Table of examples with $p_g = 1$

December 22, 2023

Contents

| $2I_8 + I_4 + I_2 + 2I_1$ | 1 |
|--|---|
| .1 2 chains, $K^2 = 10 \dots $ | 2 |
| 2 2 chains, $K^2 = 11 \dots $ | 2 |
| 3 2 chains, $K^2 = 12 \dots $ | 2 |
| | |

1 $2I_8 + I_4 + I_2 + 2I_1$

Input:

```
Output: data/K3_2I82I1I2I4
Summary_Output: tables/K3_2I82I1I2I4
3 Summary_Style: LaTeX_Table
5 Single_Chain: Y
6 Double_Chain: Y
7 Single_QHD: Y
8 Double_QHD: Y
9 Keep_First: global
# Search_For: 11
11 Search_For: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
13 Nef_Check: print
14 Effective_Check: N
15 Obstruction_Check: N
17 Summary_Include_GCD: Y
18 LaTeX_Include_Subsection: Y
20
21
22 Fibers:
23
           L_2 E_7 E_8 L_3 E_4 L_1 E_2 E_1
24
25
           LL_2 EE_7 EE_8 LL_3 EE_4 LL_1 EE_2 EE_1
      Ι1
27
           F_1
28
29
      Ι1
           F_2
30
31
      12
           B1 B2
32
33
           L P1 C P2
34
35
36
37 Merge:
38
           F_1 F_1
39
40 G_2
```

```
41 F_2 F_2
43 Sections (-2):
     E_3 Fix
44
         E_2 EE_2 F_1 F_2 B1 C
45
46
          E_4 EE_4 F_1 F_2 B1 L
48
          L_2 LL_2 F_1 F_2 B1 L
49
50
         E_8 EE_8 F_1 F_2 B1 C
51
53
          E_4 L_2 EE_4 LL_2 G_1 G_2 B2 B2 C C
54
55
          E_2 E_8 EE_2 EE_8 G_1 G_2 B2 B2 L L
56
57
58
          E_1 L_3 EE_1 LL_3 G_1 G_2 B1 B1 P2 P2
59
60
          E_7 L_1 EE_7 LL_1 G_1 G_2 B1 B1 P1 P1
61
63
          E_1 LL_3 F_1 F_2 B2 P1
64
65
          EE_1 L_3 F_1 F_2 B2 P1
66
67
68
        E_7 LL_1 F_1 F_2 B2 P2
70
      EE_7 L_1 F_1 F_2 B2 P2
```

Result:

1.1 2 chains, $K^2 = 10$

| 2 chains, $K^2 = 10$ | | | | | | | | |
|---|----|------------|----|---|-----|----|---|--|
| (n,a) Length (n,a) Length $ GCD Nef WH Independent of the content of$ | | | | | | | | |
| (513, 212) | 13 | (121, 50) | 10 | 1 | YES | _ | 1 | |
| (19309, 5695) | 22 | (139, 41) | 11 | 1 | YES | NO | 2 | |
| (19843, 5873) | 22 | (571, 169) | 14 | 1 | YES | NO | 3 | |

1.2 2 chains, $K^2 = 11$

| 2 chains, $K^2 = 11$ | | | | | | | |
|----------------------|--------|----------------|--------|-----|-----|----|-------|
| (n,a) | Length | (n,a) | Length | GCD | Nef | WH | Index |
| (58441, 21457) | 24 | (42249, 15512) | 23 | 1 | YES | NO | 4 |
| (88889, 33952) | 24 | (51584, 19703) | 23 | 1 | YES | NO | 5 |

1.3 2 chains, $K^2 = 12$

| 2 chains, $K^2 = 12$ | | | | | | | |
|----------------------|--------|------------|--------|-----|-----|----|-------|
| (n,a) | Length | (n,a) | Length | GCD | Nef | WH | Index |
| (2687, 795) | 17 | (436, 129) | 13 | 1 | YES | _ | 6 |
| (86547, 25607) | 24 | (12, 5) | 5 | 3 | YES | _ | 7 |
| (86682, 25631) | 24 | (18, 5) | 6 | 6 | YES | _ | 8 |
| (263303, 77905) | 27 | (436, 129) | 13 | 1 | YES | NO | 9 |

| (n,a) | Length | (n,a) | Length | GCD | Nef | WH | Index |
|-----------------|--------|---------------|--------|-----|-----|----|-------|
| (266348, 78757) | 27 | (487, 144) | 13 | 1 | YES | NO | 10 |
| (267721, 78962) | 27 | (4,1) | 3 | 1 | YES | _ | 11 |
| (326316, 96487) | 27 | (3,1) | 2 | 3 | YES | NO | 12 |
| (g;0,0,0;19) | 6 | (28577, 6522) | 23 | 1 | YES | _ | 13 |
| (h;0,1,0;8) | 6 | (24587, 7302) | 22 | 1 | YES | _ | 14 |