 2\\ 4 \end{array}$	+	8, 4, 1	$\begin{bmatrix} 8, 4, 1 \\ 2, 1, 4 \end{bmatrix}$	$\begin{bmatrix} 2, 4, 1 \\ 2, 1, 4 \end{bmatrix}$	I_8,I_4,I_1	2:2 2:2
!			'	!	 	2,1,4	$\begin{bmatrix} 2, 1, 4 \\ -2, 2, 1 \end{bmatrix}$	$\begin{bmatrix} 2, 1, 4 \\ 2, 1, 1 \end{bmatrix}$	$\left \begin{array}{cccccccccccccccccccccccccccccccccccc$	4
C1 0 1 1	-6 	-25		<u> </u>	— 	$\frac{3,3,1}{2,2,2}$	$\begin{bmatrix} 3, 3, 1 \\ -2, -2, -2 \end{bmatrix}$	$\begin{bmatrix} 3, 1, 1 \\ -2, -2 \end{bmatrix}$	$\begin{bmatrix} I_3,I_3,I_1 \\ I_3,I_3,I_1 \end{bmatrix}$	
$ \begin{array}{c ccccc} D1 & 1 & 0 & 0 \\ D2 & 1 & 0 & 0 \end{array} $	$50 \\ -255$	107 900		$\begin{array}{c c} 2 \\ 2 \end{array}$	+	3, 3, 2 6, 6, 1	3, 3, 2 6, 6, 1	$\begin{bmatrix} 3, 3, 2 \\ 6, 6, 1 \end{bmatrix}$	$I_3, I_3, I_2 I_6, I_6, I_1$	2:2 2:1
									10,10,11	
916		N = 916 =		1		, ,	eny classe		TT 7 4 T	916
$ \begin{array}{c ccccc} A1 & 0 & 0 & 0 \\ A2 & 0 & 0 & 0 \end{array} $	$-71 \\ -76$	$-290 \\ -255$			+	8, 2 $4, 1$	$0, 2 \\ 0, 1$	$3, 2 \\ 3, 1$	IV^*,I_2 IV,I_1	2:2 2:1
	 -1013692 3		' - -	!	<u> </u>	$\frac{4}{4}, \frac{1}{1}$	$\begin{bmatrix} 0, 1 \\ 0, 1 \end{bmatrix}$	$\begin{bmatrix} -3, 1 \\ 3, 1 \end{bmatrix}$	$\frac{1}{ }$ - $\frac{1}{ }$ V, I_1	-
$\begin{bmatrix} C1 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 \end{bmatrix}$	 -4	1		1	! <u>'</u> . +	4,1	$\begin{bmatrix} 0, 1 \\ 0, 1 \end{bmatrix}$	$\begin{bmatrix} -3, 1 \\ 3, 1 \end{bmatrix}$	$\frac{1}{ }$	<u> </u>
D1 0 1 0	 -77	236	'	3	! <u>'</u> . +	- 4, 1	$\begin{bmatrix} 0, 1 \\ 0, 1 \end{bmatrix}$	$\begin{bmatrix} -3, 1 \\ 3, 1 \end{bmatrix}$	$\begin{bmatrix} 1 & 1 & 1 & 1 \\ 1 & 1 & 1 & 1 \end{bmatrix}$	$\frac{1}{3}:2$
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	-157	-416		1	+	4,3	0, 3	1, 3	IV,I_3	3 :1
E1 0 -1 0	-5	-2	1	1	+	4,1	0,1	3, 1	$\overline{ }$ $\overline{IV}, \overline{I_1}$	<u> </u>
918	Ι	V = 918 =	2 ·	3^3 ·	17	(12 iso	geny clas	ses)		918
A1 1 -1 0	-24990	1526804		1	1	8, 11, 1	8,0,1	2,1,1	I_8,II^*,I_1	
B1 1 –1 0	0	-18	1	1	<u> </u>	1, 5, 2	1, 0, 2	1, 3, 2	I_1,IV,I_2	<u>-</u>
$C1 \mid 1-1 \mid 0$	-771		'	1	<u> </u>	11, 11, 1	11, 0, 1	$\begin{bmatrix} 1, 1, 1 \end{bmatrix}$	$\mid \text{I}_{11}, \text{II}^*, \text{I}_1 \mid$	<u>-</u>
D1 1 –1 0	-48	-768	0	1	<u> </u>	15, 3, 2	15, 0, 2	1, 1, 2	$\mid I_{15}, II, I_2 \mid$	3 : 2
$D2 \mid 1-1 \mid 0$	432	20448	0	3	_	5, 5, 6	5, 0, 6	1, 3, 6	I_5 , IV , I_6	3 :1
E1 1 -1 0	3	-3	1	1	Ī —	3, 3, 1	3, 0, 1	[1, 1, 1]	I_3 , II , I_1	3 :2
$E2 \mid 1-1 \mid 0$	-27	99	1	3	<u> </u>	1, 5, 3	1,0,3	1,1,3	I_1 , IV , I_3	3 :1
F1 1 -1 0	24	48				4, 3, 3			I_4 , II , I_3	3 :2
F2 1 -1 0	-231	-2179	1	1	<u> </u>	12, 9, 1	12,0,1	[2, 3, 1]	I_{12},IV^*,I_1	3 :1
G1 1 -1 1	-26	89				12, 3, 1	12, 0, 1	12, 1, 1		3 :2
	214			<u>:</u>	<u> </u>	4,9,3	<u>'</u>	4, 1, 1	I_4,IV^*,I_3	3 : 1
H1 1 -1 1		357	' - -	!	!	11, 5, 1	11,0,1	11, 3, 1	<u> </u>	<u> </u>
I1 1 -1 1	25 245	55		3		3, 9, 1	3, 0, 1	3, 3, 1	I_3,IV^*,I_1	3 :2
I2 1 -1 1	-245 			1	<u>-</u>	1,11,3	!	$\begin{bmatrix} 1, 1, 1 \\ \end{bmatrix}$	I_1,II^*,I_3	3:1
	-434 3886	21169 -555983		3		15, 9, 2 5, 11, 6	15, 0, 2 5, 0, 6	$\begin{bmatrix} 15, 3, 2 \\ 5, 1, 2 \end{bmatrix}$	$\begin{bmatrix} I_{15}, IV^*, I_2 \\ I_5, II^*, I_6 \end{bmatrix}$	3:2 3:1
K1 1 -1 1	-2777	-55623		!	<u> </u>	8, 5, 1	$\begin{bmatrix} 0,0,0\\ 8,0,1 \end{bmatrix}$	$\begin{bmatrix} 8, 1, 2 \\ 8, 1, 1 \end{bmatrix}$	$\begin{bmatrix} 1_{5}, 1_{1}, 1_{6} \\ I_{8}, IV, I_{1} \end{bmatrix}$	
		00020	,	*	1	\circ , \circ , \mathbf{I}	0,0,1	`, +, +	1 -0,- ,-1	

	a_1 a_2 a_3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
918	8		N =	= 9	18 =	= 2	$\cdot 3^3 \cdot 17$	(continue	ed)		918
L1	1 - 1 1	-2	487	0	1	_	1, 11, 2	1, 0, 2	1, 1, 2	I_1,II^*,I_2	
920	0		N = 92	20 :	$= 2^{3}$	$3 \cdot 5$	$5 \cdot 23$ (4	isogeny cl	lasses)		920
A1	0 0 0	1468	-2844	1	1	_	8, 3, 5	0, 3, 5	4, 3, 5	I_1^*, I_3, I_5	
B1	0 0 0	-187	991	1	1	-	4, 6, 1	0, 6, 1	2, 6, 1	$ $ III, I_6 , I_1	
$\overline{\text{C1}}$	0 1 0	4	5	1	1	-	4, 2, 1	0, 2, 1	[2, 2, 1]	$ $ III, I_2,I_1	
D1	$0 - 1 \ 0$	0	-23	1	1	-	4, 4, 1	0, 4, 1	2, 4, 1	$ $ III, I_4 , I_1	
92	1		N = 1	921	L = 3	$3 \cdot 3$	307 (2 i	sogeny cla	sses)		921
A1	0 - 1 1	-3058	-64080	0	1	_	6, 1	6, 1	2, 1	I_6,I_1	
B1	0 1 1	-23	41		3	-	6, 1	[6, 1]	6,1	I_6,I_1	3 :2
B2	0 1 1	157	-130	1	1	_	2,3	2,3	2,3	I_2,I_3	3 :1
922	2		N =	92	22 =	2 .	461 (1	isogeny cl	ass)		922
A1	1 0 0	-2	-2	0	1	_	1, 1	1,1	1, 1	I_1,I_1	
923	3		N =	92	23 =	13	· 71 (1	isogeny cl	ass)		923
A1	0 0 1	-4	19	0	1	_	3, 1	3,1	1,1	I_3,I_1	
92	$\overline{4}$		N = 924	l =	2^2	. 3 .	$7 \cdot 11$ (8 isogeny	classes)		$\overline{924}$
A1	0 - 1 0	25158				_				IV,I_5,I_5,I_7	
:								. – – – – –		IV,I_3,I_1,I_5	:
$\bar{\mathrm{C1}}$	0 - 1 0	14	-11	1	1	- -	4, 1, 3, 1	0, 1, 3, 1	1, 1, 3, 1	IV,I_1,I_3,I_1	:
D1	0 - 1 0	-470	-4311	0	1	- -	4, 13, 1, 1	[0, 13, 1, 1]	3, 1, 1, 1	$[IV,I_{13},I_1,I_1]$:
E1	0 1 0	-22	41	1	1	- -	4, 5, 1, 1	0, 5, 1, 1	3, 5, 1, 1	$ $ IV, I_5 , I_1 , I_1	:
F1	0 1 0	-1706	-27699	0	1	- -	4, 5, 3, 1	0, 5, 3, 1	[1, 5, 1, 1]	$ $ IV, I_5 , I_3 , I_1	:
G1	0 1 0	6	9	0	3	- - -	4, 3, 1, 1	0, 3, 1, 1	3, 3, 1, 1	$ $ IV,I $_3$,I $_1$,I $_1$	3 :2
G2	0 1 0	-54	-291	0	1		4, 1, 3, 3	0, 1, 3, 3	1, 1, 3, 1	$ $ IV, I_1 , I_3 , I_3	3 :1
H1										$ $ IV,I $_9$,I $_5$,I $_3$	
H2	0 1 0	59978	4520981	1	1	_	$\frac{4, 3, 15, 1}{}$	0, 3, 15, 1	1, 3, 15, 1	IV, I_3, I_{15}, I_1	3 :1
92	5		N = 1	925	5 = 1	5^2 ·	37 (5 i	sogeny cla	sses)		$\boldsymbol{925}$
A1	0 1 1	-133	519	1	1	+	8,1	2,1	2,1	I_2^*, I_1	
B1	0 - 1 1	-83			1	+	6, 1	[0, 1]	2,1	$oxed{I_0^*,I_1}$	3 :2
B2	0 - 1 1							0, 3	2, 1	I_0^*, I_3	3:1,3
B3			-3885432			<i>:</i>		0,1	2, 1	I_0^*, I_1	3 :2
C1	1 1 1						•		4,1	I_1^*,I_1 I_1^*	2:2 2:1
$\begin{bmatrix} C2 \\ -1 \end{bmatrix}$			-1094	:			8,2		4,2	:	2 : 1
'	0 - 1 1			<u>'</u> - '		+		:	2,1	I_4^*,I_1	
E1	0 0 1	-25	31	0	1	+	6,1	0, 1	2, 1	I_0^*, I_1	
920	6		N =	92	26 =	2 ·	463 (1	isogeny cl	ass)		926
A1	1 1 1	7			2		6, 1	6, 1	6, 1	I_6,I_1	2 :2
A2	1 1 1	-33	23	0	2	+	3, 2	3, 2	3, 2	I_3,I_2	2:1

a_1	$a_2 a_1$	a_4	$a_6 r$	T	$s \operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
927			N = 927	= 3	2.103 (1 i	sogeny cla	ss)		927
A1	1-1	0 - 54	-243 1	1	- 11,1	5,1	2,1	I_5^*, I_1	
928	ı		N = 928 =	$= 2^{!}$	$5 \cdot 29$ (2 iso	ogeny class	es)	,	928
A1 (0 1	0 - 1	1	1	- 12,1	0,1	4, 1	I_{3}^{*},I_{1}	
B1 (0 - 1	0 -1	17 1	$\bar{1}$	-12,1	0,1	4,1	I_3^*,I_1	
930)		N = 930 = 2	. 3	.5.31 (15	isogeny cl	asses)		930
	1 1	-108		1	+ 12, 3, 1, 1		· · · · · ·	I_{12},I_3,I_1,I_1	T
A2	1 1	-428	2832 1		+6,6,2,2	6, 6, 2, 2		I_6, I_6, I_2, I_2	
_	1 1				+3,12,1,1			I_3, I_{12}, I_1, I_1	
$\begin{vmatrix} A4 \end{vmatrix}$	1 1 (0 652	16008 1	$\lfloor 2 \rfloor$	[-3, 3, 4, 4]	3, 3, 4, 4	1,1,2,2	I_3,I_3,I_4,I_4	2 : 2
B1 [1 1	-203	-1347 0	1	-9,1,5,1	9, 1, 5, 1	1, 1, 1, 1	I_9,I_1,I_5,I_1	
C1	1 1	0 98	244 0	1	[-11, 5, 1, 1]	11, 5, 1, 1	[1, 1, 1, 1]	I_{11},I_{5},I_{1},I_{1}	
D1 :	1 1	0 2238	181236 1	$\bar{2}$	[-16, 1, 7, 2]	16, 1, 7, 2	[2, 1, 7, 2]	$ I_{16},I_1,I_7,I_2 $	2 :2
D2	1 1	-37442	2585844 1	2	+8, 2, 14, 1	8, 2, 14, 1			
E1	1 1	0 3	9 1	$\overline{2}$	[-2, 2, 2, 1]	[2, 2, 2, 1]	[2, 2, 2, 1]	I_2,I_2,I_2,I_1	2 :2
E2	1 1	-47	99 1	2	+1,4,1,2	1, 4, 1, 2		I_1, I_4, I_1, I_2	2:1
F1	1 0	1 - 10400749	13377941672 0	1	[-23, 11, 3, 5]	23, 11, 3, 5	[1, 11, 1, 1]	$ I_{23},I_{11},I_{3},I_{5} $	<u> </u>
G1	1 0		:- :		[+ 4, 1, 3, 1]	: :	:	:	2 :2
G2	1 0	1 - 264				2, 2, 6, 2		I_2,I_2,I_6,I_2	
	1 0			2	+ 1, 4, 3, 4	1, 4, 3, 4	1, 4, 1, 2	I_1, I_4, I_3, I_4	2:2
G4	1 0	1 666	7882 0	$\frac{1}{2}$	[-1, 1, 12, 1]	1,1,12,1	1,1,2,1	I_1, I_1, I_{12}, I_1	2 :2
	1 0				-8, 5, 3, 2	8, 5, 3, 2		I_8,I_5,I_3,I_2	
H2	1 0	1 -2013	-12344 1	$\frac{1}{2}$	+4,10,6,1	4, 10, 6, 1	[2, 10, 6, 1]	I_4, I_{10}, I_6, I_1	2 :1
	1 0				-1, 3, 3, 1	1, 3, 3, 1		I_1, I_3, I_3, I_1	3 :2
I2 1	1 0	1 -523	-4642 0	1	[-3,1,1,3]	3,1,1,3	1,1,1,3	I_3,I_1,I_1,I_3	3 :1
	1 0				-26, 2, 2, 1	26, 2, 2, 1	2, 2, 2, 1		
J2 1	1 0	1 -218448	39279646 0	2	+13,4,1,2	13, 4, 1, 2	[1, 4, 1, 2]	$ I_{13},I_4,I_1,I_2 $	2 : 1
	1 1				-4,1,1,2	4, 1, 1, 2		I_4,I_1,I_1,I_2	
!-	1 1				+2,2,2,1	$\frac{1}{2}, 2, 2, 1$:	I_2,I_2,I_2,I_1	2 : 1
$\lfloor L1 \rfloor$	1 1	1 -23051	1344449 0	1	[-3, 3, 13, 1]	3, 3, 13, 1	3,1,1,1	I_3,I_3,I_{13},I_1	
	1 1				-6,4,2,1	6, 4, 2, 1	6, 2, 2, 1	0, 1, 2, 1	2:2
M2	1 1	1 - 161	119 1	$\frac{1}{2}$	+3,8,1,2	3, 8, 1, 2	3, 2, 1, 2	I_3, I_8, I_1, I_2	2 :1
	1 0				-12, 9, 1, 2			I_{12},I_{9},I_{1},I_{2}	
	$\begin{pmatrix} 1 & 0 & 0 \\ 1 & 0 & 0 \end{pmatrix}$				+6,18,2,1			I_6, I_{18}, I_2, I_1	
	$egin{array}{cccc} 1 & 0 & 0 \\ 1 & 0 & 0 \end{array}$		-3060495 0 $-195033699 0$		$\begin{bmatrix} -4, 3, 3, 6 \\ +2, 6, 6, 3 \end{bmatrix}$	$\begin{array}{ c c c } 4, 3, 3, 6 \\ 2, 6, 6, 3 \end{array}$	$\begin{vmatrix} 4, 3, 1, 6 \\ 2, 6, 2, 3 \end{vmatrix}$	$\begin{bmatrix} I_4, I_3, I_3, I_6 \\ I_2, I_6, I_6, I_3 \end{bmatrix}$	2 :4; 3 :1 2 :3; 3 :2
				<u>-</u>	$\begin{vmatrix} 1 & 2 & 0 & 0 & 0 \\ -1 & -1 & 0 & -1 & -1 \\ -16 & 2 & 0 & 2 & 1 \end{vmatrix}$!	<u> </u>	!	2 : 3, 3 : 2 2 : 2
	$egin{array}{cccc} 1 & 0 & 0 & 0 \\ 1 & 0 & 0 & 0 \end{array}$				$\begin{bmatrix} -16, 2, 2, 1 \\ +8, 4, 4, 2 \end{bmatrix}$	$ \begin{array}{ c c c c } 16, 2, 2, 1 \\ 8, 4, 4, 2 \end{array} $	$\begin{bmatrix} 16, 2, 2, 1 \\ 8, 4, 4, 2 \end{bmatrix}$	/ -/ -/ -/	2 : 2 2 : 1, 3, 4
_	1 0				+4,2,2,4	4, 2, 2, 4			2:2,5,6
	1 0				+ 4, 8, 8, 1	4, 8, 8, 1		I_4, I_8, I_8, I_1	2:2
	1 0				+ 2, 1, 1, 2	2, 1, 1, 2	2, 1, 1, 2	I_2,I_1,I_1,I_2	2:3
O6	1 0	0 - 18920	-1060740 0	2	-2,1,1,8	2, 1, 1, 8	2, 1, 1, 2	I_2,I_1,I_1,I_8	2 :3

	a_1 a_2 a_3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
931	L		N = 93	31 =	$=7^{2}$. 19	(3 isog	geny class	es)		931
A1	0 -1	1 -114	727	0	1	_	8, 1	0,1	3, 1	IV^*,I_1	
B1	0 - 1	1 33	-8	0	1	i	6, 1	0,1	1, 1	I_0^*, I_1	3 :2
B2	0 - 1	1 - 457	4157	0	1	_	6, 3	0, 3	1,1	I_0^*, I_3	3 :1,3
В3	0 - 1	1 - 37697	2829742	0	1	_	6, 1	0, 1	1, 1	I_0^*, I_1	3 :2
$\overline{\text{C1}}$	0 1	1 -2	-3	0	1	<u> </u>	2,1	0,1	1,1	II,I_1	
933	3		N = 93	33 =	= 3·	311	(2 isos	geny class	es)		933
A1	0 -1	1 -3	-1	1	1	+	1,1	1,1	1,1	I_1,I_1	
B1	0 1	1 -399	-3184	1	1	- +	11,1	11, 1	11,1	I_{11},I_1	<u>-</u>
934	1		N = 93	34 =	= 2 ·	467	(3 isos	geny class	es)		934
A1	1 0	1 -3	0	1	1	+	1,1	1,1	1,1	I_1,I_1	
B1	1 0	0 -129	521	0	3	+	15, 1	15, 1	15, 1	I_{15},I_1	3 :2
B2	1 0	0 - 1889	-31639	0	1	+	5, 3	5,3	5, 1	I_5,I_3	3 : 1
$\bar{C}1$	1 –1	1 - 183	-905	0	1	+	3,1	$\frac{1}{3}, \frac{1}{3}$	3,1	I_3,I_1	-
935	5		N = 935	<u> </u>	$5 \cdot 1$	1 · 1	7 (2 is	ogeny clas	sses)		935
A1	0 1	1 - 1			1	_	2, 1, 1		2, 1, 1	I_2,I_1,I_1	
B1		1 - 13155		0	3	<u>-</u>	6, 3, 1	:	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$		$\begin{bmatrix} 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 $
B2		1 -9655	893306	0		_		2, 9, 3	$\begin{bmatrix} 0, 1, 1 \\ 2, 1, 1 \end{bmatrix}$		3 : 1
936	5		N = 936	=	$2^3 \cdot 3$	$3^2 \cdot 1$	13 (9 is	sogeny cla	sses)		936
A1	0 0	0 9					,	0, 0, 1		I_1^* , III , I_1	2 :2
A2	0 0	0 -51	94		2		10, 3, 2	0, 0, 2	2, 2, 2	$\Pi^*,\Pi\Pi,\Pi_2$	2 :1
B1	0 0	0 - 147	718	0	1	Ī —	11, 6, 1	0, 0, 1	1,1,1	II^*,I_0^*,I_1	
$\overline{C1}$	0 0	0 42	-335	0	2	Ī — Ī	4, 9, 2	0, 3, 2	[2, 2, 2]	III,I_3^*,I_2	2 :2
C2	0 0	0 - 543	-4430	0	2	+	8, 12, 1	0, 6, 1	2, 4, 1	I_1^*, I_6^*, I_1	2 :1
D1	0 0	0 -5862	-162295	0	2	+	4, 16, 3	0, 10, 3	[2, 4, 1]	$ III,I_{10}^*,I_3 $	2 :2
D2	0 0	0 5073	-698110	0	2	_	8, 11, 6	0, 5, 6	2, 4, 2		2 :1
E1	0 0	-66	-119	1	2	+	4, 10, 1	[0, 4, 1]	[2, 4, 1]	III,I_4^*,I_1	2 :2
E2	0 0	0 - 471	3850	1	4	+	8, 8, 2	0, 2, 2	2, 4, 2	I_1^*, I_2^*, I_2	2:1,3,4
E3		0 - 7491	249550	1	4	+	10, 7, 1	0, 1, 1	2, 4, 1	III^*,I_1^*,I_1	2 :2
E4	0 0	0 69	12166	1	2	<u> </u>	10, 7, 4	[0, 1, 4]	[2, 2, 4]	III^*,I_1^*,I_4	2 :2
F1		0 81	-270	0	2	—	8, 9, 1	0, 0, 1	4, 2, 1	I_1^* , III^* , I_1	2 :2
F2		0 - 459	-2538	0	2	+	10, 9, 2	0, 0, 2	2,2,2	III^*,III^*,I_2	2 :1
G1 G2		$ \begin{array}{rr} 0 & -30 \\ 0 & -615 \end{array} $	133 5866	1 1	$\begin{bmatrix} 2 \\ 2 \end{bmatrix}$	 -	4, 7, 2 8, 8, 1	$0, 1, 2 \\ 0, 2, 1$	$\begin{bmatrix} 2, 2, 2 \\ 4, 4, 1 \end{bmatrix}$	$ III,I_1^*,I_2 I_1^*,I_2^*,I_1 $	2:2 2:1
H1	<u> </u>	0 - 30	29	1	$\begin{bmatrix} 2 \\ 2 \end{bmatrix}$	 		$\begin{bmatrix} 0, 2, 1 \\ -2, 2, 1 \end{bmatrix}$	$\frac{ 4,4,1 }{ 2,4,1 }$	-	$\begin{bmatrix} {f 2} & 1 \\ {f -} & {f -} & {f -} \\ {f 2} & 2 \end{bmatrix}$
H2	$\begin{bmatrix} 0 & 0 & 0 \\ 0 & 0 & 0 \end{bmatrix}$		218	1	$\frac{2}{2}$	_	8, 7, 2	$0, 2, 1 \\ 0, 1, 2$	$\begin{bmatrix} 2, 4, 1 \\ 4, 4, 2 \end{bmatrix}$. 2.	$2 \cdot 2$ $2 : 1$
I1	0 0	0 -354	-2563	0	2	: +	4, 8, 1	0, 2, 1	2, 4, 1	$ $ III,I_2^*,I_1	2 :2
I2		0 - 399	-1870	0	4		8, 10, 2	0, 4, 2	4, 4, 2	I_1^*, I_4^*, I_2	2:1,3,4
I3		0 -2739	53822	0	2	+	10, 14, 1	0, 8, 1	2, 4, 1	$\mathrm{III}^*, \mathrm{I}_8^*, \mathrm{I}_1$	2 :2
I4	0 0	0 1221	-13210	0	2	_	10, 8, 4	0, 2, 4	2, 2, 4	III^*,I_2^*,I_4	2 :2

T					1			T		T	
a_1 a_2	a_3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
938			N = 938	= :	$2 \cdot 7$. 67	(4 iso	geny clas	ses)		938
A1 1 0	1	-4	-2	1	1	+	2, 1, 1	2, 1, 1	2, 1, 1	I_2,I_1,I_1	
B1 1 0	1	-365	13608	1	$\frac{1}{2}$	-	10, 5, 2	10, 5, 2	2, 5, 2	I_{10},I_{5},I_{2}	2 :2
$B2 \mid 1 \mid 0$	1	-11085	446696	1	2	+	5, 10, 1	5, 10, 1	1, 10, 1	I_5, I_{10}, I_1	2 :1
C1 1 1	1	-56	-135	1	1^{-1}	+	8, 3, 1	8, 3, 1	8, 3, 1	I_8,I_3,I_1	Ī
D1 1 0	0	-179	737	0	3	+	18, 1, 1	18, 1, 1	18, 1, 1	$ I_{18}, I_1, I_1 $	3 :2
$D2 \mid 1 \mid 0$		-4339	-110303		3	+	6, 3, 3	6, 3, 3	6, 3, 3	I_6, I_3, I_3	3 :1,3
D3 1 0	0 -	-351399	-80206123	0	1	+	2, 1, 1	2, 1, 1	2, 1, 1	I_2,I_1,I_1	3 :2
939			N = 939	=	$3 \cdot 3$	13	(3 isog	geny class	es)		939
$A1 \mid 0-1$	1	-321	-9817	1	1	_	17, 1	17,1	1,1	I_{17},I_1	<u> </u>
B1 1 0		-6	-5	1	2	+	2, 1	2,1	2, 1	I_2,I_1	2 :2
B2 1 0	1	9	-23	1	2	<u> </u>	1,2	1,2	1,2	I_1,I_2	2 :1
$C1 \mid 0 \mid 1$	1	4	14	1	1	_	5,1	5,1	5, 1	I_5,I_1	
940			N = 940 =	= 2	$2^2 \cdot 5$. 4'	7 (5 iso	ogeny clas	sses)		940
A1 0 1	. 0	21619	-57905	0	1	-	8, 1, 7	0, 1, 7	3, 1, 1	IV^*,I_1,I_7	
B1 0 0	0	-103	398	0	$\begin{bmatrix} 1 \end{bmatrix}$	+	8, 3, 1	0, 3, 1	1, 1, 1	$ $ IV^*,I_3,I_1	Ī
$C1 \mid 0 \mid 1$. 0	-7076	226340	1	3	+	8, 5, 3	0, 5, 3	3, 1, 3	IV*,I ₅ ,I ₃	3 :2
$\begin{bmatrix} C2 & 0 & 1 \end{bmatrix}$. 0	-31516	-1956716	1	1	+	8, 15, 1	0, 15, 1	1, 1, 1	IV^*, I_{15}, I_1	3 :1
$D1 \mid 0 - 1$. 0	-20	40	1	1	+	8, 1, 1	0, 1, 1	3, 1, 1	IV^*,I_1,I_1	
$E1 \ 0 \ -1$. 0	-45	-103	0	$\begin{bmatrix} 1 \end{bmatrix}$	-	8, 1, 1	0, 1, 1	3, 1, 1	$ \text{ IV*}, \text{I}_1, \text{I}_1 $	₋
942			N = 942 =	= 2	2 · 3 ·	15'	7 (4 iso	ogeny clas	sses)		942
A1 1 0	1	15	4	0	1	_	9, 1, 1	9, 1, 1	1, 1, 1	I_9,I_1,I_1	
B1 1 1	1 -	-215539	-38605903	0	$\begin{bmatrix} 1 \end{bmatrix}$		8, 18, 1	8, 18, 1	[8, 2, 1]	$ I_8, I_{18}, I_1 $	Ī
C1 1 0	0	146	37508	1	1	-	16, 10, 1	16, 10, 1	16, 10, 1	I_{16}, I_{10}, I_{1}	
D1 1 0	0	-65	201	1	1	 -	6, 4, 1	[6, 4, 1]	6, 4, 1	I_6, I_4, I_1	
943			N = 94	3 =	= 23	. 41	(1 isc	geny clas	s)	<u> </u>	943
$A1 \ 1-1$. 0	-13	24	1	2		1,2	1,2	1, 2	I_1,I_2	2 :2
A2 1-1	0	-218	1295	0	2	+	2,1	2, 1	2,1	I_2,I_1	2 :1
$\overline{944}$			N = 944	=	$2^4 \cdot 5$	59	(11 iso	geny class	ses)		944
A1 0 1	. 0	4	-4	1	1	_	8, 1	0, 1	2, 1	I_0^*, I_1	
B1 0 1	. 0	-276	1676	1	1	;	8,1	0,1	2,1	$oxed{I_0^*,I_1}$	<u> </u>
C1 0 1	. 0	8	-12	1	1	;	11, 1	0,1	4,1	$oxed{I_3^*,I_1}$	<u> </u>
D1 0 0	0	2	-1	0	1	 -	4,1	0,1	1,1	$ $ II,I $_1$	<u> </u>
E1 0 0	0	-19	34	2	$\begin{bmatrix} -1 \\ 1 \end{bmatrix}$		10, 1	0,1	4,1	I_2^*, I_1	
F1 0 1	. 0	-1	-2	0	$\begin{bmatrix} -1 \\ 1 \end{bmatrix}$		4,1	0,1	1,1	$ $ II, I_1	
$G1 \mid 0 \mid 1$. 0	888	14068	0	$\begin{bmatrix} -1 \\ 1 \end{bmatrix}$		31, 1	19,1	2,1	$ I_{23}^*, I_1 $	
H1 0 1	0	-400	-3308	1	1		22, 1	10, 1	4,1	$ec{f I}_{14}^*, ec{f I}_1$	5:2
H2 0 1	0	1840	162452	1	1	_	14,5	2,5	4,5	I_6^*, I_5	5 :1
I1 0 1	. 0	8	-44	1	1		14, 1	2,1	4,1	I_6^*,I_1	

	<u> </u>			1	l	1	- (1)	- ()		T	<u> </u>
	a_1 a_2 a_3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
944	1		N =	944	4=2	$^4 \cdot 5$	59 (co	ntinued)		_	944
J1	0 -1 0	-9	-8	1	1	_	4, 1	0, 1	1,1	II,I_1	3 :2
J2	0 -1 0	31	-68 	<u> </u>	1	ļ — -	4,3	0,3	1,3	II,I_3	3 :1
K1	0 1 0	-64	180	1	1	_	13, 1	1,1	4,1	I_5^*, I_1	
946	3		N = 946 =	= 2	· 11 ·	43	(3 iso	geny class	ses)		946
A1	1 - 1 0	-11	-11	0	2	+	4, 1, 1	4, 1, 1	2, 1, 1	I_4,I_1,I_1	2 :2
A2	1 - 1 0	-31	57	0	4	+	2, 2, 2	2, 2, 2	2, 2, 2	I_2,I_2,I_2	2:1,3,4
A3 A4	$\begin{bmatrix} 1 & -1 & 0 \\ 1 & -1 & 0 \end{bmatrix}$	$-461 \\ 79$	3927 299	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$	$\begin{array}{ c c }\hline 2\\ 2 \end{array}$	+	$1, 4, 1 \\ 1, 1, 4$	$\begin{bmatrix} 1,4,1\\ 1&1&4 \end{bmatrix}$	$\begin{bmatrix} 1,2,1\\ 1&1&4 \end{bmatrix}$	I_1,I_4,I_1	2:2 2:2
	<u>-</u>			<u>!</u>	<u>!</u>	— 		1,1,4	$\begin{bmatrix} 1, 1, 4 \\ \end{bmatrix}$	$\mid I_1,I_1,I_4 \mid$	<u>-</u>
B1 B2	$\begin{bmatrix} 1 & 0 & 1 \\ 1 & 0 & 1 \end{bmatrix}$	$ \begin{array}{r} 14 \\ -261 \end{array} $	$-8 \\ -1680$	1 1	3		2, 3, 1 6, 1, 3	2, 3, 1 6, 1, 3	$\begin{bmatrix} 2, 3, 1 \\ 2, 1, 3 \end{bmatrix}$	$I_2,I_3,I_1 \\ I_6,I_1,I_3$	3:2 $3:1$
C1	$\begin{bmatrix} 1 & 0 & 1 \\ 1 & 0 & 0 \end{bmatrix}$	-1806	-29692	<u> </u>	<u> </u>	-	10, 1, 3 $10, 1, 1$	$\begin{bmatrix} 0, 1, 0 \\ -1, -1 \end{bmatrix}$	$\begin{bmatrix} 2, 1, 0 \\ -2, -2 \end{bmatrix}$:	0 . 1
		-1800						, ,	, ,	I_{10},I_1,I_1	0.40
948	1		N = 948 =			· 79		geny class	<u> </u>	l	948
A1	0 - 1 0	-17	-78	0	$\frac{2}{2}$	-	4, 3, 2	0, 3, 2	3, 1, 2	IV,I_3,I_2	2 :2
A2		-412	-3080	$\frac{0}{10}$	$\frac{1}{1}$	+ 	8,6,1	$\begin{bmatrix} 0, 6, 1 \\ -2, -2, 1 \end{bmatrix}$	$\begin{bmatrix} 3, 2, 1 \\ -1, 1 \end{bmatrix}$	$ \text{IV}^*, \text{I}_6, \text{I}_1 $	2 : 1
B1	0 -1 0		8968	<u> </u>	1	-	8,9,1	'	1,1,1	$ $ IV^*, I_9, I_1	
C1	$\begin{bmatrix} 0 & 1 & 0 \\ 0 & 1 & 0 \end{bmatrix}$	12	36	0	3		8, 3, 1	0, 3, 1	3, 3, 1	IV^*, I_3, I_1	3 :2
C2	0 1 0	-108	-1068	0	1		8, 1, 3	0, 1, 3	1, 1, 3	IV^*,I_1,I_3	3:1
950)		N = 950 =	= 2	$\cdot 5^2 \cdot$	19	(5 iso	geny class	ses)	1	950
A1	1 0 1	-1	148	1	1	-	5, 6, 1	5, 0, 1	1, 2, 1	I_5, I_0^*, I_1	5 :2
A2	1 0 1	-1751	-31352	1 -	1	ļ — -	1,6,5	1,0,5	1,2,1	I_1,I_0^*,I_5	 5 : 1
B1	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	-750	-12500		1		3, 12, 1		1, 2, 1	I_3,I_6^*,I_1	3:2
B2	1 1 0		-7081250	! - ·	1	— 	1,8,3	1,2,3	$\begin{bmatrix} 1, 2, 3 \\ -1, 2, 3 \end{bmatrix}$	I_1,I_2^*,I_3	3 : 1
C1	$\begin{bmatrix} 1 & -1 & 0 \\ -1 & -1 & -1 \end{bmatrix}$	-1192	17216	!	<u> </u> 	ļ — 	11, 8, 1	11, 2, 1	1,2,1	$ I_{11}, I_2^*, I_1 $	
D1	1 0 0	37	167	0	1	<u> </u>	1,8,1	1,2,1	[1, 2, 1]	I_1,I_2^*,I_1	<u> </u>
E1	1 1 1	-388	2781	1	1	_	3, 6, 1	3, 0, 1	3, 2, 1	I_3, I_0^*, I_1	3 :2
E2 E3	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	237 - 2138	11281 -306969	1 1	1 1	_	9, 6, 3 $27, 6, 1$	9,0,3	9, 2, 3	I_9,I_0^*,I_3	$\begin{bmatrix} 3:1,3\\ 2:2 \end{bmatrix}$
								27, 0, 1	27, 2, 1	I_{27},I_0^*,I_1	3:2
954	ı		N = 954 =	1	$\cdot 3^2 \cdot$	53	`	ogeny clas	<u> </u>	T	954
A1	1 -1 0	-96 		<u> </u>	1	ļ — 	7,9,1	7,0,1	$\begin{bmatrix} 1, 2, 1 \\ \end{bmatrix}$	$ I_7,III^*,I_1 $	
B1	1 - 1 0	12	-100		2		2, 9, 1	2, 0, 1	2, 2, 1	I_2,III^*,I_1	2 :2
B2	$\begin{bmatrix} 1 & -1 & 0 \\ -1 & -1 & -1 \end{bmatrix}$	-258	-1450	<u>!</u> - :	2	+ 	1,9,2	1,0,2	1,2,2	$ I_1,III^*,I_2 $	2 : 1
C1	1 -1 0	-108	-1328	0	1	<u> </u>	11, 8, 1	11, 2, 1	1,2,1	I_{11},I_2^*,I_1	<u> </u>
D1	1 -1 0	18	202	1	1	<u> </u>	1,11,1	1,5,1	1,4,1	I_1, I_5^*, I_1	<u> </u>
E1	1 - 1 0	-2547	63477	1	1		24, 6, 1	24, 0, 1	2, 1, 1	I_{24},I_0^*,I_1	3 :2
E2	1 -1 0	-221427 	40159989	1	3	<u> </u>	8, 6, 3	8,0,3	[2,1,3]	I_{8},I_{0}^{*},I_{3}	3:1
F1	1 - 1 0	9	-27		1	-	3, 6, 1	3, 0, 1	1, 2, 1	I_3, I_0^*, I_1	3 :2
F2	$\begin{bmatrix} 1 & -1 & 0 \\ -1 & -1 & -1 \end{bmatrix}$	-81 	783 	!	3	— 	1,6,3	1,0,3	1,2,3	I_1, I_0^*, I_3	3:1
G1	1 -1 1	1	3		2	<u> </u>	2, 3, 1	2, 0, 1	2, 2, 1	I_2 , III , I_1	2 :2
G2	1 –1 1	-29 	63	<u> </u>	2	+ 	1,3,2	1,0,2	1,2,2	I_1,III,I_2	2 : 1
H1	1 -1 1	-11 	27	1	1	<u> </u>	7, 3, 1	7,0,1	[7, 2, 1]	I_7,III,I_1	<u> </u>
I1	1 - 1 1	-248	1563	1	1	-	5, 6, 1	5, 0, 1	5, 2, 1	I_5,I_0^*,I_1	

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	a_1 a_2	a_3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
954	4			N = 9	954	1 = 1	$2 \cdot 3$	$3^2 \cdot 53$	(continu	ed)		95
J1	1 - 1	1	1273	-3585	1	1	_	17, 9, 1	17, 3, 1	17, 4, 1	I_{17},I_3^*,I_1	
K1	1-1	1	-545	-4759	0	1	-	3, 9, 1	3,3,1	[3, 2, 1]	I_3,I_3^*,I_1	3 :2
K2	1 - 1	1	400	-19501	0	3	-	9, 7, 3	9, 1, 3	9, 2, 3	I_9,I_1^*,I_3	3 :1
L1	1 - 1	1	58	303	0	1	-	1,12,1	1, 6, 1	1, 2, 1	I_1,I_6^*,I_1	
$\overline{\mathrm{M1}}$	1 - 1	1	-68	-201	0	1		4, 6, 1	[4,0,1]	[4, 1, 1]	I_4, I_0^*, I_1	
							1					
95!	5			N = 95	55	=5	. 19	91 (1 i	sogeny c	lass)		95
A1			-1038	13292		2	_	10, 1	10, 1	2, 1	$\mathrm{I}_{10},\!\mathrm{I}_{1}$	2:2
A2	1 - 1	1	-16663	832042	0	2	+	5, 2	5, 2	1, 2	I_5,I_2	2 :1
950	3			M 05	c	Ω?	2 0	20 (1		1 \		95
A1		0	-1				1		isogeny o		TX/ T	90
AI	0 0	U	-1	-3	U	1	_	4,1	0, 1	1,1	IV,I_1	
95'	7			N = 957	7 =	= 3·	11	. 29 (1	isogeny	class)		95
A1	1 1	0	-491	3984				`	7, 1, 2	1, 1, 2	I_7,I_1,I_2	2 :2
A2	1 1		-346	6565				, ,	14, 2, 1		I_{14},I_{2},I_{1}	2 :1
960)			N = 960	=	2^6 ·	3 ·	5 (16)	isogeny c	lasses)		96
A1	0 - 1	0	4	6		2		6, 4, 1		1, 2, 1	II,I_4,I_1	2 :2
A2	0 - 1	0	-41	105	1	4			0, 2, 2		I_{2}^{*},I_{2},I_{2}	2:1,3,4
A3	0 - 1		-161	-639		2			0, 1, 4		I_5^*, I_1, I_4	2 :2
A4	0 - 1		-641	6465	- !		'	15, 1, 1		'	I_5^*, I_1, I_1	2 :2
B1	0 - 1		-61	205				10, 2, 1	0, 2, 1		I_0^*, I_2, I_1	2 :2
B2 B3	$ \begin{array}{c c} 0 & -1 \\ 0 & -1 \end{array} $		$-81 \\ -801$	81 - 8415		$\frac{4}{4}$		14, 4, 2 $16, 2, 4$	0, 4, 2	4, 2, 2	$I_4^*, I_4, I_2 I_6^*, I_2, I_4$	
B4	0 - 1 $0 - 1$		-301 319	-6413 321		2		16, 2, 4 $16, 8, 1$	$0, 2, 4 \\ 0, 8, 1$	$\begin{bmatrix} 4, 2, 2 \\ 2, 2, 1 \end{bmatrix}$	$\begin{array}{c} {\rm I}_6, {\rm I}_2, {\rm I}_4 \\ {\rm I}_6^*, {\rm I}_8, {\rm I}_1 \end{array}$	2:2,5,6 $2:2$
B5	0 - 1			-553215				10, 0, 1 $17, 1, 2$			$[I_{7}^{*},I_{1},I_{2}]$	2:3
B6	0 - 1		-321	-18879				17, 1, 8		2, 1, 2		2 :3
$\bar{C}1$	$\begin{bmatrix} 0 & -1 \\ 0 & -1 \end{bmatrix}$		15	-15 -15	- :		:	14, 1, 1	$\begin{bmatrix} 0, 1, 1 \end{bmatrix}$	$\begin{vmatrix} 4 & 1 & 1 \\ 4 & 1 & 1 \end{vmatrix}$	$ I_4^*, I_1, I_1 $	2 :2
C2	0 - 1		-65	-63				16, 2, 2	, ,	4, 2, 2		2:1,3,4
C3	0 - 1		-865	-9503					0, 4, 1	4, 2, 1	0	
C4	0 - 1	0	-545	5025	0				0, 1, 4		${ m I}_{7}^{*}, { m I}_{1}, { m I}_{4}$	2 :2
D1	0 - 1	0	-900	-10098	0	2	+	6, 3, 2	0, 3, 2	[1, 1, 2]	II,I_3,I_2	2 :2
D2	0 - 1	0	-905	-9975	0				0, 6, 4		I_2^*, I_6, I_4	
D3	0 - 1		-1985	19617				15, 3, 8			I_5^*, I_3, I_8	
D4	0 - 1	0	95	-31775	0	2	<u> </u>	15, 12, 2	[0, 12, 2]	[4, 2, 2]	I_5^*, I_{12}, I_2	2 :2
E1	0 - 1		95	1057				, ,	4, 3, 1			2:2;3:3
E2			-1185	14625				20, 6, 2		4, 2, 2		2 :1,4,5; 3 :
E3	0 - 1		-865	-31775				30, 1, 3	12, 1, 3	4, 1, 3	I_{20}^*, I_1, I_3	
E4	0 - 1		-4385	-94815					1, 12, 1			2:2;3:7
E5 E6			-18465 -21345	971937 -1190943				19, 3, 4 $24, 2, 6$	1, 3, 4			2:2;3:8 2:378:3:
E0 E7				-1190943 -76646943				24, 2, 0 21, 4, 3				$egin{array}{c} {f 2}:3,7,8;{f 3}:\ {f 2}:6;{f 3}:4 \end{array}$
E8			-29025	-249375				21, 1, 0 $21, 1, 12$				2:6; 3:5

	a_1 a_2 a_3	a_4	$a_6 r $	$T \mid s \operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
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960)			N = 96	50 =	$= 2^6$. 3	$\cdot 5$ (cor	ntinued)			960
F1	0 1	. 0	4	-6	0	2	_	6, 4, 1	0, 4, 1	1, 4, 1	II,I_4,I_1	2 :2
F2	0 1	0	-41	-105	0	4	+		0, 2, 2	4, 2, 2	I_{2}^{*},I_{2},I_{2}	2:1,3,4
F3	0 1	0	-641	-6465	0	2	+	15, 1, 1	0, 1, 1	2, 1, 1	$\bar{I_5^*}, I_1, I_1$	2 :2
F4	0 1	0	-161	639	0	2	+	15,1,4	0, 1, 4	2, 1, 2	I_5^*, I_1, I_4	2:2
G1	0 1	0	-1	95	0	2	_	18, 1, 1	0, 1, 1	[4, 1, 1]	I_{8}^{*},I_{1},I_{1}	2 :2
G2	0 1	. 0	-321	2079	0	4	+	18, 2, 2	0, 2, 2	4, 2, 2	I_{8}^{*},I_{2},I_{2}	2:1,3,4
G3	0 1	0	-641	-3105	0	4	+	18, 4, 4	0, 4, 4	4, 4, 2	I_8^*, I_4, I_4	2:2,5,6
G4	0 1	0	-5121	139359	0	2	+	18, 1, 1	0, 1, 1	4, 1, 1	I_8^*, I_1, I_1	2 :2
G5	0 1	0	-8641	-311905	0	4	+	18, 8, 2	0, 8, 2	4, 8, 2	I_8^*, I_8, I_2	2:3,7,8
G6	0 1	_	2239	-20961	0	2	_	18, 2, 8	0, 2, 8	4, 2, 2	I_8^*, I_2, I_8	2 :3
G7	0 1			-19829665	0	2	+	18, 4, 1	0, 4, 1	2, 4, 1	I_8^*, I_4, I_1	2:5
G8	0 1	0	-7041	-429345	0	2	-	18, 16, 1	0, 16, 1	2, 16, 1	I_8^*, I_{16}, I_1	2 :5
H1	0 1	0	-900	10098	1	2	+	6, 3, 2	0, 3, 2	1, 3, 2	II,I_3,I_2	2:2
H2	0 1		-905	9975	1	4	+	12, 6, 4	0, 6, 4	4, 6, 4	I_2^*, I_6, I_4	2:1,3,4
Н3	0 1		-1985	-19617	1	2	+	15, 3, 8	0, 3, 8	4, 3, 8	I_5^*, I_3, I_8	2:2
H4	0 1	0	95	31775	1	4	-	15, 12, 2	0, 12, 2	4, 12, 2	I_5^*, I_{12}, I_2	2 :2
I1	0 - 1	0	-1	-95	0	2	-	18, 1, 1	0, 1, 1	[4, 1, 1]	I_{8}^{*},I_{1},I_{1}	2 :2
I2	0 - 1	0	-321	-2079	0	4	+	18, 2, 2	0, 2, 2	4, 2, 2	I_8^*, I_2, I_2	2:1,3,4
I3	0 - 1	0	-5121	-139359	0	2	+	18, 1, 1	0, 1, 1	2, 1, 1	I_8^*, I_1, I_1	2 :2
I4	0 - 1	0	-641	3105	0	4	+	18, 4, 4	0, 4, 4	4, 2, 2	I_8^*, I_4, I_4	2:2,5,6
I5	0 - 1	. 0	-8641	311905	0	4	+	18, 8, 2	0, 8, 2	4, 2, 2	I_{8}^{*},I_{8},I_{2}	2:4,7,8
I6	0 - 1		2239	20961	0	2	_	18, 2, 8	0, 2, 8	2, 2, 2	I_8^*, I_2, I_8	2:4
I7	0 - 1		-138241	19829665	0	2	+	, ,	0, 4, 1	2, 2, 1	I_8^*, I_4, I_1	2:5
I8	0 - 1	0	-7041	429345	0	2	-	18, 16, 1	0, 16, 1	[4, 2, 1]	I_8^*, I_{16}, I_1	2 :5
J1	0 - 1	0	4	-30	0	2	-	-))	0, 2, 4	1, 2, 2	II,I_2,I_4	2 :2
J2	0 - 1	. 0	-121	-455	0	4	+	12, 4, 2	0, 4, 2	4, 2, 2	I_{2}^{*},I_{4},I_{2}	2:1,3,4
J3	0 - 1	. 0	-1921	-31775	0	2	+	15, 2, 1	0, 2, 1	4, 2, 1	I_5^*, I_2, I_1	2 :2
J4	0 - 1	0	-321	1665	0	2	+	15, 8, 1	0, 8, 1	2, 2, 1	I_5^*, I_8, I_1	2 :2
K1	0 - 1	0	-20	42	1	$\frac{1}{2}$	+	6, 1, 1	0, 1, 1	1, 1, 1	II,I_1,I_1	2 :2
K2	0 - 1	0	-25	25	1	4	+	12, 2, 2	0, 2, 2	4, 2, 2	I_{2}^{*},I_{2},I_{2}	2:1,3,4
K3	0 - 1	0	-225	-1215	1	2	+	15, 4, 1	0, 4, 1	2, 2, 1	I_5^*, I_4, I_1	2:2
K4	0 - 1	0	95	97	1	4	-	15, 1, 4	0, 1, 4	4, 1, 4	I_5^*, I_1, I_4	2 :2
L1	0 1	0	-61	-205	1	$\frac{1}{2}$	+	10, 2, 1	0, 2, 1	[2, 2, 1]	I_0^*, I_2, I_1	2 :2
L2	0 1	0	-81	-81	1	4	+	14, 4, 2	0, 4, 2	4, 4, 2		2:1,3,4
L3	0 1	0	-801	8415	1	4	+	16, 2, 4	0, 2, 4	4, 2, 2	I_6^*, I_2, I_4	2:2,5,6
L4	0 1	0	319	-321	1	2		16, 8, 1		4, 8, 1	I_6^*, I_8, I_1	
L5	0 1	0	-12801	553215	1	2	+	17, 1, 2	0, 1, 2	4, 1, 2	I_7^*, I_1, I_2	2 :3
L6	0 1	0	-321	18879	1	2	_	17, 1, 8	0, 1, 8	2, 1, 2	I_7^*, I_1, I_8	2 :3
M1	0 1	0	4	30	1	2	-	6, 2, 4	0, 2, 4	1, 2, 2	II,I_2,I_4	2 :2
M2	0 1	0	-121	455	1	4	+	12, 4, 2	0, 4, 2	4, 4, 2	I_2^*, I_4, I_2	2:1,3,4
М3	0 1	0	-321	-1665	1	2	+	15, 8, 1	0, 8, 1	4, 8, 1	$\bar{I_5^*}, I_8, I_1$	2 :2
M4	0 1	0	-1921	31775	1	2	+	15, 2, 1	0, 2, 1	2, 2, 1	I_5^*, I_2, I_1	2 :2
N1	0 1	0	-20	-42	0	$\frac{1}{2}$	+	6, 1, 1	0, 1, 1	1,1,1	II,I_1,I_1	2 :2
N2	0 1	0	-25	-25	0	4		12, 2, 2		4, 2, 2	, , , ,	2:1,3,4
N3	0 1	0	-225	1215	0	4		15, 4, 1		4, 4, 1		
N4	0 1	0	95	-97	0	2	—	15, 1, 4	0, 1, 4	2, 1, 4	-	

	a_1	a_2	a_3	a_4	$a_6 r$	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
96	0				N =	96	0 =	$=2^6\cdot 3\cdot 5$	(continu	ed)		960
O1	0	1	0	95	-1057 0	2	_	22, 3, 1	4, 3, 1	4, 3, 1	I_{12}^*,I_3,I_1	2 :2; 3 :3
O2	0	1		-1185	-14625 0		+	20, 6, 2	2, 6, 2	4, 6, 2	I_{10}^*, I_6, I_2	2 :1,4,5; 3 :6
O3	0	1		-865	31775 0		_	30, 1, 3	12, 1, 3	4, 1, 3	I_{20}^*, I_1, I_3	2:6;3:1
04	0	1		-18465	-9719370		+	19, 3, 4	1, 3, 4	2, 3, 4	I_{9}^{*},I_{3},I_{4}	2 :2; 3 :7
O5	0	1		-4385	94815 0		+	19, 12, 1	1, 12, 1	4, 12, 1	I_9^*, I_{12}, I_1	2 :2; 3 :8
O6 O7	$0 \\ 0$	1 1		-21345 -29025	$ \begin{array}{c c} 1190943 & 0 \\ 249375 & 0 \end{array} $		+++++++++++++++++++++++++++++++++++++++	24, 2, 6 $21, 1, 12$	6, 2, 6	4, 2, 6	I_{14}^*, I_2, I_6	2 : 3, 7, 8; 3 : 2
08	_			-29025 -341345	76646943 0		+	21, 1, 12 21, 4, 3	3, 1, 12 3, 4, 3	$\begin{bmatrix} 2, 1, 12 \\ 4, 4, 3 \end{bmatrix}$	$\begin{bmatrix} I_{11}^*, I_1, I_{12} \\ I_{11}^*, I_4, I_3 \end{bmatrix}$	$egin{array}{c} {f 2}:6;{f 3}:4 \ {f 2}:6;{f 3}:5 \end{array}$
P1	0	1	0	15	15 0	2	<u> </u>	14, 1, 1	0, 1, 1	[4, 1, 1]	I_4^*, I_1, I_1	2 :2
P2	0	1	0	-65	63 0		+	16, 2, 2	0, 2, 2	4, 2, 2	I_6^*, I_2, I_2	2:1,3,4
P3	0	1		-545	-5025 0		+	17, 1, 4	0, 1, 4	2, 1, 4	I_7^*, I_1, I_4	2 :2
P4	0	1	0	-865	9503 0	4	+	17, 4, 1	0, 4, 1	4, 4, 1	I_7^*, I_4, I_1	2 :2
96	2				N = 96	2 =	= 2	$\cdot 13 \cdot 37$	(1 isogeny	class)		962
A1	1 -	-1	1	-9	-70	2	+	4, 1, 1	4, 1, 1	4, 1, 1	I_4,I_1,I_1	2 :2
A2	1 -	-1	1	11	-470	2	_	2, 2, 2	2, 2, 2	2, 2, 2	I_2,I_2,I_2	2 : 1
96	1				N = 9	64 -	_ 9	$9^2 \cdot 9/1$	(1 isogeny	class)		964
A1	0	1	0	-20	-44 0		 _	8,1	0,1	1,1	IV^*,I_1	
								- ,	- /	,	, , 1	
96					N = 9				1 isogeny o	· · · · · · · · · · · · · · · · · · ·	Γ	965
A1		-1		-100	411 0		+	2, 1	2,1	2, 1	I_2,I_1	2 :2
A2	1 -	-1	0	-95	450 0	2	_	4, 2	4,2	2,2	I_4,I_2	2 : 1
96	6				N = 966 =	= 2	. 3	$\cdot 7 \cdot 23$	(11 isogeny	classes)		966
A1	1	1	0	334	5556 1	2	_	10, 4, 3, 2	10, 4, 3, 2	2, 2, 1, 2	I_{10},I_4,I_3,I_2	2 :2
A2											I_5, I_8, I_6, I_1	
$\bar{\mathrm{B1}}$	1	1	0	-5131	-144323 0						$ I_{13},I_3,I_5,I_1 $	
C1		1		-14744	836928 1						$ I_{22},I_{8},I_{1},I_{2} $	
C2	1	1	0	-250264		2	+	11, 16, 2, 1	11, 16, 2, 1	1,2,2,1	$I_{11}, I_{16}, I_{2}, I_{1}$	2 : 1
D1				18							I_2,I_4,I_2,I_1	
D_2				-72		2	+	1, 2, 4, 2	$\begin{bmatrix} 1, 2, 4, 2 \\ \end{bmatrix}$	1,2,4,2	I_1,I_2,I_4,I_2	2 : 1
E1		0		-1							I_6, I_4, I_2, I_1	
E2	1	0	1	-361					<u></u>		I_3, I_2, I_4, I_2	
F1		0			858394 0							
F2					13735450 0							
F3		0			-235767140							
F4					-715440266 ₀		:			<u></u>	[
G1		1		126							$I_{16}, I_{2}, I_{2}, I_{1}$	
G2	1	1		-1154	12431 1						I_{8},I_{4},I_{4},I_{2}	
G3 G4				-5074							I_4,I_8,I_2,I_4	
G4 G5		1		-17714 -79134	-8601153						I_4, I_2, I_8, I_1	
G6		1		-79134 6266	-609505 1						I_{2},I_{16},I_{1},I_{2} I_{2},I_{4},I_{1},I_{8}	
H1		 1								:	$\left \begin{array}{cccccccccccccccccccccccccccccccccccc$	- · · ·
***			_	010	01110	_	<u> </u>	<u></u>		, -, -, -	-0,-9,-1,-1	

						ITI		and(A)	and (i)		Vodeine	Tanganing
		$a_2 a_3$	a_4	a_6	r	T		$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
966					1 1			$3 \cdot 7 \cdot 23$	(continue		T	966
I1 I2	1 1	$0 \ 0$	-599	-9255		4		4, 6, 1, 4	[4,6,1,4]		I_4, I_6, I_1, I_4	2 :2
I3	1	0 0 0 -	-11179 -178849 -	-455731 -29127301		$\frac{4}{2}$		2, 12, 2, 2 $1, 6, 4, 1$			$\begin{bmatrix} I_2, I_{12}, I_2, I_2 \\ I_1, I_6, I_4, I_1 \end{bmatrix}$	
I4	1		-12789	-316305							I_1, I_0, I_4, I_1 I_1, I_{24}, I_1, I_1	
J1	1	0 0	9096	224832	0	1			:	<u> </u>	I_9, I_1, I_{11}, I_1	:
K1	1	0 0	3	9	0	3	<u> </u>	3, 3, 1, 1	[3, 3, 1, 1]	[3, 3, 1, 1]	$ I_3,I_3,I_1,I_1 $	$ {f 3}:2$
K2	1	0 0	-27	-249	0	1	_	1, 1, 3, 3	1, 1, 3, 3	1, 1, 3, 1	I_1, I_1, I_3, I_3	3 : 1
968	3			N = 96	8 =	= 2 ³	. 1	1^2 (5 is	ogeny clas	sses)		968
A1	0	1 0	15	-13	1	1	_	8,3	0,0	4, 2	I ₁ *,III	
B1	0	0 0	-1331	-29282	0	1	 	10,8	0,0	2,3	III*,IV*	:
$\overline{\text{C1}}$	0	1 0	1775	24451	0	1		8,9	0,0	2, 2	$ar{I}_1^*, ar{III}^*$	
D1	0	0 0	-11	22	1	1	·	10, 2	0,0	2, 1	 III*,II	
E1	0	0 0	-484	-5324	1	1	 -	8,7	0, 1	2,4	$oxed{I_1^*,I_1^*}$:
969)			N = 96	9 =	= 3 ·	17	. 19 (1	isogeny cl	lass)	1	969
A1	1	0 1	-10	-1	г т	2	+	2, 1, 2	2, 1, 2	2, 1, 2	I_2,I_1,I_2	2 :2
A2	1	0 1	-105	-419	0	2	+	4, 2, 1	4, 2, 1	4, 2, 1	I_4,I_2,I_1	2 :1
970)			N = 970) =	· 2 ·	5 ·	97 (2 is	sogeny cla	sses)		970
A1	1	0 1	-21444	1420226	0	1	_	11, 13, 1	11, 13, 1	1, 1, 1	I_{11},I_{13},I_{1}	
B1	1	0 0	-5	-5	0	1	- -	1, 1, 1	1, 1, 1	1,1,1	$\overline{\left[\begin{array}{ccccccccccccccccccccccccccccccccccc$:
972	2			N = 97	'2 =	$= 2^{2}$	2.3	8^5 (4 iso	ogeny class	ses)		972
A1	0	0 0	0					`	0,0	,	IV*,II	3 :2
A2	0	0 0	0	324	0	3	<u> </u>	8,11	0,0	3,3	IV*,IV*	3 :1
B1	0	0 0	0	-3		1	-	4,5	0,0	1, 1	IV,II	3 :2
B2	0	0 0		81	:	3	<u> </u>	4, 11 	0,0	3,3	IV,IV*	3 :1
$\begin{bmatrix} \mathrm{C1} \\ \mathrm{C2} \end{bmatrix}$	0	$0 \ 0$	0	9		3	_	4,7	0,0	3,3	IV,IV	3:2
':	0	$\frac{0}{0}$	0	-243	<u> </u>	1	— 	$\frac{4,13}{2}$	$\frac{ }{ }$ 0,0	1,1	IV,II* 	3:1
D1 D2	0	$\begin{array}{cc} 0 & 0 \\ 0 & 0 \end{array}$	$0 \\ 0$	36 - 972	1	3 1	_	8, 7 $8, 13$	$0,0 \\ 0,0$	3, 3 1, 1	IV^*,IV IV^*,II^*	3:2 3:1
973	2						15		,			973
A1	0	1 1	-26	N = 97 43	1	$\frac{= \iota}{1}$	+	$\frac{1,1}{1,1}$	$\frac{\text{ogeny clas}}{1,1}$	$\frac{(1,1)}{(1,1)}$	I_1,I_1	<i>313</i>
B1	0	 1 1	-203	1048	<u>'</u> - '	- - -	! <u>'</u> . +	- ' 1, 1	$\begin{bmatrix} 1 & 1 & 1 & 1 \\ 1 & 1 & 1 \end{bmatrix}$	1,1	$egin{array}{cccccccccccccccccccccccccccccccccccc$	$ {f 3}:2$
B2	0	1 1	-253		1	3	+	3, 3	3,3	3,3	I_3,I_3	3:1,3
В3	0	1 1	-11373	-470630	1	1	+	9, 1	9,1	9,1	I_9,I_1	3 :2
974	1			N = 97	4 =	= 2	. 48	87 (8 is	ogeny clas	ses)		974
A1	1	-1 0	-13	-27	0	1	_	9,1	9,1	1,1	I_9,I_1	
B1	1	1 0	-9421	-355915	0	1	 -	3,1	3,1	1,1	$\overline{I_3,I_1}$	
$\overline{\text{C1}}$	1	1 0	8	0	0	2] <u> </u>	6,1	[6, 1]	[2,1]	I_6,I_1	2 :2
C2	1	1 0	-32	-40	0	2	+	3,2	3,2	1,2	I_3,I_2	2 :1
D1	1	$-1 \ 0$	-178	980	0	1	_	15, 1	15, 1	1, 1	I_{15},I_1	

	a_1	$a_2 a_3$	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
974		23	**4	N = 974		' '	<u> </u>			~ <i>p</i>		974
E1		1 1	-5		1	1	_	$\frac{3,1}{3,1}$	3,1	3, 1	I_3,I_1	
F1	 1	1 1	 -91	297	<u>-</u> -	' 1	<u> </u> _	9,1	9,1	9,1	$\begin{bmatrix} I_9,I_1 \end{bmatrix}$	
G1	<u>'</u>	-1 1		 -3	<u>-</u> -	' 1	! 	3,1	$\begin{bmatrix} - & - & - \\ & 3, 1 \end{bmatrix}$	$\begin{bmatrix} -\frac{1}{3}, 1 \end{bmatrix}$	$\begin{bmatrix} I_3,I_1 \end{bmatrix}$	<u> </u>
H1	<u>'</u>	-1 1		 117	<u>-</u> -	!	¦	15, 1	$\begin{bmatrix} -5, 1 \\ 15, 1 \end{bmatrix}$	$\begin{bmatrix} -5, 1 \\ 15, 1 \end{bmatrix}$	I_{15}, I_{1}	<u> </u>
97				N = 975 = 3					eny classe		115,11	975
A1	1	1 0	-2750	$\frac{17 - 973 - 3}{54375}$	1	2	+	$\frac{(11 \text{ isog})}{4,7,1}$	4,1,1	(2, 2, 1)	I_4,I_1^*,I_1	2:2
A1 A2	1	1 0		49000	1	$\frac{2}{4}$	+	8, 8, 2	8, 2, 2	$\begin{bmatrix} 2, 2, 1 \\ 2, 4, 2 \end{bmatrix}$	I_{8},I_{2}^{*},I_{2}	$\begin{bmatrix} {f 2} & . & . & . \\ {f 2} & . & 1, 3, 4 \end{bmatrix}$
A3	1	1 0		-528125	1	4		4, 10, 4	4, 4, 4	2, 4, 2	I_4, I_4^*, I_4	2:2,5,6
A4	1	1 0		284625	1	2		16, 7, 1	16, 1, 1	2, 2, 1	I_{16}, I_1^*, I_1	2:2
A5	1	1 0	-203125	-35321000	1	4	+	2, 14, 2	2, 8, 2	2, 4, 2	I_2,I_8^*,I_2	2:3,7,8
A6	1	1 0	15125	-2468750	1	2	_	2, 8, 8	2, 2, 8	2, 4, 2	_	2 :3
A7	1	1 0	-3250000	-2256492875	1	2	+	1, 10, 1	1, 4, 1	1, 4, 1	I_1, I_4^*, I_1	2 :5
A8	1	1 0	-198250	-37090625	1	2	_	1, 22, 1	1, 16, 1	1, 4, 1	I_1,I_{16}^*,I_1	2 :5
B1	0	$-1 \ 1$		-82	1	$\begin{vmatrix} 1 \end{vmatrix}$	ļ —	1, 7, 1	[1, 1, 1]	[1, 4, 1]	I_1, I_1^*, I_1	
C1	1	1 0	300	14625	0	$\begin{vmatrix} 1 \end{vmatrix}$		6, 10, 1	[6,0,1]	[2, 1, 1]	I_6,II^*,I_1	
D1	0	-1 1	-1658	-40282	0	$\begin{vmatrix} 1 \end{vmatrix}$		3, 13, 1	[3, 7, 1]	1, 2, 1	I_3,I_7^*,I_1	
E1	1	1 1	-1138	-15844	0	1	-	2, 8, 3	[2,0,3]	[2, 1, 1]	I_2,IV^*,I_3	
F1	0	$-1 \ 1$	-83	3818	1	$\begin{vmatrix} 1 \end{vmatrix}$		5, 9, 1	[5,0,1]	1, 2, 1	$ I_5,III^*,I_1 $	
$\overline{G1}$	$1 \frac{1}{1}$	0 0	12	-33	0	2	<u> </u>	1, 6, 1	1,0,1	[1, 4, 1]	I_1, I_0^*, I_1	2 :2
G2	1	0 0	-113	-408	0	4	+	2, 6, 2	2, 0, 2	2, 4, 2		2:1,3,4
G3	1	0 0	-1738	-28033	0	2	+	4, 6, 1	4, 0, 1	4, 2, 1	I_4,I_0^*,I_1	2 :2
G4	1	0 0	-488	3717	0	2	+	1, 6, 4	1, 0, 4	1, 2, 2	I_1,I_0^*,I_4	2 :2
H1	1	0 1	-46	-127	1	1	<u> </u>	2, 2, 3	[2,0,3]	[2, 1, 3]	I_2,II,I_3	
I1	0	1 1	-4758	128144	1	$\begin{vmatrix} 1 \end{vmatrix}$	_ _	7, 7, 3	[7, 1, 3]	7, 4, 3	I_7,I_1^*,I_3	
J1	0	1 1	-3	29	1	$\begin{vmatrix} 1 \end{vmatrix}$		5, 3, 1	[5,0,1]	5, 2, 1	\mid I ₅ ,III,I ₁	
K1	$1 \frac{1}{1}$	0 0	12	117	1	1	-	6, 4, 1	[6,0,1]	[6, 3, 1]	I_6 ,IV, I_1	
970	6			N = 976 =	2^4	· 61		(3 isogen	y classes))		976
A1	0	-1 0	40	-16	0	1	<u> </u> _	16, 1	4,1	2,1	I_8^*,I_1	
B1	0	-1 0	-32	-64	0	1	-	12, 1	0, 1	2,1	I_4^*,I_1	
C1	0	0 0	1	-6	1	1	-	8, 1	0, 1	1, 1	I_0^*, I_1	
978	8			N = 978 = 2	• 3	. 16	3	(8 isoge	eny classe	s)		978
A1	1	1 0	-37670	2798484	0	1	_	19, 5, 1	19, 5, 1	1,1,1	I_{19}, I_5, I_1	
B1	1	1 0	_9	-15	0	$\frac{1}{2}$	+	2, 1, 1	[2, 1, 1]	[2, 1, 1]	I_2,I_1,I_1	2 :2
B2	1	1 0	1	-33	0	2	-	1, 2, 2	1, 2, 2	1, 2, 2	I_1,I_2,I_2	2 :1
C1	1	1 0	-2188119	-1243572651	0	1	+	13, 26, 1	13, 26, 1	1, 2, 1	$ I_{13},I_{26},I_{1} $	
D1	1	1 0	458	-2060	0	$\begin{vmatrix} 1 \end{vmatrix}$	-	5, 13, 1	5, 13, 1	[1, 1, 1]	$ I_5, I_{13}, I_1 $	
E1	1	0 1	-5	2	1	$\begin{vmatrix} 1 \end{vmatrix}$	+	1, 2, 1	[1, 2, 1]	[1, 2, 1]	I_1, I_2, I_1	
F1	1	1 1	-121	455	1	1	+	11, 2, 1	11, 2, 1	11, 2, 1	I_{11},I_{2},I_{1}	
G1	1	0 0	-132	144	1	1	+	7, 8, 1	7,8,1	7, 8, 1	I_7, I_8, I_1	
H1	1	0 0		9		3	-	3, 3, 1	, ,	3, 3, 1	I_3, I_3, I_1	3 :2
H2	1	0 0	27	-237	0	1	—	1, 1, 3	1, 1, 3	1, 1, 3	I_1, I_1, I_3	3 : 1

	<i>Q</i> .1	a_2	a.s	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies
979		ω2	<i>a</i> 3		N = 979	l	' '			geny class	1	Hoddina	979
A1		-1	1	1	$\frac{1\sqrt{-973}}{-2}$	1	1	_	$\frac{(2.1808)}{1,1}$	1,1	1,1	I_1,I_1	
B1	 1	1	0	-14646	-688345	1	$\frac{1}{2}$	' +	4,3	$\frac{1}{4}, \frac{1}{3}$	$\frac{1}{4}, \frac{1}{3}$	$\begin{bmatrix} I_4,I_3 \end{bmatrix}$	2:2
B2	1	1	0	-14041	-747030	1	2	_	2, 6	2,6	2, 6	I_2,I_6	2 :1
980	980 $N = 980 =$						$2^2 \cdot 5$	$\cdot 7^2$	² (9 is	ogeny clas	sses)		980
A1	0	1	0	-996	11780		3	_	8, 3, 4	0, 3, 0	3, 1, 3		3 :2
A2	0	1	0	964	51764	<u>'</u>	1	— 	8, 9, 4	[0, 9, 0]	1,1,3	<u> </u>	3 :1
B1	0 	0	0	-343 	-4802	<u>-</u> -	1 	— 	8, 1, 8	[0, 1, 0]	1,1,1	$ IV^*,I_1,IV^* $	
C1	0	1	0	19	-1	1	1	— 	8, 1, 3	[0, 1, 0]	1,1,2	$ $ $ $ $ $ $ $ $ $ $ $ $ $ $ $ $ $	
D1 D2		$-1 \\ -1$	0	-261 -39461	8065 3030385	1 1	1	_	8, 3, 7 $8, 1, 9$	$0, 3, 1 \\ 0, 1, 3$	$\begin{bmatrix} 3, 1, 4 \\ 1, 1, 4 \end{bmatrix}$		3 :2 3 :1
E1		$-1 \\ -1$	- 0	-35401 915	2185		<u>1</u> 1	 	8, 1, 9	$\begin{bmatrix} 0, 1, 3 \\ -1, 1, 0 \end{bmatrix}$	$\begin{bmatrix} 1, 1, 4 \\ 1, 1, 2 \end{bmatrix}$	$\left \begin{array}{cccccccccccccccccccccccccccccccccccc$	3 . 1
F1	<u>-</u>			-48820	-4138168	<u>-</u> -	1 1	— 	8, 3, 10	$\begin{bmatrix} 0, 1, 0 \\ \\ 0, 3, 0 \end{bmatrix}$	$\begin{bmatrix} 1, 1, 2 \\ \end{bmatrix}$	$ \text{IV}^{\text{II}}, \text{III} $ $ \text{IV}^{*}, \text{I}_{3}, \text{II}^{*} $	 3 : 2
F2		$-1 \\ -1$	0		-4136108 -17660600		1	_	8, 9, 10	$0, 3, 0 \\ 0, 9, 0$	[3, 3, 1] [1, 9, 1]	$ IV^{*}, I_{3}, II^{*} $ $ IV^{*}, I_{9}, II^{*} $	3 : 2 3 : 1
G1	 0	-1^{-1}	0	-65	-118	0	$\begin{vmatrix} \\ 2 \end{vmatrix}$	' +		$\begin{bmatrix} 0, 1, 0 \end{bmatrix}$	3, 1, 2	[2:2;3:3
G2		-1	0	180	-1000	0	2	_	8, 2, 6	0, 2, 0	3, 2, 2	IV^*,I_2,I_0^*	2:1;3:4
G3 G4		-1	0	-2025 -1780	35750	0	$\begin{array}{c c} 2 \\ 2 \end{array}$	+	4, 3, 6	0, 3, 0	$\begin{bmatrix} 1, 3, 2 \\ 1, 6, 2 \end{bmatrix}$	IV,I_3,I_0^*	2:4;3:1
H1	0 0	$-1 \\ -0$	0	-1780 -7	44472			— 	8, 6, 6	$\begin{bmatrix} 0, 6, 0 \\ 0, 1, 0 \end{bmatrix}$	1,6,2	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	2 :3; 3 :2
I1	0 0		0	1568	$ \begin{array}{r} 14 \\ -72716 \end{array} $	<u>'</u>	1 1	 	8, 1, 2	$\begin{bmatrix} 0, 1, 0 \\ 0, 1, 5 \end{bmatrix}$	$\frac{ 1,1,1 }{ 1,1,2 }$!	
<u></u>	Ŭ	U	U	1906				<u> </u>	8, 1, 11	0, 1, 5		IV^*,I_1,I_5^*	001
$\frac{981}{\text{A1}}$		1	0	36	N = 981		1	109	`	geny class		Т* Т	$\begin{array}{c c} 981 \\ \hline \end{array}$
B1		$-1 \\ -1 \\ -1$			81 262	<u>'</u>	1 	— 	10,1	4,1	$\frac{1}{1} \frac{2,1}{2,1}$	$\left \begin{array}{c} \mathrm{I}_{4}^{*}, \mathrm{I}_{1} \\ $	
		<u>-1</u>	1	$\frac{-74}{}$		<u> </u>	1		6, 1	0,1	2, 1	I_0^*, I_1	000
982			1					1	`	geny clas	·	т т	$\begin{array}{c c} 982 \\ \hline \end{array}$
A1		0	1	-22	40		1	_	- /	8,1	2, 1	I_8,I_1	004
984		-1		104	N = 984	1	$2^3 \cdot 3$	_	•		<u> </u>	TT + T T	984
A1		-1 		184	1644	<u>'</u>	I 	— 	11,9,1	0,9,1	1,1,1	<u>'</u>	
B1		-1 		-577 	-5147	<u>'</u>	1 	— 	8, 3, 1	0, 3, 1	4,1,1	<u> =</u>	
C1		-1 		-369	4293	<u>-</u> -	1	— 	8, 5, 3	[0, 5, 3]	[2, 1, 3]	<u> </u>	
D1	0	1	0	7	27	1	1	_	8, 3, 1	0, 3, 1	2, 3, 1	I_1^*, I_3, I_1	
985	<u> </u>				N = 985		$5 \cdot 1$	97	(2 isog	geny class	es)	Γ	985
A1	<u>-</u>	-1		-89	-302	0	1	— 	3,1	3,1	3,1	I_3,I_1	
B1	0	1	1	-20	24	1	1	+	4, 1	4, 1	4, 1	I_4,I_1	
986	3				N = 986	= 2	2 · 17	. 29	9 (6 is	ogeny clas	sses)		986
A1	1	-	1	9	-34		3		2, 3, 1	2, 3, 1	2, 3, 1	I_2,I_3,I_1	3 :2
A2	1	0	1	-586	-5508		:	<u>'</u>	6, 1, 3		2,1,1	!	3 :1
B1	1	1		-10407 	-413003	<u>'</u>	1	'	12, 2, 1	12, 2, 1	[2, 2, 1]	I_{12},I_2,I_1	
C1	1		0	-276	1616 5520		2			12, 1, 2			2:2 2:1
C2	1	1	0		5520	<u>'</u>	2	<u>'</u>		$\begin{bmatrix} 6, 2, 4 \\ 4, 2, 1 \end{bmatrix}$	$\frac{ 2,2,4 }{ 4,2,1 }$!	2 : 1
D1	1	0	U	8	16	1	1	l —	4, 2, 1	4, 2, 1	[4, 2, 1]	$\mathrm{I}_4,\!\mathrm{I}_2,\!\mathrm{I}_1$	

	ı								ı		1	1	
	a_1 a_2	a_3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies	
98	6			N = 9	986	6 =	2	\cdot 17 \cdot 29	(continu	ed)		986	
E1	1 0	0	3467	-83679	1	1	_	14, 1, 5	14, 1, 5	14, 1, 5	I_{14}, I_{1}, I_{5}		
$\overline{F1}$	1-1	1	-1	17	1	1	- -	8, 1, 1	8, 1, 1	8,1,1	I_8,I_1,I_1		
98	7			N = 987	_	= 3	. 7	. 47 (5	isogeny c	lasses)		987	
A1		0	7	0		2	_	2, 2, 1	2, 2, 1	2, 2, 1	I_2,I_2,I_1	2 :2	
A2	¦	0	-28	-35	_'		+ 	4, 1, 2	$\frac{4}{1}, \frac{1}{2}$	[2,1,2]	I_4,I_1,I_2	2 :1	
B1 B2		1 1	$-62 \\ -67$	-214 0 -184 0		2 4	+	2, 1, 1 $4, 2, 2$	2, 1, 1	2, 1, 1	I_2,I_1,I_1	2:2 2:1 2 4	
B3		1	-382	$\frac{-184}{2588}$			+++	$\frac{4}{2}, \frac{2}{2}, \frac{2}{4}$	4, 2, 2 2, 1, 4	2, 2, 2 2, 1, 4	$I_4, I_2, I_2 \\ I_2, I_1, I_4$	2 :1,3,4 $ 2:2 $	
B4		1	168	-936		2	<u> </u>	8, 4, 1	8, 4, 1	2, 2, 1	I_8, I_4, I_1	2:2	
$\bar{\text{C1}}$	0 - 1	1	-208	1227	0	1	- -	3, 3, 1	3, 3, 1	1, 1, 1	I_3, I_3, I_1	<u> </u>	
$\overline{D1}$	$\begin{bmatrix} 0 & 1 \end{bmatrix}$	1	-2066	100013	0	1	[-]	7, 5, 3	7, 5, 3	$\begin{bmatrix} 7, 1, 1 \end{bmatrix}$	I_7,I_5,I_3		
E1		0	1596	9783		2	_	10,2,3	10, 2, 3	10, 2, 3	I_{10}, I_2, I_3	2:2	
E2	1 0	0	-6909	79524	1	2	+	5, 1, 6	5, 1, 6	5, 1, 6	I_5,I_1,I_6	2 :1	
<u>98</u>	988 $N = 988 = 2^2 \cdot 13 \cdot 19$ (4 isogeny classes) 988												
A1	0 - 1	0	114	-247	0	1	_	4, 5, 1	0, 5, 1	3, 1, 1	IV,I_5,I_1		
B1	0 0	0	-362249	165197113	1	1	- -	4, 1, 13	0, 1, 13	3, 1, 13	IV,I ₁ ,I ₁₃		
C1	0 0	0	16	36	1	1	- -	8, 2, 1	0, 2, 1	[3, 2, 1]	$ $ IV^*,I_2,I_1		
D1	0 1	0	-18	-71	0	3	-	4, 1, 3	0,1,3	3, 1, 3	IV,I_1,I_3	3 :2	
D2	0 1	0	-1918	-32979	0	1	_	4, 3, 1	0, 3, 1	1, 3, 1	IV,I_3,I_1	3 :1	
98	9			N = 98	39	=	23	. 43 (1	isogeny c	lass)		989	
A1	1 - 1	0	-241	1502	0	1	_	1, 1	1,1	1,1	I_1,I_1		
99	0			N = 990 =	2	· 3 ²	2.	5 · 11 (12 isogeny	classes)		990	
A1			-15	25							, , , ,	2 :2	
	1-1		15	91							$ I_1,III,I_4,I_2 $		
B1 B2	$\begin{array}{c c} 1-1 \\ 1-1 \end{array}$		-10734 -10614						6,0,6,1 3,0,12,2			2:2;3:3	
B3			-14109								$ I_{18},III,I_{12},I_{2} $	′	
B4	1 - 1	0	55011	1066373	0	2	_	9, 9, 4, 6	9, 0, 4, 6	1, 2, 4, 2	I_9 ,III * , I_4 , I_6	2:3;3:2	
$\overline{C1}$	1-1	0	2295	-4595	0	2	[<u> </u>	16, 9, 1, 2	16, 3, 1, 2	[2, 2, 1, 2]	I_{16}, I_3^*, I_1, I_2	2 :2	
C2			-9225	-29939					8, 6, 2, 4	, , , ,	0,0,-,-	2:1,3,4	
C3				-13307459					[4, 3, 1, 8]		~	2:2	
C4 C5			-96345 -1539765	11487325 (735795481 ($\begin{vmatrix} 4, 12, 4, 2 \\ 2, 6, 8, 1 \end{vmatrix}$		· ·	2:2,5,6 $2:4$	
C6			-46845	23238625							-	2:4 2:4	
D1	<u>'</u>		90	1300	-			5, 6, 5, 1			$\begin{bmatrix} I_5, I_0^*, I_5, I_1 \end{bmatrix}$	$ {\bf 5}:2 $	
D2			-53460								I_1, I_0^*, I_1, I_5	5 :1	
$\bar{\mathrm{E}1}$	1 - 1	0	45	-459	1	2	 -	8, 8, 1, 1	[8, 2, 1, 1]	[2, 2, 1, 1]	I_8,I_2^*,I_1,I_1	2 :2	
E2	1 - 1		-675	-6075				4, 10, 2, 2		2, 4, 2, 2		2:1,3,4	
E3	1-1		-10575	-415935					[2, 8, 1, 1]	[2,4,1,1]	. 0.	2:2	
E4 E5	$\begin{array}{c c} 1-1 \\ 1-1 \end{array}$		-2295 -34965	35721 [2525175]				2, 8, 4, 4 1, 7, 8, 2	$\begin{bmatrix} 2, 2, 4, 4 \\ 1, 1, 8, 2 \end{bmatrix}$	$\begin{bmatrix} 2, 4, 2, 4 \\ 1, 2, 2, 2 \end{bmatrix}$		2:2,5,6 $2:4$	
E6			4455	201771				1, 7, 0, 2 $1, 7, 2, 8$		1, 2, 2, 2 $1, 4, 2, 8$		2:4 2:4	

	a a	<i>a</i>		a m	ITI		$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$		Kodaira	Isogenies
	$a_1 \ a_2$	u_3	a_4	$a_6 r$	1	s	$\frac{\operatorname{ord}(\Delta)}{}$, , ,	c_p	Rodalia	
99	0			N = 990			$3^2 \cdot 5 \cdot 11$	(continue	ed)	1	990
F1 F2	$\begin{array}{c c} 1-1 \\ 1-1 \end{array}$		$-9 \\ 81$	$ \begin{array}{c c} -27 & 0 \\ 675 & 0 \end{array} $		 -	3, 6, 1, 1 $1, 6, 3, 3$	3, 0, 1, 1 1, 0, 3, 3	$\begin{vmatrix} 1, 1, 1, 1 \\ 1, 1, 3, 3 \end{vmatrix}$	$\begin{bmatrix} I_3, I_0^*, I_1, I_1 \\ I_1, I_0^*, I_3, I_3 \end{bmatrix}$	3:2 3:1
$\overline{G1}$	1-1	0	-362394	-79244492 0	2	+	28, 11, 4, 1	28, 5, 4, 1	[2, 4, 4, 1]	I_{28}, I_5^*, I_4, I_1	2 :2
G2	1 - 1		-1099674	346460980 0				14, 10, 8, 2		I_{14},I_{10}^*,I_8,I_2	
G3				25790683828 0			7, 11, 16, 1		1, 2, 16, 1	., 0, -,	2 :2
G4	¦			2138540980 0				-		I_7, I_{20}^*, I_4, I_4	
H1	1-1		-96608	-11533373 1			6, 9, 6, 1	6,0,6,1		I_6,III^*,I_6,I_1	
H2 H3	$\begin{array}{c c} 1-1 \\ 1-1 \end{array}$		$-95528 \\ -1568$	$-11804669 \begin{vmatrix} 1 \\ -4669 \end{vmatrix} 1$			3, 9, 12, 2 18, 3, 2, 3	$\begin{bmatrix} 3, 0, 12, 2 \\ 18, 0, 2, 3 \end{bmatrix}$		$I_3,III^*,I_{12},I_2 \\ I_{18},III,I_2,I_3$	
H4			-1308 6112	-40091 -415331		_	9, 3, 4, 6	$\begin{vmatrix} 16, 0, 2, 3 \\ 9, 0, 4, 6 \end{vmatrix}$	9, 2, 2, 6		
I1	$\begin{vmatrix} 1 & 1 & 1 \\ 1 & -1 & 1 \end{vmatrix}$		-137	-539 0			2, 9, 2, 1	$\begin{bmatrix} 2, 0, 2, 1 \\ 2, 0, 2, 1 \end{bmatrix}$	<u> </u>	$ I_2,III^*,I_2,I_1 $	
I2	$1-1 \\ 1-1$		133	-25910	$\frac{2}{2}$	_	1, 9, 4, 2	$\begin{bmatrix} 2, 0, 2, 1 \\ 1, 0, 4, 2 \end{bmatrix}$		$ I_1,III^*,I_2,I_1 $	
J1	$\begin{vmatrix} 1 & -1 & -1 \\ 1 & -1 \end{vmatrix}$		-203	987 1			8, 7, 2, 1	$\begin{bmatrix} 8,1,2,1 \end{bmatrix}$	8,4,2,1		$ {\bf 2}:2$
J2	1-1		-923	-9669 1			4, 8, 4, 2	4, 2, 4, 2	$\begin{bmatrix} 0, 4, 2, 1 \\ 4, 4, 2, 2 \end{bmatrix}$	0 / 1 / - / 1	2 : 2 $ 2: 1, 3, 4 $
J3	1 - 1		-14423	-663069 1		+		2, 1, 2, 4	2, 2, 2, 2	I_2,I_1^*,I_2,I_4	2:2
J4	1 - 1	1	1057	-46893 1	2	_	2,10,8,1	2, 4, 8, 1	2, 4, 2, 1	I_2,I_4^*,I_8,I_1	2:2
$\bar{\mathrm{K1}}$	1-1	1	-12542	543741 0	4	+	4, 11, 2, 1	[4, 5, 2, 1]	[4, 4, 2, 1]	I_4, I_5^*, I_2, I_1	2 :2
K2	1 - 1	1	-12722	527469 0	4	+	2, 16, 4, 2	2, 10, 4, 2	2, 4, 4, 2	I_2,I_{10}^*,I_4,I_2	2:1,3,4
K3			-37472	-2125731 0			1, 26, 2, 1	1, 20, 2, 1		I_1,I_{20}^*,I_2,I_1	2:2
K4	1-1	1	9148	2137101 0	2	_	1,11,8,4	1, 5, 8, 4	[1, 2, 8, 2]	I_1, I_5^*, I_8, I_4	2 :2
L1	1 - 1	1	-797	-8539 0	1	_	7, 6, 1, 3	7, 0, 1, 3	7, 1, 1, 1	I_7,I_0^*,I_1,I_3	3 :2
L2	1 - 1	1	2668	-45961 0	3	_	21, 6, 3, 1	21, 0, 3, 1	21, 1, 3, 1	I_{21},I_0^*,I_3,I_1	3 : 1
99	4			N = 994 =	= 2	. 7	· 71 (7 i	sogeny clas	sses)		994
A1	1 0	1	-1	4 1	1	_	4, 1, 1	4, 1, 1	2, 1, 1	I_4,I_1,I_1	
B1	1 0	1	255	-796 0	2	[-	4, 5, 2	[4, 5, 2]	[2, 1, 2]	I_4, I_5, I_2	2 :2
B2	1 0	1	-1165	-7044 0	2	+	2, 10, 1	2, 10, 1	2, 2, 1	I_2, I_{10}, I_1	2:1
$\overline{\text{C1}}$		0	-371	-3091 0	2	<u></u>	8, 3, 2	8, 3, 2	[2, 3, 2]	I_8,I_3,I_2	2 :2
C2	1 1	0	-6051	-1837150	2	+	4, 6, 1	4, 6, 1	2, 6, 1	I_4,I_6,I_1	2:1
D1	1 0	1	164	922 1	3	[_	8, 1, 3	8, 1, 3	[2, 1, 3]	I_8,I_1,I_3	3 :2
D2	1 0	1	-1611	-39690 1	1	_	24, 3, 1	24, 3, 1	2, 3, 1	I_{24}, I_3, I_1	3 :1
E1	1 0	0	-11	13 0	2	+	2, 1, 1	[2, 1, 1]	[2, 1, 1]	I_2,I_1,I_1	2 :2
E2	1 0	0	-21	-17 0	2	+	1, 2, 2	1, 2, 2	1, 2, 2	I_1, I_2, I_2	2:1
F1	1-1	1	-16	-13 1	2	+	8, 1, 1	8, 1, 1	8, 1, 1	I_8,I_1,I_1	2 :2
F2		1	-96	371 1	4	+	4, 2, 2	4, 2, 2	4, 2, 2	I_4,I_2,I_2	2:1,3,4
F3			-1516	$23091\ 1$		+			2, 4, 1	I_2,I_4,I_1	2 :2
F4	1 - 1	1	44	1267 1	2	-	2, 1, 4	[2, 1, 4]	2,1,2	I_2,I_1,I_4	2 :2
G1		0	-678	-5660 1		+	, ,	18, 3, 1	18, 3, 1	I_{18}, I_3, I_1	2:2;3:3
G2		0	-3238	65508 1		+	, ,	9, 6, 2	9, 6, 2		2:1;3:4
G_3		0	-52198	-4594524 1		+	6, 1, 3	6, 1, 3	$\begin{bmatrix} 6, 1, 1 \\ 2, 2, 2 \end{bmatrix}$	I_6,I_1,I_3	2:4;3:1
G4	1 0	0	-52238	-4587140 1	2	+	3, 2, 6	3, 2, 6	3, 2, 2	I_3,I_2,I_6	2:3;3:2
99				N = 995		5 · 1	199 (2 is	ogeny class	ses)	Γ	995
A1		1	2	30		_	2, 1	2, 1	2,1	I_2,I_1	2 :2
A2	1 0	1	-23	33 0	2	+	1, 2	1,2	1,2	I_1,I_2	2 : 1

	a_1	a_2	a_3	a_4	a_6	r	T	s	$\operatorname{ord}(\Delta)$	$\operatorname{ord}_{-}(j)$	c_p	Kodaira	Isogenies	
995	995 $N = 995 = 5 \cdot 199$ (continued)													
B1	0	1	1	-15	19	1	3	_	3,1	3,1	3, 1	I_3,I_1	3 :2	
B2	0	1	1	85	64	1	1	_	1,3	1,3	1,3	I_1,I_3	3 :1	
996	96 $N = 996 = 2^2 \cdot 3 \cdot 83$ (3 isogeny classes)													
A1	0	-1	0	19	-42	0	2	_	4, 6, 1	0, 6, 1	3, 2, 1	IV,I_6,I_1	2 :2	
A2	0	-1	0	-116	-312	0	2	+	8, 3, 2	0, 3, 2	[3, 1, 2]	IV^*,I_3,I_2	2 :1	
B1	0	1	0	164	-8764	1	1	-	8,13,1	0, 13, 1	3, 13, 1	IV^*,I_{13},I_1		
C1	0	1	0	-12	36	1	3	_	8, 3, 1	0, 3, 1	3, 3, 1	IV^*,I_3,I_1	3 :2	
C2	0	1	0	108	-876	1	1	_	8, 1, 3	0, 1, 3	1, 1, 1	IV^*,I_1,I_3	3 :1	
997	•				N	= 9	97 =	997	7 (3 iso	geny class	ses)		997	
A1	0	-1	1	-18	36	1	1	+	1	1	1	I_1		
B1	0	-1	1	-5	-3	2	1	+	1	1	1	I_1		
C1	0	-1	1	-24	54	2	1	+	1	1	1	I_1		
999)				$\overline{N} =$	99	9 = 3	3.5	37 (2 is	sogeny clas	sses)		999	
A1	1	-1	0	-69	-208	1	1	_	9,1	0, 1	1,1	IV^*,I_1		
B1	1	-1	1	-8	10	1	1	<u> </u>	3, 1	0,1	1,1	$ $ II,I $_1$		