Number of vertices n = 9. Adjacencies of Graph

- 1. vertex 1 adjacent to 2 3 4 5 6 7 8 9
- 2. vertex 2 adjacent to 1 6 7 8 9
- 3. vertex 3 adjacent to 1 6 7 8 9
- 4. vertex 4 adjacent to 1 6 7 8 9
- 5. vertex 5 adjacent to 1 6 7 8 9
- 6. vertex 6 adjacent to 1 2 3 4 5
- 7. vertex 7 adjacent to 1 2 3 4 5
- 8. vertex 8 adjacent to 1 2 3 4 5
- 9. vertex 9 adjacent to 1 2 3 4 5

Size of automorphism group of the graph=1152

Full group: |Aut(polytope)| = 294912

Restricted group: $|Aut(G) \times switch| = 294912$

Number of orbits for the full group: 175

List of orbits of facets for the full group: Total number of orbits = 175 Total number of facets = 36391264

1. Inequality 1 with incidence 192 and stabilizer of size 4608. Orbit size is 64 nature: 3-cycle inequality, C=[3, 9, 1] F=[3, 9]

```
(1,2):0
         (1,3):1
                   (1,4):0
                             (1,5):0
                                       (1,6):0
                                                 (1,7):0
(1,8):0
                             (2,7):0
                                       (2,8):0
                                                 (2,9):0
         (1,9):1
                   (2,6):0
(3,6):0
         (3,7):0
                   (3,8):0
                             (3,9):-1
                                       (4,6):0
                                                 (4,7):0
(4,8):0
         (4,9):0
                   (5,6):0
                             (5,7):0
                                       (5,8):0
                                                 (5,9):0
```

2. Inequality 2 with incidence 128 and stabilizer of size 1024. Orbit size is 288 nature: 4-cycle inequality, C=[5, 8, 3, 7] F=[5, 8]

(1,2):0	(1,3):0	(1,4):0	(1,5):0	(1,6):0	(1,7):0
(1,8):0	(1,9):0	(2,6):0	(2,7):0	(2,8):0	(2,9):0
(3,6):0	(3,7):1	(3,8):1	(3,9):0	(4,6):0	(4,7):0
(4,8):0	(4,9):0	(5,6):0	(5,7):1	(5,8): -1	(5,9):0

3. Inequality 3 with incidence 80 and stabilizer of size 32. Orbit size is 9216 nature: unknown

```
(1,2):0
          (1,3):0
                     (1,4):1
                               (1,5):1
                                          (1,6): -1
                                                     (1,7):0
(1,8):-1
                                                     (2,9):0
                               (2,7):0
          (1,9):0
                    (2,6): -1
                                          (2,8):1
                                          (4,6):1
                               (3,9):0
                                                     (4,7):0
(3,6):0
          (3,7):0
                     (3,8):0
(4,8):1
                     (5,6):1
          (4,9):1
                               (5,7):0
                                          (5,8):1
                                                    (5,9):-1
```

4. Inequality 4 with incidence 52 and stabilizer of size 12. Orbit size is 24576 nature: unknown

```
\overline{(1,2)}: -1
           (1,3):0
                      (1,4):-1
                                  (1,5):1
                                             (1,6):0
                                                        (1,7):0
(1,8):1
                                                        (2,9):1
           (1,9):0
                      (2,6):0
                                 (2,7):-1
                                             (2,8):1
(3,6):0
                                 (3,9):0
                                                        (4,7):1
           (3,7):0
                      (3,8):0
                                             (4,6):1
(4,8):1
           (4,9):0
                                             (5,8): -1
                      (5,6):1
                                 (5,7):0
                                                        (5,9):1
```

5. Inequality 5 with incidence 48 and stabilizer of size 8. Orbit size is 36864 nature: unknown

```
(1,2):0
           (1,3):0
                      (1,4):0
                                 (1,5):2
                                           (1,6): -1
                                                      (1,7):1
                                                      (2,9):0
(1,8):-1
           (1,9):-1
                     (2,6): -1
                                 (2,7):0
                                            (2,8):1
(3,6):0
           (3,7):1
                      (3,8):0
                                 (3,9):1
                                            (4,6):1
                                                      (4,7):1
(4,8):1
           (4,9):-1
                      (5,6):1
                                (5,7):-1
                                            (5,8):1
                                                      (5,9):1
```

6. Inequality 6 with incidence 48 and stabilizer of size 16. Orbit size is 18432 nature: unknown

```
(1,2):0
           (1,3):0
                      (1,4):0
                                (1,5):0
                                          (1,6):0
                                                    (1,7):0
(1,8):0
           (1,9):0
                     (2,6): -1
                                (2,7):0
                                          (2,8):1
                                                    (2,9):0
(3,6): -1
           (3,7):1
                     (3,8):-1
                                (3,9):1
                                          (4,6):1
                                                    (4,7):1
(4,8):1
                      (5,6):1
                                (5,7):0
                                          (5,8):1
                                                    (5,9):2
          (4,9): -1
```

7. Inequality 7 with incidence 48 and stabilizer of size 8. Orbit size is 36864 nature: unknown

```
(1,2):0
          (1,3):0
                    (1,4):0
                               (1,5):0
                                          (1,6): -1
                                                     (1,7):1
(1,8):0
          (1,9):0
                    (2,6): -1
                               (2,7):-1
                                          (2,8):1
                                                     (2,9):1
(3,6):0
                                                     (4,7):1
          (3,7):0
                    (3,8):0
                               (3,9):0
                                          (4,6):1
                                                    (5,9):-1
(4,8):0
          (4,9):2
                    (5,6):1
                               (5,7):1
                                          (5,8):1
```

8. Inequality 8 with incidence 48 and stabilizer of size 16. Orbit size is 18432 nature: unknown

```
(1,2):0
           (1,3):0
                     (1,4):0
                                (1,5):2
                                           (1,6):1
                                                     (1,7):1
(1,8):-1
                                (2,7):0
                                           (2,8):0
                                                     (2,9):0
           (1,9):1
                     (2,6):0
(3,6):1
                                (3,9):1
                                           (4,6):1
                                                     (4,7):1
          (3,7):-1
                     (3,8):1
(4,8):1
          (4,9):-1
                     (5,6):-1
                                (5,7):-1
                                           (5,8):1
                                                     (5,9):-1
```

9. Inequality 9 with incidence 48 and stabilizer of size 8. Orbit size is 36864 nature: unknown

```
(1,2): -2
           (1,3):0
                     (1,4):-1
                                (1,5):2
                                           (1,6):2
                                                      (1,7):0
(1,8):-1
          (1,9):2
                     (2,6):1
                                (2,7):1
                                                      (2,9):1
                                          (2,8):-1
                                                      (4,7):0
(3,6):1
                     (3,8):0
          (3,7):0
                                (3,9):-1
                                           (4,6):1
(4,8):1
                                                     (5,9):-1
          (4,9):1
                     (5,6): -1
                                (5,7):1
                                           (5,8):1
```

10. Inequality 10 with incidence 44 and stabilizer of size 4. Orbit size is 73728 nature: unknown

```
(1,2):-1
          (1,3):0
                     (1,4):-1
                               (1,5):1
                                           (1,6):0
                                                     (1,7):1
                                                     (2,9):-1
(1,8):0
          (1,9):0
                     (2,6):1
                               (2,7):1
                                          (2,8):0
(3,6):1
                     (3,8):0
                                          (4,6): -1
          (3,7):0
                               (3,9):1
                                                     (4,7):1
(4,8):2
          (4,9):1
                     (5,6):1
                               (5,7):-1
                                          (5,8):2
                                                     (5,9):-1
```

11. Inequality 11 with incidence 41 and stabilizer of size 2. Orbit size is 147456 nature: unknown

```
(1,2): -1
          (1,3):0
                     (1,4):1
                               (1,5):0
                                          (1,6):1
                                                     (1,7):0
(1,8): -1
          (1,9):0
                     (2,6):1
                               (2,7):0
                                          (2,8): -1
                                                     (2,9):1
          (3,7):0
                    (3,8):0
                               (3,9):-1
                                          (4,6):0
                                                     (4,7):-1
(3,6):1
                     (5,6):1
                               (5,7):1
                                          (5,8):1
                                                     (5,9):1
(4,8):1
          (4,9):1
```

12. Inequality 12 with incidence 41 and stabilizer of size 6. Orbit size is 49152 nature: unknown

```
(1,2):1
           (1,3): -2
                     (1,4):-1
                                 (1,5):1
                                           (1,6):1
                                                     (1,7):1
(1,8): -1
           (1,9):2
                      (2,6):1
                                (2,7):0
                                           (2,8):1
                                                     (2,9):-1
                                                     (4,7):1
(3,6):1
           (3,7):1
                     (3,8):-1
                                (3,9):1
                                           (4,6):0
                                                     (5,9):-1
(4,8):1
           (4,9):1
                     (5,6): -1
                                (5,7):1
                                          (5,8):0
```

13. Inequality 13 with incidence 40 and stabilizer of size 2. Orbit size is 147456 nature: unknown

```
(1,2):0
          (1,3):-1
                      (1,4):1
                                (1,5):-1
                                           (1,6):2
                                                      (1,7):0
                                           (2,8):2
(1,8): -1
           (1,9):0
                      (2,6):2
                                 (2,7):0
                                                      (2,9):0
(3,6):2
                                 (3,9):2
                                           (4,6): -2
                                                      (4,7):1
           (3,7):0
                     (3,8):-1
(4,8):1
           (4,9):1
                      (5,6):2
                                 (5,7):1
                                           (5,8):-1
                                                      (5,9):-1
```

14. Inequality 14 with incidence 40 and stabilizer of size 4. Orbit size is 73728 nature: unknown

```
(1,2):1
          (1,3):0
                    (1,4):0
                               (1,5): -1
                                          (1,6): -1
                                                     (1,7):1
(1,8):0
          (1,9):0
                    (2,6):1
                               (2,7):-2
                                                     (2,9):1
                                          (2,8):1
(3,6):0
          (3,7):0
                               (3,9):1
                                                     (4,7):2
                    (3,8):-1
                                          (4,6):2
(4,8):1
          (4,9):1
                    (5,6): -2
                               (5,7):1
                                          (5,8):1
                                                     (5,9):1
```

15. Inequality 15 with incidence 40 and stabilizer of size 4. Orbit size is 73728 nature: unknown

```
(1,6):0
(1,2): -1
          (1,3):0
                    (1,4):0
                               (1,5):1
                                                    (1,7):0
(1,8):0
                                                    (2,9):-1
          (1,9):0
                    (2,6):1
                               (2,7):0
                                         (2,8):1
(3,6):1
                               (3,9):1
          (3,7):0
                    (3,8):0
                                         (4,6): -1
                                                    (4,7):1
(4,8):1
          (4,9):1
                    (5,6):1
                               (5,7):1
                                         (5,8):0
                                                    (5,9):-1
```

16. Inequality 16 with incidence 40 and stabilizer of size 8. Orbit size is 36864 nature: unknown

```
(1,2):0
           (1,3): -1
                      (1,4):-1
                                 (1,5):1
                                            (1,6): -1
                                                       (1,7):1
(1,8):1
           (1,9):0
                      (2,6):0
                                 (2,7):-1
                                            (2,8):1
                                                      (2,9):0
(3,6): -2
           (3,7):1
                                 (3,9):1
                                                      (4,7):2
                      (3,8):1
                                            (4,6):3
(4,8):2
           (4,9):0
                      (5,6):2
                                 (5,7):-1
                                           (5,8):-1
                                                      (5,9):1
```

17. Inequality 17 with incidence 38 and stabilizer of size 2. Orbit size is 147456 nature: unknown

```
(1,2): -1
           (1,3):-1
                      (1,4):1
                                 (1,5):3
                                            (1,6):3
                                                       (1,7):1
(1,8): -1
           (1,9):-1
                      (2,6):2
                                 (2,7):0
                                            (2,8):2
                                                       (2,9):-1
(3,6):1
           (3,7):1
                      (3,8):0
                                 (3,9):1
                                            (4,6): -2
                                                       (4,7):1
                      (5,6): -2
(4,8):1
           (4,9):-1
                                 (5,7):-1
                                            (5,8):2
                                                       (5,9):2
```

18. Inequality 18 with incidence 38 and stabilizer of size 2. Orbit size is 147456 nature: unknown

```
(1,2):-1
           (1,3):-1
                      (1,4):1
                                (1,5):1
                                           (1,6): -1
                                                      (1,7):-1
(1,8):1
           (1,9):1
                      (2,6):1
                                (2,7):-1
                                           (2,8):2
                                                      (2,9):1
(3,6):-1
                                           (4,6):1
                                                      (4,7):1
           (3,7):0
                      (3,8):1
                                (3,9):1
           (4,9):1
(4,8):0
                      (5,6):0
                                (5,7):1
                                           (5,8):2
                                                      (5,9): -2
```

19. Inequality 19 with incidence 38 and stabilizer of size 2. Orbit size is 147456 nature: unknown

```
\overline{(1,2)}: -3
            (1,3):0
                       (1,4):1
                                   (1,5):-1
                                               (1,6):1
                                                           (1,7):1
(1,8):2
                       (2,6):2
                                               (2,8):2
                                                          (2,9):-2
           (1,9):-1
                                   (2,7):3
(3,6):1
            (3,7):0
                       (3,8):0
                                   (3,9):1
                                              (4,6): -1
                                                          (4,7):3
(4,8): -2
                                               (5,8):2
            (4,9):1
                       (5,6): -1
                                   (5,7):1
                                                          (5,9):1
```

20. Inequality 20 with incidence 38 and stabilizer of size 2. Orbit size is 147456 nature: unknown

```
(1,2):1
           (1,3):-1
                      (1,4):0
                                 (1,5): -1
                                            (1,6): -1
                                                       (1,7):2
(1,8):0
           (1,9):0
                      (2,6):1
                                 (2,7):-2
                                            (2,8):1
                                                       (2,9):1
(3,6): -1
                                 (3,9):1
                                            (4,6):2
           (3,7):1
                      (3,8):0
                                                       (4,7):3
(4,8):0
           (4,9):1
                      (5,6): -1
                                 (5,7):2
                                            (5,8):1
                                                       (5,9):-1
```

21. Inequality 21 with incidence 38 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2):1
           (1,3): -2
                      (1,4):-1
                                 (1,5):0
                                            (1,6):0
                                                       (1,7):1
(1,8): -1
           (1,9):2
                      (2,6):1
                                 (2,7):0
                                            (2,8):1
                                                       (2,9):-1
(3,6):1
           (3,7):1
                                 (3,9):1
                                                       (4,7):1
                      (3,8):-1
                                            (4,6): -1
(4,8):1
           (4,9):2
                                 (5,7):-1
                                                       (5,9):2
                      (5,6):1
                                            (5,8):0
```

22. Inequality 22 with incidence 38 and stabilizer of size 2. Orbit size is 147456 nature: unknown

```
(1,2): -2
           (1,3):-1
                     (1,4):0
                                (1,5):1
                                           (1,6):1
                                                      (1,7):2
(1,8):0
          (1,9):-1
                     (2,6):2
                                (2,7):1
                                           (2,8):1
                                                      (2,9): -2
(3,6):1
           (3,7):1
                     (3,8):0
                                (3,9):1
                                           (4,6): -1
                                                      (4,7):1
                                (5,7):-1
(4,8):1
           (4,9):1
                     (5,6):1
                                           (5,8):0
                                                      (5,9):1
```

23. Inequality 23 with incidence 36 and stabilizer of size 4. Orbit size is 73728 nature: unknown

```
(1,2):1
          (1,3):-4
                     (1,4):2
                                (1,5):1
                                           (1,6):1
                                                      (1,7):2
(1,8):1
                                                      (2,9):2
          (1,9): -4
                     (2,6):1
                                (2,7):1
                                           (2,8):-1
                                (3,9): -2
(3,6):2
                                                      (4,7): -2
          (3,7):2
                     (3,8):2
                                           (4,6):1
                     (5,6): -1
                                           (5,8):1
(4,8):1
          (4,9):2
                                (5,7):1
                                                      (5,9):2
```

24. Inequality 24 with incidence 36 and stabilizer of size 2. Orbit size is 147456 nature: unknown

```
(1,2): -2
           (1,3): -5
                      (1,4):1
                                 (1,5): -2
                                            (1,6):5
                                                        (1,7):2
(1,8):-1
           (1,9):2
                      (2,6):2
                                            (2,8):2
                                                       (2,9):2
                                 (2,7):0
(3,6):3
                                                       (4,7):2
           (3,7):2
                      (3,8): -3
                                 (3,9):3
                                            (4,6): -3
(4,8):1
                      (5,6):3
                                 (5,7):2
           (4,9):1
                                            (5,8):1
                                                       (5,9): -2
```

25. Inequality 25 with incidence 35 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2): -1
           (1,3):-1
                      (1,4):0
                                 (1,5):4
                                           (1,6): -2
                                                      (1,7):3
                                                      (2,9):1
(1,8):2
           (1,9):-1
                      (2,6):2
                                (2,7):2
                                            (2,8):2
                                                      (4,7):2
(3,6): -1
           (3,7):1
                      (3,8):0
                                (3,9):1
                                            (4,6):1
(4,8): -2
           (4,9):-1
                      (5,6):2
                                (5,7): -2
                                           (5,8): -2
                                                      (5,9):2
```

26. Inequality 26 with incidence 34 and stabilizer of size 4. Orbit size is 73728 nature: unknown

```
(1,2):0
           (1,3): -1
                      (1,4):0
                                 (1,5):1
                                           (1,6):0
                                                      (1,7):0
(1,8):-1
           (1,9):1
                      (2,6): -2
                                (2,7):2
                                           (2,8):1
                                                      (2,9):1
(3,6):2
           (3,7):1
                                (3,9):3
                                                      (4,7): -2
                      (3,8):-1
                                           (4,6): -2
(4,8):2
           (4,9):2
                      (5,6):2
                                           (5,8):3
                                                      (5,9):-1
                                 (5,7):1
```

27. Inequality 27 with incidence 34 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2):1
          (1,3):-1
                     (1,4):-1
                                (1,5):0
                                           (1,6):1
                                                     (1,7):1
(1,8):0
          (1,9):1
                     (2,6):0
                                (2,7):-1
                                          (2,8):1
                                                     (2,9):-1
(3,6):2
          (3,7): -2
                     (3,8):1
                                (3,9):2
                                          (4,6):1
                                                     (4,7):2
                     (5,6): -2
(4,8):1
          (4,9):1
                                (5,7):0
                                          (5,8):1
                                                     (5,9):1
```

28. Inequality 28 with incidence 34 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2): -3
           (1,3):-1
                      (1,4):0
                                 (1,5):1
                                            (1,6):2
                                                       (1,7):1
                                                       (2,9):-3
(1,8):1
           (1,9):-1
                      (2,6):2
                                 (2,7):1
                                            (2,8):3
(3,6):2
                                 (3,9):2
                                                       (4,7):1
           (3,7):0
                      (3,8):1
                                            (4,6): -1
(4,8):1
           (4,9):1
                      (5,6): -1
                                 (5,7):-1
                                            (5,8):2
                                                       (5,9):1
```

29. Inequality 29 with incidence 34 and stabilizer of size 2. Orbit size is 147456 nature: unknown

```
(1,2):0
           (1,3):-1
                      (1,4):0
                                 (1,5):0
                                            (1,6): -1
                                                       (1,7):1
(1,8):0
           (1,9):1
                                            (2,8):2
                                                      (2,9):-1
                     (2,6): -1
                                 (2,7):0
                                            (4,6):2
(3,6):-1
           (3,7):1
                      (3,8):0
                                 (3,9):1
                                                       (4,7):2
(4,8):1
                                (5,7):-2
           (4,9):1
                      (5,6):1
                                            (5,8):1
                                                       (5,9):2
```

30. Inequality 30 with incidence 34 and stabilizer of size 2. Orbit size is 147456 nature: unknown

```
(1,2):1
           (1,3):-1
                      (1,4):-1
                                 (1,5): -2
                                           (1,6):1
                                                      (1,7):0
                                                      (2,9):-1
(1,8):0
           (1,9):2
                      (2,6): -1
                                 (2,7):2
                                           (2,8):1
(3,6): -2
                                 (3,9):2
                                                      (4,7): -2
           (3,7):1
                      (3,8):0
                                           (4,6):1
(4,8):1
           (4,9):1
                      (5,6):3
                                 (5,7):3
                                           (5,8):0
                                                      (5,9):2
```

31. Inequality 31 with incidence 34 and stabilizer of size 2. Orbit size is 147456 nature: unknown

```
(1,2):0
           (1,3):-1
                      (1,4):1
                                 (1,5):-1
                                            (1,6):1
                                                       (1,7):0
(1,8):1
           (1,9):1
                      (2,6):1
                                 (2,7):0
                                            (2,8):0
                                                       (2,9):-1
(3,6):2
           (3,7):1
                                 (3,9):2
                                                       (4,7):2
                      (3,8): -2
                                            (4,6): -1
                                            (5,8):2
                                                       (5,9):1
(4,8): -1
           (4,9):-1
                      (5,6):1
                                 (5,7):1
```

32. Inequality 32 with incidence 34 and stabilizer of size 4. Orbit size is 73728 nature: unknown

```
(1,2):0
           (1,3):-1
                      (1,4):0
                                 (1,5):1
                                            (1,6):0
                                                      (1,7):1
(1,8):1
           (1,9):0
                      (2,6):1
                                (2,7):-1
                                            (2,8):1
                                                      (2,9):1
(3,6):-1
           (3,7):1
                      (3,8):0
                                 (3,9):1
                                            (4,6):3
                                                      (4,7):1
(4,8):-1
           (4,9):1
                     (5,6): -1
                                 (5,7):0
                                           (5,8):-1
                                                      (5,9):1
```

33. Inequality 33 with incidence 34 and stabilizer of size 2. Orbit size is 147456 nature: unknown

```
(1,2): -1
           (1,3):-1
                      (1,4):0
                                 (1,5):2
                                            (1,6):2
                                                       (1,7):1
(1,8):0
                                                       (2,9):-1
           (1,9):-1
                      (2,6):1
                                 (2,7):0
                                            (2,8):1
(3,6):1
                                 (3,9):2
                                                       (4,7):1
           (3,7):1
                      (3,8):1
                                            (4,6): -1
(4,8):1
           (4,9):-1
                      (5,6): -1
                                 (5,7):-1
                                            (5,8):1
                                                       (5,9):1
```

34. Inequality 34 with incidence 34 and stabilizer of size 2. Orbit size is 147456 nature: unknown

```
(1,2):-1
           (1,3):-1
                      (1,4):0
                                 (1,5):-1
                                           (1,6):0
                                                      (1,7):1
(1,8):1
                                 (2,7):2
                                           (2,8):1
                                                      (2,9):-1
           (1,9):1
                      (2,6):-1
(3,6): -2
                                           (4,6):2
                                                      (4,7):2
           (3,7):1
                      (3,8):0
                                 (3,9):2
(4,8):-1
           (4,9):1
                      (5,6):1
                                 (5,7):0
                                           (5,8):1
                                                      (5,9):1
```

35. Inequality 35 with incidence 34 and stabilizer of size 2. Orbit size is 147456 nature: unknown

```
(1,2):-1
           (1,3):0
                     (1,4):-1
                                 (1,5):1
                                           (1,6):1
                                                      (1,7):0
                                                      (2,9):0
(1,8):1
           (1,9):-1
                      (2,6):1
                                (2,7):-1
                                           (2,8):1
(3,6):1
                                                      (4,7):2
           (3,7):0
                      (3,8):0
                                 (3,9):1
                                           (4,6):1
(4,8):1
           (4,9):-1
                      (5,6):0
                                 (5,7):1
                                           (5,8):-1
                                                      (5,9):1
```

36. Inequality 36 with incidence 34 and stabilizer of size 2. Orbit size is 147456 nature: unknown

```
(1,2):-1
           (1,3): -2
                      (1,4):0
                                 (1,5):1
                                            (1,6):1
                                                       (1,7):2
(1,8): -1
           (1,9):0
                      (2,6):2
                                 (2,7):1
                                            (2,8):1
                                                       (2,9):-1
           (3,7):1
                                 (3,9):1
                                                       (4,7):1
(3,6):1
                      (3,8):-1
                                            (4,6): -1
(4,8):1
                                 (5,7):-1
                                                       (5,9):1
           (4,9):1
                      (5,6):1
                                            (5,8):0
```

37. Inequality 37 with incidence 34 and stabilizer of size 4. Orbit size is 73728 nature: unknown

```
(1,2):1
          (1,3):1
                     (1,4):0
                               (1,5): -1
                                          (1,6): -1
                                                     (1,7):1
(1,8):1
          (1,9):0
                     (2,6):1
                               (2,7):0
                                          (2,8): -1
                                                     (2,9):1
(3,6):1
                                          (4,6):0
                                                     (4,7):-1
          (3,7):-1
                     (3,8):0
                               (3,9):-1
(4,8):1
          (4,9):2
                     (5,6):1
                               (5,7):1
                                          (5,8):1
                                                     (5,9):0
```

38. Inequality 38 with incidence 34 and stabilizer of size 16. Orbit size is 18432 nature: unknown

```
(1,2): -2
           (1,3): -2
                      (1,4):0
                                 (1,5):0
                                            (1,6):2
                                                       (1,7):2
(1,8):0
           (1,9):0
                      (2,6):1
                                 (2,7):1
                                           (2,8):-1
                                                       (2,9):1
(3,6):1
                                                      (4,7):-1
           (3,7):1
                      (3,8):1
                                 (3,9):-1
                                            (4,6):1
                                 (5,7):1
(4,8):1
           (4,9):1
                      (5,6): -1
                                            (5,8):1
                                                       (5,9):1
```

39. Inequality 39 with incidence 33 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2):1
          (1,3):-1
                     (1,4):1
                               (1,5):0
                                          (1,6):0
                                                    (1,7):-1
(1,8):0
                     (2,6):0
                                          (2,8):1
                                                    (2,9):-1
          (1,9):0
                               (2,7):1
(3,6):1
                                                    (4,7):1
          (3,7):0
                     (3,8):1
                               (3,9):1
                                          (4,6):1
(4,8):0
          (4,9):1
                     (5,6): -2
                                                    (5,9):1
                               (5,7):1
                                          (5,8):0
```

40. Inequality 40 with incidence 33 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2):0
           (1,3): -3
                     (1,4):-1
                                 (1,5):0
                                           (1,6):2
                                                     (1,7):1
                                                     (2,9):-1
(1,8): -1
           (1,9):2
                      (2,6):2
                                 (2,7):1
                                           (2,8):2
                                                     (4,7):-1
(3,6):2
                                           (4,6):1
           (3,7):2
                     (3,8): -2
                                 (3,9):1
(4,8):0
           (4,9):1
                     (5,6): -1
                                 (5,7):1
                                           (5,8):1
                                                     (5,9):1
```

41. Inequality 41 with incidence 33 and stabilizer of size 2. Orbit size is 147456 nature: unknown

```
(1,2):-1
           (1,3):-1
                      (1,4):0
                                 (1,5):1
                                            (1,6): -1
                                                       (1,7):1
(1,8):1
           (1,9):0
                      (2,6): -1
                                 (2,7):1
                                            (2,8):2
                                                       (2,9):-1
           (3,7):0
                                 (3,9):1
                                                       (4,7):1
(3,6):-1
                      (3,8):1
                                            (4,6):1
                      (5,6):2
                                 (5,7):-1
                                            (5,8):3
                                                       (5,9):1
(4,8): -1
           (4,9):1
```

42. Inequality 42 with incidence 33 and stabilizer of size 6. Orbit size is 49152 nature: unknown

```
(1,2): -2
           (1,3): -6
                      (1,4):2
                                 (1,5): -2
                                            (1,6):2
                                                       (1,7):2
(1,8):6
           (1,9):2
                      (2,6):2
                                 (2,7):-1
                                            (2,8):3
                                                      (2,9): -2
(3,6):3
                                                       (4,7):2
           (3,7):3
                      (3,8):3
                                 (3,9):3
                                            (4,6):1
                      (5,6): -2
                                 (5,7):2
(4,8): -3
           (4,9): -2
                                            (5,8):3
                                                      (5,9):-1
```

43. Inequality 43 with incidence 32 and stabilizer of size 32. Orbit size is 9216 nature: unknown

```
(1,2):0
          (1,3):0
                     (1,4):0
                               (1,5):0
                                          (1,6):0
                                                     (1,7):0
                               (2,7):2
                                          (2,8):2
                                                    (2,9):-1
(1,8):0
          (1,9):0
                     (2,6):1
          (3,7):2
                               (3,9):2
                                          (4,6):2
                                                    (4,7):-1
(3,6): -1
                     (3,8):-1
          (4,9):2
(4,8):1
                     (5,6):2
                               (5,7):1
                                          (5,8): -2
                                                    (5,9):-1
```

44. Inequality 44 with incidence 32 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2): -1
           (1,3):0
                     (1,4):0
                                (1,5):1
                                           (1,6): -1
                                                     (1,7):1
(1,8):0
                                           (2,8):1
                                                     (2,9):1
           (1,9):0
                     (2,6):0
                                (2,7):1
                                                     (4,7):1
(3,6):-1
           (3,7):0
                     (3,8):-1
                                (3,9):2
                                           (4,6):2
                     (5,6):2
                                (5,7):-1
(4,8):-1
          (4,9):0
                                           (5,8):1
                                                     (5,9):1
```

45. Inequality 45 with incidence 32 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2):-1
          (1,3):0
                     (1,4): -2
                                (1,5):1
                                          (1,6): -1
                                                      (1,7):1
                                                      (2,9):0
(1,8):0
          (1,9):2
                     (2,6):1
                                (2,7):1
                                          (2,8): -1
                                                      (4,7):1
(3,6):3
                                (3,9):2
          (3,7):0
                     (3,8):1
                                          (4,6): -2
          (4,9):2
(4,8):1
                     (5,6):1
                                (5,7):1
                                          (5,8):1
                                                     (5,9): -2
```

46. Inequality 46 with incidence 32 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2):-1
           (1,3):-1
                      (1,4):0
                                 (1,5):1
                                            (1,6): -1
                                                       (1,7):2
(1,8):0
           (1,9):0
                      (2,6): -1
                                 (2,7):1
                                            (2,8):2
                                                       (2,9):-1
(3,6): -1
           (3,7):1
                                 (3,9):1
                                            (4,6):2
                                                       (4,7):2
                      (3,8):0
(4,8):1
                                 (5,7):-2
                                                       (5,9):1
           (4,9):1
                      (5,6):1
                                            (5,8):1
```

47. Inequality 47 with incidence 32 and stabilizer of size 2. Orbit size is 147456 nature: unknown

```
(1,2):-1
           (1,3):0
                     (1,4): -1
                                (1,5):2
                                           (1,6):0
                                                      (1,7):-1
(1,8):2
          (1,9):1
                     (2,6):1
                                (2,7):-1
                                           (2,8):2
                                                      (2,9):-1
(3,6):1
          (3,7):1
                     (3,8):-1
                                (3,9):1
                                           (4,6): -1
                                                      (4,7):4
                                           (5,8):-2
(4,8):3
           (4,9):1
                     (5,6):1
                                (5,7):3
                                                      (5,9): -2
```

48. Inequality 48 with incidence 32 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2):-1
          (1,3):-1
                      (1,4):1
                                (1,5):1
                                           (1,6):1
                                                      (1,7):0
(1,8):0
           (1,9):1
                      (2,6):1
                                (2,7):1
                                           (2,8):1
                                                      (2,9):0
                                                      (4,7):2
(3,6):2
                                (3,9):1
           (3,7):1
                     (3,8):-1
                                          (4,6): -1
(4,8):-1
          (4,9):-1
                      (5,6):1
                                (5,7):0
                                           (5,8):1
                                                     (5,9):-1
```

49. Inequality 49 with incidence 32 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2):0
           (1,3):-1
                      (1,4):1
                                 (1,5):0
                                            (1,6): -1
                                                       (1,7):1
(1,8):2
                      (2,6):1
                                            (2,8):1
                                                       (2,9):1
           (1,9):0
                                 (2,7):-1
(3,6): -1
                                                       (4,7):1
           (3,7):0
                      (3,8):1
                                 (3,9):1
                                            (4,6):2
                      (5,6): -1
                                            (5,8): -1
(4,8):-1
           (4,9):1
                                 (5,7):1
                                                       (5,9):1
```

50. Inequality 50 with incidence 32 and stabilizer of size 16. Orbit size is 18432 nature: unknown

```
(1,2):0
           (1,3):0
                     (1,4):0
                                (1,5):0
                                          (1,6):2
                                                     (1,7):0
                                                     (2,9):-1
(1,8):0
          (1,9):2
                     (2,6):1
                                (2,7):1
                                          (2,8):1
                                                     (4,7):-1
(3,6): -1
           (3,7):1
                     (3,8):-1
                                (3,9):1
                                          (4,6): -1
(4,8):1
           (4,9):1
                     (5,6): -1
                                (5,7):1
                                          (5,8):1
                                                     (5,9):1
```

51. Inequality 51 with incidence 32 and stabilizer of size 2. Orbit size is 147456 nature: unknown

```
(1,2):0
          (1,3):-1
                     (1,4):1
                                (1,5):0
                                          (1,6):1
                                                     (1,7):1
(1,8): -1
          (1,9):1
                     (2,6):1
                                (2,7):0
                                          (2,8):0
                                                     (2,9):-1
                                          (4,6): -2
           (3,7):1
                                (3,9):2
                                                     (4,7):1
(3,6):1
                     (3,8):1
          (4,9):-1
                               (5,7):1
                                          (5,8):1
                                                     (5,9):-1
(4,8):1
                     (5,6):1
```

52. Inequality 52 with incidence 32 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2): -2
           (1,3):-4
                      (1,4):1
                                 (1,5):1
                                           (1,6):4
                                                      (1,7):1
(1,8):2
           (1,9):1
                      (2,6):2
                                (2,7):0
                                           (2,8):2
                                                      (2,9):-2
(3,6):2
                                                      (4,7): -2
           (3,7):2
                      (3,8):3
                                (3,9):3
                                           (4,6): -2
(4,8):2
                                                      (5,9):-1
           (4,9):1
                     (5,6): -2
                                (5,7):1
                                           (5,8):1
```

53. Inequality 53 with incidence 32 and stabilizer of size 2. Orbit size is 147456 nature: unknown

```
(1,2): -3
          (1,3):-3
                     (1,4):-1
                                (1,5):1
                                           (1,6):2
                                                      (1,7):0
                                           (2,8):2
                                                      (2,9): -2
(1,8):4
           (1,9):0
                      (2,6):2
                                (2,7):1
          (3,7):-1
(3,6):2
                                (3,9):2
                      (3,8):2
                                           (4,6): -1
                                                      (4,7):1
(4,8):2
           (4,9):1
                      (5,6):1
                                (5,7):1
                                           (5,8): -2
                                                      (5,9):1
```

54. Inequality 54 with incidence 31 and stabilizer of size 2. Orbit size is 147456 nature: unknown

```
(1,2):-1
           (1,3):0
                     (1,4):0
                                 (1,5):1
                                           (1,6):1
                                                     (1,7):1
(1,8):0
                     (2,6):1
                                (2,7):0
                                                     (2,9):-1
           (1,9):0
                                           (2,8):1
(3,6):2
          (3,7):-1
                                                     (4,7):1
                     (3,8):0
                                (3,9):1
                                           (4,6):1
(4,8):1
                                           (5,8):2
          (4,9):-1
                     (5,6): -1
                                (5,7):-1
                                                     (5,9):1
```

55. Inequality 55 with incidence 31 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,6):0
(1,2):-1
           (1,3):-1
                     (1,4): -2
                                 (1,5):1
                                                      (1,7):1
                                                      (2,9):0
(1,8):0
           (1,9):2
                      (2,6):1
                                (2,7):1
                                           (2,8): -1
(3,6):3
                                (3,9):2
                                           (4,6): -3
                                                      (4,7):2
           (3,7):1
                      (3,8):1
           (4,9):2
(4,8):1
                      (5,6):1
                                (5,7):1
                                           (5,8):1
                                                      (5,9): -2
```

56. Inequality 56 with incidence 31 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2):0
          (1,3):1
                     (1,4):-1
                                (1,5): -1
                                           (1,6): -1
                                                      (1,7):1
(1,8):1
          (1,9):2
                     (2,6):2
                                (2,7):1
                                           (2,8): -2
                                                      (2,9):3
          (3,7):-1
                                                      (4,7):-2
(3,6):1
                     (3,8):0
                                (3,9):-1
                                           (4,6): -1
(4,8):1
          (4,9):3
                     (5,6):1
                                           (5,8):2
                                                      (5,9):1
                                (5,7):1
```

57. Inequality 57 with incidence 31 and stabilizer of size 2. Orbit size is 147456 nature: unknown

```
(1,2): -1
           (1,3): -1
                      (1,4):0
                                 (1,5):1
                                             (1,6):1
                                                        (1,7):1
(1,8): -1
           (1,9):0
                      (2,6):2
                                 (2,7):1
                                            (2,8):1
                                                       (2,9):-1
(3,6):1
           (3,7):1
                      (3,8):-1
                                 (3,9):2
                                            (4,6): -1
                                                        (4,7):2
(4,8):1
           (4,9):0
                      (5,6): -1
                                 (5,7):-1
                                            (5,8):2
                                                        (5,9):1
```

58. Inequality 58 with incidence 31 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2):0
          (1,3): -4
                     (1,4):1
                                (1,5):1
                                           (1,6):3
                                                      (1,7):2
(1,8):2
          (1,9):1
                     (2,6): -2
                                (2,7):1
                                           (2,8):2
                                                     (2,9):-1
(3,6):2
                     (3,8):2
                                (3,9):2
                                                     (4,7):-2
          (3,7):2
                                          (4,6): -1
(4,8):1
          (4,9):1
                     (5,6): -2
                                (5,7):1
                                          (5,8):-1
                                                      (5,9):1
```

59. Inequality 59 with incidence 31 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2): -2
          (1,3): -3
                     (1,4):1
                               (1,5): -2
                                           (1,6):5
                                                      (1,7):2
(1,8):0
                     (2,6):3
                                (2,7):2
                                          (2,8):-2
                                                     (2,9):-1
           (1,9):1
                                                     (4,7):4
(3,6):3
           (3,7):2
                     (3,8):1
                                (3,9):3
                                          (4,6):-5
(4,8):1
                                (5,7):2
                                           (5,8):2
                                                     (5,9):-2
          (4,9):-1
                     (5,6):4
```

60. Inequality 60 with incidence 31 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2):-1
          (1,3):-4
                      (1,4):0
                                (1,5):1
                                           (1,6):2
                                                      (1,7):2
                                                     (2,9):-1
(1,8):3
           (1,9):1
                     (2,6): -2
                                (2,7):1
                                           (2,8):3
(3,6):2
                                                     (4,7):-3
                      (3,8):3
                                (3,9):2
                                           (4,6):0
           (3,7):3
(4,8):2
           (4,9):1
                     (5,6): -2
                                (5,7):1
                                          (5,8):-1
                                                     (5,9):1
```

61. Inequality 61 with incidence 31 and stabilizer of size 2. Orbit size is 147456 nature: unknown

```
(1,2): -2
           (1,3): -1
                      (1,4):1
                                 (1,5):1
                                           (1,6):1
                                                      (1,7):1
(1,8):0
           (1,9):-1
                      (2,6):2
                                 (2,7):0
                                           (2,8):2
                                                      (2,9): -2
           (3,7):1
                      (3,8):0
                                 (3,9):1
                                                     (4,7):-1
(3,6):1
                                           (4,6):1
(4,8):0
           (4,9):1
                                           (5,8):2
                                                      (5,9):1
                      (5,6): -1
                                 (5,7):1
```

62. Inequality 62 with incidence 31 and stabilizer of size 3. Orbit size is 98304 nature: unknown

```
(1,2): -1
          (1,3): -5
                     (1,4):-1
                                 (1,5):1
                                            (1,6):3
                                                       (1,7):3
(1,8):3
           (1,9):1
                      (2,6):1
                                (2,7):-2
                                            (2,8):3
                                                      (2,9):-1
(3,6):3
           (3,7):3
                      (3,8):3
                                 (3,9):2
                                           (4,6): -2
                                                       (4,7):3
(4,8):1
          (4,9):-1
                     (5,6): -3
                                (5,7):-1
                                            (5,8):2
                                                       (5,9):1
```

63. Inequality 63 with incidence 30 and stabilizer of size 2. Orbit size is 147456 nature: unknown

```
(1,2):0
          (1,3):-1
                     (1,4):1
                               (1,5):0
                                         (1,6): -1
                                                    (1,7):1
(1,8):0
                               (2,7):1
                                         (2,8):-2
          (1,9):0
                     (2,6):2
                                                    (2,9):-1
(3,6):0
          (3,7):2
                               (3,9):2
                                         (4,6):2
                                                    (4,7):-1
                     (3,8):1
(4,8):1
          (4,9):1
                     (5,6):1
                               (5,7):1
                                         (5,8):2
                                                    (5,9): -2
```

64. Inequality 64 with incidence 30 and stabilizer of size 2. Orbit size is 147456 nature: unknown

```
(1,3): -2
(1,2): -1
                      (1,4): -2
                                (1,5):1
                                           (1,6):0
                                                      (1,7):2
(1,8):0
           (1,9):2
                      (2,6):1
                                (2,7):2
                                           (2,8):-1
                                                      (2,9):-1
                                                      (4,7):3
(3,6):4
           (3,7):2
                                (3,9):3
                                           (4,6): -4
                      (3,8):1
(4,8):1
           (4,9):2
                      (5,6):1
                                                      (5,9):-2
                                (5,7):1
                                           (5,8):1
```

65. Inequality 65 with incidence 30 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,4):0
(1,2): -1
           (1,3):-1
                                 (1,5):1
                                            (1,6): -1
                                                        (1,7):1
(1,8):1
           (1,9):0
                      (2,6): -1
                                 (2,7):1
                                            (2,8):2
                                                       (2,9):-1
(3,6): -1
                                            (4,6):2
                                                        (4,7):2
           (3,7):0
                      (3,8):1
                                 (3,9):1
(4,8):1
           (4,9):1
                      (5,6):1
                                 (5,7): -2
                                            (5,8):1
                                                        (5,9):1
```

66. Inequality 66 with incidence 30 and stabilizer of size 2. Orbit size is 147456 nature: unknown

```
(1,2):1
          (1,3): -3
                     (1,4):1
                                (1,5):3
                                           (1,6):-4
                                                     (1,7):2
(1,8):2
          (1,9):0
                     (2,6):3
                                (2,7):-1
                                           (2,8):2
                                                     (2,9):1
           (3,7):2
                                (3,9):2
                                                     (4,7):2
(3,6): -2
                     (3,8):1
                                           (4,6):3
          (4,9):-1
                     (5,6):2
                                (5,7):-1
                                          (5,8): -2
                                                     (5,9):2
(4,8):-1
```

67. Inequality 67 with incidence 30 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2):-1
           (1,3):-1
                     (1,4):-1
                                 (1,5):0
                                           (1,6):1
                                                      (1,7):1
(1,8):0
                      (2,6):3
           (1,9):1
                                (2,7):1
                                           (2,8):3
                                                      (2,9):0
(3,6):2
                                (3,9):2
                                                      (4,7):3
           (3,7):1
                     (3,8): -2
                                           (4,6): -2
                                (5,7):2
(4,8):1
           (4,9):1
                      (5,6):2
                                           (5,8): -2
                                                      (5,9): -2
```

68. Inequality 68 with incidence 30 and stabilizer of size 2. Orbit size is 147456 nature: unknown

```
(1,2):-1
           (1,3):-1
                     (1,4):-1
                                 (1,5):1
                                            (1,6):0
                                                      (1,7):0
(1,8):2
                                (2,7):-1
                                            (2,8):2
                                                      (2,9): -2
           (1,9):0
                      (2,6):2
(3,6):1
           (3,7):-1
                                 (3,9):2
                                                      (4,7):1
                      (3,8):1
                                           (4,6): -1
(4,8):2
           (4,9):1
                      (5,6):2
                                 (5,7):1
                                           (5,8):-1
                                                       (5,9):1
```

69. Inequality 69 with incidence 30 and stabilizer of size 4. Orbit size is 73728 nature: unknown

```
(1,2):-2
           (1,3):0
                      (1,4):1
                                 (1,5):1
                                            (1,6): -2
                                                       (1,7):1
(1,8):1
                      (2,6):0
                                 (2,7):2
                                            (2,8):2
                                                       (2,9):2
           (1,9):0
           (3,7):-1
(3,6): -2
                                                       (4,7):1
                      (3,8):-1
                                 (3,9):4
                                            (4,6):2
(4,8):-1
                      (5,6):2
           (4,9):1
                                 (5,7):-1
                                            (5,8):1
                                                       (5,9):1
```

70. Inequality 70 with incidence 30 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2):0
                     (1,4):0
          (1,3): -3
                                (1,5):1
                                          (1,6):2
                                                     (1,7):1
                                                     (2,9):-1
(1,8):2
          (1,9):1
                     (2,6): -2
                                (2,7):0
                                          (2,8):3
(3,6):2
                                (3,9):2
                                          (4,6):0
                                                     (4,7):-2
          (3,7):2
                     (3,8):3
(4,8):1
          (4,9):1
                     (5,6): -2
                                (5,7):1
                                          (5,8): -1
                                                     (5,9):1
```

71. Inequality 71 with incidence 30 and stabilizer of size 2. Orbit size is 147456 nature: unknown

```
\overline{(1,4)}: -1
(1,2): -2
           (1,3): -2
                                   (1,5):2
                                              (1,6):4
                                                         (1,7):1
                                              (2,8):2
(1,8):0
           (1,9):0
                       (2,6):2
                                   (2,7):1
                                                         (2,9):-1
                                                         (4,7):-2
(3,6):2
           (3,7):1
                       (3,8):-1
                                   (3,9):2
                                              (4,6):3
                                              (5,8):2
                                                         (5,9):2
(4,8):1
           (4,9):1
                       (5,6): -3
                                  (5,7):-1
```

72. Inequality 72 with incidence 30 and stabilizer of size 2. Orbit size is 147456 nature: unknown

```
(1,2):-1
           (1,3): -2
                      (1,4):2
                                 (1,5):1
                                           (1,6): -2
                                                       (1,7):2
(1,8):1
           (1,9):1
                      (2,6):2
                                 (2,7):1
                                           (2,8):3
                                                      (2,9):1
(3,6):0
                                 (3,9):2
                                                      (4,7): -2
           (3,7):2
                      (3,8): -2
                                           (4,6):2
                                                      (5,9):-1
(4,8): -1
           (4,9):1
                      (5,6):2
                                 (5,7):1
                                           (5,8):-1
```

73. Inequality 73 with incidence 30 and stabilizer of size 2. Orbit size is 147456 nature: unknown

```
(1,2): -2
           (1,3):0
                      (1,4):0
                                 (1,5):0
                                           (1,6):2
                                                      (1,7):2
(1,8):1
           (1,9):1
                      (2,6):1
                                 (2,7):1
                                           (2,8):1
                                                      (2,9):1
(3,6):1
          (3,7):-2
                                 (3,9):2
                                                      (4,7):1
                     (3,8):-1
                                           (4,6): -1
(4,8):1
           (4,9):1
                      (5,6):1
                                (5,7): -2
                                           (5,8):2
                                                      (5,9):-1
```

74. Inequality 74 with incidence 30 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2):2
                                                      (1,7):4
          (1,3):3
                     (1,4):1
                               (1,5): -2
                                          (1,6): -1
(1,8):0
                     (2,6):1
                                                      (2,9):2
          (1,9):1
                               (2,7):-2
                                          (2,8):-1
(3,6):2
                                                     (4,7): -2
          (3,7): -2
                     (3,8):1
                               (3,9): -2
                                          (4,6):-1
(4,8):1
                     (5,6):1
                                                      (5,9):2
          (4,9):1
                                (5,7):2
                                           (5,8):1
```

75. Inequality 75 with incidence 29 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2): -1
          (1,3): -2
                     (1,4):1
                                (1,5):0
                                          (1,6):2
                                                     (1,7):1
                                                     (2,9):-1
(1,8):0
           (1,9):1
                     (2,6):1
                                (2,7):2
                                          (2,8): -1
(3,6):2
                                (3,9):2
                                          (4,6): -2
                                                     (4,7):2
           (3,7):1
                     (3,8):1
(4,8):1
           (4,9):0
                     (5,6):1
                                (5,7):0
                                          (5,8):1
                                                     (5,9): -2
```

76. Inequality 76 with incidence 29 and stabilizer of size 2. Orbit size is 147456 nature: unknown

```
(1,2):-1
          (1,3): -2
                     (1,4):1
                               (1,5):0
                                          (1,6):2
                                                     (1,7):1
(1,8):0
          (1,9):1
                     (2,6):2
                               (2,7):1
                                         (2,8):-1
                                                    (2,9):-1
                                         (4,6): -2
(3,6):1
           (3,7):2
                               (3,9):2
                                                     (4,7):2
                     (3,8):1
(4,8):0
          (4,9):-1
                               (5,7):0
                                          (5,8):2
                                                    (5,9):-1
                     (5,6):1
```

77. Inequality 77 with incidence 29 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2):0
           (1,3):-1
                      (1,4):1
                                (1,5):1
                                           (1,6): -2
                                                      (1,7):0
(1,8):1
           (1,9):0
                     (2,6):1
                                (2,7):-1
                                           (2,8):2
                                                      (2,9): -2
                                                      (4,7):3
(3,6):-1
           (3,7):0
                     (3,8):1
                                (3,9):1
                                           (4,6):2
                     (5,6):2
                                                      (5,9):2
(4,8):1
           (4,9):1
                                (5,7): -2
                                           (5,8):1
```

78. Inequality 78 with incidence 29 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2):1
           (1,3):-1
                     (1,4):-1
                                (1,5): -1
                                           (1,6):1
                                                      (1,7):0
(1,8):0
           (1,9):1
                     (2,6): -2
                                 (2,7):1
                                           (2,8):3
                                                      (2,9):-1
(3,6): -2
                                           (4,6):2
                                                      (4,7): -2
           (3,7):1
                      (3,8):0
                                 (3,9):2
(4,8):2
           (4,9):1
                      (5,6):3
                                 (5,7):2
                                           (5,8):1
                                                      (5,9):1
```

79. Inequality 79 with incidence 29 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,7):0
(1,2): -1
           (1,3):-1
                      (1,4):0
                                 (1,5):1
                                           (1,6):1
(1,8):0
                      (2,6):1
                                 (2,7):1
                                           (2,8):1
                                                     (2,9): -2
           (1,9):0
(3,6):2
                                                     (4,7):-1
           (3,7):1
                      (3,8):0
                                 (3,9):2
                                           (4,6):1
(4,8):1
                                           (5,8):2
                                                     (5,9):1
           (4,9):-1
                      (5,6): -1
                                 (5,7):1
```

80. Inequality 80 with incidence 29 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2): -2
           (1,3):-1
                      (1,4):1
                                (1,5):1
                                           (1,6):2
                                                      (1,7):0
                                (2,7):2
                                                     (2,9):-3
(1,8):0
          (1,9):-1
                      (2,6):2
                                           (2,8):1
                                          (4,6): -1
(3,6):2
                                (3,9):2
                                                      (4,7):2
           (3,7):1
                      (3,8):0
(4,8):-1
           (4,9):1
                     (5,6): -1
                                (5,7):1
                                           (5,8):2
                                                      (5,9):1
```

81. Inequality 81 with incidence 29 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2):1
          (1,3):2
                     (1,4):-1
                                (1,5): -1
                                           (1,6): -1
                                                      (1,7):1
(1,8):2
          (1,9):1
                     (2,6):1
                                (2,7):0
                                           (2,8): -2
                                                      (2,9):2
                                                      (4,7):-2
                     (3,8):-1
(3,6):2
          (3,7):-1
                                (3,9): -2
                                           (4,6):1
(4,8):2
          (4,9):2
                     (5,6):1
                                (5,7):2
                                           (5,8):1
                                                      (5,9):1
```

82. Inequality 82 with incidence 29 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2): -2
           (1,3): -2
                      (1,4): -2
                                 (1,5):1
                                           (1,6):1
                                                      (1,7):1
(1,8):0
                      (2,6):2
           (1,9):3
                                 (2,7):1
                                           (2,8): -2
                                                      (2,9):1
(3,6):3
                                                      (4,7):2
           (3,7):1
                      (3,8):2
                                 (3,9):2
                                           (4,6): -3
(4,8):1
           (4,9):2
                      (5,6):1
                                 (5,7):1
                                           (5,8):1
                                                      (5,9): -2
```

83. Inequality 83 with incidence 29 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2): -2
           (1,3):-4
                      (1,4):0
                                (1,5): -1
                                           (1,6):3
                                                      (1,7):1
                                                      (2,9):2
(1,8):1
           (1,9):2
                      (2,6):2
                                (2,7):1
                                           (2,8): -3
(3,6):2
                                (3,9):3
                                           (4,6): -1
                                                      (4,7): -2
           (3,7):3
                      (3,8):4
                                           (5,8):1
(4,8):1
           (4,9):2
                      (5,6):2
                                (5,7):-1
                                                      (5,9):-1
```

84. Inequality 84 with incidence 29 and stabilizer of size 2. Orbit size is 147456 nature: unknown

```
(1,2): -3
           (1,3): -2
                      (1,4):1
                                 (1,5): -2
                                            (1,6):3
                                                       (1,7):2
(1,8):1
                      (2,6):1
                                 (2,7):3
                                            (2,8):3
                                                       (2,9):2
           (1,9):2
           (3,7):-4
(3,6):3
                                                       (4,7):1
                      (3,8):-1
                                 (3,9):4
                                            (4,6): -3
(4,8):-1
           (4,9):2
                      (5,6):2
                                            (5,8): -2
                                 (5,7):4
                                                       (5,9):2
```

85. Inequality 85 with incidence 29 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2):-1
                                           (1,6):0
           (1,3):-1
                      (1,4):2
                                 (1,5):1
                                                      (1,7):-1
(1,8):2
                                (2,7):2
                                                      (2,9): -2
           (1,9):0
                      (2,6):1
                                           (2,8):2
(3,6):2
                                (3,9):2
                                           (4,6):2
                                                      (4,7):1
           (3,7):0
                      (3,8):1
(4,8): -2
                                (5,7):2
           (4,9):-1
                      (5,6): -1
                                           (5,8):-1
                                                      (5,9):1
```

86. Inequality 86 with incidence 29 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2): -3
           (1,3): -2
                      (1,4):0
                                (1,5):1
                                           (1,6):2
                                                      (1,7):0
                                           (2,8):2
(1,8):1
           (1,9):3
                      (2,6):2
                                (2,7):2
                                                      (2,9):1
(3,6):2
          (3,7):-2
                                (3,9):3
                                           (4,6):0
                                                      (4,7):3
                     (3,8):-1
           (4,9):2
                                (5,7):1
(4,8):-1
                      (5,6):2
                                           (5,8):-1
                                                     (5,9):-3
```

87. Inequality 87 with incidence 29 and stabilizer of size 2. Orbit size is 147456 nature: unknown

```
(1,2):-2
           (1,3):-1
                      (1,4):-1
                                 (1,5):1
                                           (1,6):1
                                                      (1,7):1
(1,8):1
           (1,9):2
                      (2,6):2
                                (2,7):2
                                           (2,8):2
                                                      (2,9):0
(3,6):3
                                (3,9):2
                                                      (4,7):3
           (3,7):1
                      (3,8): -1
                                           (4,6): -3
           (4,9):2
(4,8):-1
                      (5,6):1
                                (5,7):1
                                           (5,8):-1
                                                      (5,9): -2
```

88. Inequality 88 with incidence 29 and stabilizer of size 2. Orbit size is 147456 nature: unknown

```
(1,2): -2
           (1,3): -2
                      (1,4):0
                                (1,5): -1
                                           (1,6):2
                                                      (1,7):1
                                           (2,8):2
                                                      (2,9): -2
(1,8):2
           (1,9):0
                      (2,6):1
                                (2,7):1
(3,6):1
                                                      (4,7):-1
                                (3,9):2
           (3,7):2
                      (3,8):1
                                           (4,6): -2
(4,8):2
           (4,9):1
                      (5,6):2
                                (5,7):-1
                                           (5,8):1
                                                      (5,9):1
```

89. Inequality 89 with incidence 29 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2):0
           (1,3):-1
                      (1,4):0
                                (1,5):-1
                                            (1,6):2
                                                       (1,7):1
(1,8):-1
           (1,9):0
                                (2,7):-1
                                                       (2,9):0
                      (2,6):3
                                            (2,8):4
(3,6):3
                                                       (4,7):2
           (3,7):-1
                     (3,8): -2
                                 (3,9):3
                                           (4,6): -2
(4,8):2
           (4,9):2
                      (5,6):2
                                 (5,7):1
                                           (5,8):-1
                                                      (5,9):-1
```

90. Inequality 90 with incidence 29 and stabilizer of size 2. Orbit size is 147456 nature: unknown

```
(1,2):-1
                                           (1,6):2
           (1,3): -2
                      (1,4):0
                                 (1,5):1
                                                     (1,7):-1
(1,8):0
           (1,9):1
                      (2,6):2
                                (2,7):-1
                                           (2,8):3
                                                      (2,9):1
(3,6):3
                                           (4,6):2
                                                      (4,7):3
          (3,7):-2
                     (3,8): -2
                                 (3,9):3
(4,8):0
           (4,9):1
                     (5,6): -3
                                 (5,7):1
                                           (5,8):1
                                                      (5,9):2
```

91. Inequality 91 with incidence 29 and stabilizer of size 2. Orbit size is 147456 nature: unknown

```
(1,2): -2
           (1,3): -1
                      (1,4):1
                                  (1,5):1
                                            (1,6): -2
                                                        (1,7):1
(1,8):1
           (1,9):1
                      (2,6): -1
                                  (2,7):2
                                             (2,8):2
                                                        (2,9):1
(3,6): -1
           (3,7):1
                                  (3,9):2
                                             (4,6):2
                                                        (4,7):3
                      (3,8):-1
(4,8):-1
           (4,9):-1
                      (5,6):2
                                                        (5,9):1
                                 (5,7):-1
                                             (5,8):1
```

92. Inequality 92 with incidence 29 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2):1
          (1,3):3
                     (1,4): -1
                                (1,5): -1
                                           (1,6): -2
                                                       (1,7):2
(1,8):0
          (1,9):2
                     (2,6):2
                                (2,7):0
                                           (2,8):-1
                                                       (2,9):2
(3,6):2
                                                      (4,7): -2
          (3,7):-2
                     (3,8):1
                                (3,9): -2
                                           (4,6): -1
          (4,9):3
(4,8):1
                     (5,6):1
                                (5,7):2
                                           (5,8):1
                                                       (5,9):1
```

93. Inequality 93 with incidence 29 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2): -2
           (1,3):-1
                      (1,4):0
                                (1,5): -1
                                           (1,6):3
                                                      (1,7):1
           (1,9):-1
(1,8):1
                      (2,6):3
                                (2,7):-1
                                           (2,8):3
                                                      (2,9): -3
(3,6):4
                                                      (4,7):2
           (3,7):-1
                      (3,8):1
                                (3,9):5
                                           (4,6): -2
(4,8):2
           (4,9):2
                      (5,6):2
                                (5,7):1
                                           (5,8):-1
                                                      (5,9):-1
```

94. Inequality 94 with incidence 29 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2):1
          (1,3): -6
                     (1,4):-2
                                (1,5):1
                                           (1,6):2
                                                      (1,7):5
(1,8):3
          (1,9):2
                     (2,6):1
                                (2,7):-3
                                           (2,8):3
                                                     (2,9):-2
(3,6):3
                                                      (4,7):3
          (3,7):3
                                (3,9):3
                     (3,8):3
                                          (4,6): -2
(4,8):2
          (4,9):-1
                     (5,6): -2
                                (5,7):-2
                                                      (5,9):2
                                           (5,8):1
```

95. Inequality 95 with incidence 28 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2): -1
           (1,3):-1
                      (1,4):0
                                (1,5):0
                                          (1,6):1
                                                      (1,7):1
                                                     (2,9): -2
(1,8):1
           (1,9):1
                      (2,6):1
                                (2,7):1
                                          (2,8):3
(3,6):3
                                (3,9):2
                                          (4,6): -1
                                                      (4,7):1
           (3,7):-1
                      (3,8):1
                                (5,7):2
(4,8):1
           (4,9):1
                      (5,6):2
                                          (5,8): -2
                                                     (5,9): -2
```

96. Inequality 96 with incidence 28 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2):-1
           (1,3):-1
                      (1,4):0
                                 (1,5):0
                                            (1,6): -1
                                                       (1,7):1
(1,8):1
           (1,9):1
                      (2,6): -1
                                 (2,7):1
                                            (2,8):3
                                                       (2,9): -2
(3,6): -2
           (3,7):0
                                 (3,9):2
                                            (4,6):2
                                                       (4,7):2
                      (3,8):1
(4,8):1
                      (5,6):2
                                 (5,7):-2
                                            (5,8):2
                                                       (5,9):2
           (4,9):1
```

97. Inequality 97 with incidence 28 and stabilizer of size 2. Orbit size is 147456 nature: unknown

```
(1,2):-1
           (1,3):-1
                      (1,4):1
                                 (1,5):1
                                            (1,6):1
                                                      (1,7):-1
(1,8):1
           (1,9):1
                      (2,6):2
                                 (2,7):2
                                           (2,8):2
                                                      (2,9):-1
(3,6):3
                                 (3,9):2
           (3,7):-1
                      (3,8):-1
                                           (4,6): -1
                                                      (4,7):3
                                                      (5,9): -2
           (4,9):2
(4,8): -1
                      (5,6):1
                                 (5,7):1
                                           (5,8):-1
```

98. Inequality 98 with incidence 28 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2): -1
          (1,3): -3
                     (1,4):1
                               (1,5):0
                                          (1,6):3
                                                     (1,7):2
                                (2,7):2
                                                     (2,9):-1
(1,8):0
           (1,9):2
                     (2,6):1
                                         (2,8):-1
(3,6):3
                               (3,9):3
                                         (4,6): -4
                                                     (4,7):3
           (3,7):2
                     (3,8):1
                                                     (5,9):-3
(4,8):1
          (4,9):-1
                     (5,6):3
                                (5,7):1
                                          (5,8):1
```

99. Inequality 99 with incidence 28 and stabilizer of size 2. Orbit size is 147456 nature: unknown

```
(1,2):-1
           (1,3):0
                      (1,4):0
                                (1,5):1
                                           (1,6):0
                                                     (1,7):0
(1,8):1
                      (2,6):2
                                (2,7):2
                                           (2,8):2
                                                     (2,9):-1
           (1,9):1
           (3,7):-2
                                                     (4,7):3
(3,6):3
                                (3,9):2
                     (3,8):-1
                                           (4,6):0
(4,8):-1
           (4,9):2
                      (5,6):1
                                          (5,8):-1
                                                     (5,9):-2
                                (5,7):1
```

100. Inequality 100 with incidence 28 and stabilizer of size 2. Orbit size is 147456 nature: unknown

```
(1,2):-1
           (1,3):-1
                     (1,4):-1
                                (1,5):1
                                           (1,6):1
                                                      (1,7):1
                                           (2,8):2
                                                     (2,9): -2
(1,8):1
           (1,9):1
                      (2,6):2
                                (2,7):1
(3,6):2
                                (3,9):2
                                          (4,6): -2
                                                      (4,7):3
           (3,7):1
                      (3,8):0
                                (5,7):2
                                           (5,8):-2
(4,8):1
           (4,9):1
                      (5,6):1
                                                     (5,9): -2
```

101. Inequality 101 with incidence 28 and stabilizer of size 2. Orbit size is 147456 nature: unknown

```
(1,2):0
          (1,3):-2
                     (1,4):-1
                                (1,5):1
                                          (1,6):1
                                                     (1,7):1
                                                     (2,9):-1
(1,8):0
          (1,9):2
                     (2,6):2
                                (2,7):1
                                          (2,8):2
(3,6):2
          (3,7):1
                                (3,9):2
                                          (4,6): -2
                                                     (4,7):3
                     (3,8):-1
                                                     (5,9):-2
(4,8):1
          (4,9):1
                               (5,7):2
                                          (5,8): -2
                     (5,6):1
```

102. Inequality 102 with incidence 28 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2):1
           (1,3): -2
                      (1,4):-1
                                 (1,5):0
                                            (1,6):1
                                                       (1,7):2
(1,8):-1
           (1,9):2
                      (2,6):2
                                 (2,7):-1
                                            (2,8):3
                                                       (2,9):-1
(3,6):2
           (3,7):1
                      (3,8):-1
                                 (3,9):2
                                            (4,6): -2
                                                       (4,7):3
           (4,9):2
(4,8):2
                      (5,6):1
                                 (5,7):3
                                            (5,8): -1
                                                       (5,9): -3
```

103. Inequality 103 with incidence 28 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2):0
           (1,3): -2
                      (1,4):1
                                (1,5): -1
                                           (1,6):1
                                                      (1,7):1
(1,8):0
           (1,9):2
                      (2,6):2
                                 (2,7):0
                                           (2,8):3
                                                     (2,9):-1
(3,6):2
                                 (3,9):2
                                                      (4,7):3
           (3,7):1
                     (3,8):-1
                                           (4,6):1
(4,8):-2
                                           (5,8):2
           (4,9):-3
                     (5,6): -2
                                 (5,7):3
                                                      (5,9):2
```

104. Inequality 104 with incidence 28 and stabilizer of size 2. Orbit size is 147456 nature: unknown

```
(1,2): -2
           (1,3):-1
                      (1,4):1
                                 (1,5):1
                                           (1,6):2
                                                      (1,7):1
(1,8):-1
                      (2,6):1
                                 (2,7):2
                                                      (2,9):1
           (1,9):1
                                           (2,8): -2
                                                      (4,7):2
(3,6):2
           (3,7):-1
                      (3,8):3
                                 (3,9):3
                                           (4,6): -1
(4,8):3
          (4,9):-1
                      (5,6): -2
                                                      (5,9):2
                                 (5,7):0
                                           (5,8):-1
```

105. Inequality 105 with incidence 28 and stabilizer of size 2. Orbit size is 147456 nature: unknown

```
(1,2):0
          (1,3):0
                     (1,4):-1
                                (1,5):1
                                           (1,6):1
                                                      (1,7):1
(1,8):0
                                                     (2,9):-1
          (1,9):0
                     (2,6):2
                                (2,7):-1
                                           (2,8):2
(3,6):2
                                          (4,6): -1
                                                      (4,7):2
          (3,7):-1
                     (3,8):-1
                                (3,9):4
          (4,9):2
(4,8):2
                     (5,6): -2
                                (5,7):-1
                                           (5,8):1
                                                      (5,9):1
```

106. Inequality 106 with incidence 28 and stabilizer of size 2. Orbit size is 147456 nature: unknown

```
(1,2):0
          (1,3): -2
                     (1,4):1
                                (1,5):1
                                           (1,6):1
                                                      (1,7):0
(1,8):1
                                                      (2,9):2
          (1,9): -2
                     (2,6):2
                                (2,7):1
                                           (2,8):-1
                                                      (4,7):-1
(3,6):1
          (3,7):2
                                (3,9): -2
                                           (4,6): -1
                     (3,8):3
(4,8):2
          (4,9):3
                                (5,7):2
                                           (5,8):-1
                                                      (5,9):1
                     (5,6):-1
```

107. Inequality 107 with incidence 28 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2):0
           (1,3): -1
                      (1,4):-1
                                 (1,5):0
                                            (1,6): -1
                                                       (1,7):1
(1,8):0
           (1,9):2
                      (2,6): -2
                                 (2,7):1
                                            (2,8):2
                                                       (2,9):-1
(3,6): -1
                                            (4,6):2
           (3,7):1
                      (3,8):-1
                                 (3,9):2
                                                       (4,7):3
(4,8):1
           (4,9):1
                      (5,6):2
                                 (5,7): -2
                                            (5,8):2
                                                       (5,9):2
```

108. Inequality 108 with incidence 28 and stabilizer of size 2. Orbit size is 147456 nature: unknown

```
(1,2):-1
           (1,3):-4
                      (1,4):-1
                                (1,5):0
                                           (1,6):2
                                                      (1,7):1
(1,8):1
           (1,9):2
                      (2,6):2
                                (2,7):1
                                           (2,8): -3
                                                      (2,9):1
(3,6):3
                                (3,9):3
                                                      (4,7): -3
           (3,7):4
                      (3,8):4
                                           (4,6):1
(4,8):1
           (4,9):2
                      (5,6): -2
                                 (5,7):1
                                           (5,8): -1
                                                      (5,9):2
```

109. Inequality 109 with incidence 28 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2):0
           (1,3): -2
                      (1,4):1
                                 (1,5):1
                                            (1,6):1
                                                        (1,7):0
(1,8):-1
           (1,9):0
                                            (2,8):2
                                                       (2,9):-1
                      (2,6):1
                                 (2,7):2
(3,6):2
           (3,7):1
                      (3,8): -2
                                 (3,9):3
                                            (4,6): -1
                                                       (4,7):2
                      (5,6): -1
                                 (5,7):-1
(4,8): -1
                                            (5,8):2
           (4,9):1
                                                       (5,9):3
```

110. Inequality 110 with incidence 28 and stabilizer of size 2. Orbit size is 147456 nature: unknown

```
(1,4):1
(1,2): -1
          (1,3): -3
                                 (1,5):1
                                            (1,6):3
                                                       (1,7):1
(1,8):1
           (1,9):1
                      (2,6):1
                                 (2,7):0
                                            (2,8):3
                                                      (2,9):-3
(3,6):3
                      (3,8):2
                                 (3,9):3
           (3,7):1
                                           (4,6): -3
                                                       (4,7):3
                     (5,6): -2
                                            (5,8):2
(4,8):2
           (4,9):1
                                (5,7): -3
                                                       (5,9):2
```

111. Inequality 111 with incidence 28 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2):-2
           (1,3):-1
                      (1,4):1
                                (1,5):1
                                           (1,6):1
                                                      (1,7):0
                                           (2,8):2
(1,8):1
           (1,9):1
                      (2,6):2
                                (2,7):3
                                                     (2,9):-1
(3,6):2
           (3,7):0
                                (3,9):2
                                          (4,6): -2
                                                     (4,7):4
                     (3,8):-1
(4,8):-1
           (4,9):2
                      (5,6):1
                                (5,7):1
                                          (5,8):-1
                                                     (5,9):-2
```

112. Inequality 112 with incidence 28 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2): -2
           (1,3): -2
                      (1,4):1
                                 (1,5):0
                                           (1,6):3
                                                      (1,7):2
(1,8):1
           (1,9):1
                      (2,6):2
                                 (2,7):3
                                           (2,8):2
                                                      (2,9):-1
(3,6):3
                                (3,9):2
           (3,7):2
                      (3,8):-1
                                           (4,6): -4
                                                      (4,7):4
                                                      (5,9): -2
(4,8): -1
           (4,9):0
                      (5,6):2
                                 (5,7):1
                                           (5,8):-1
```

113. Inequality 113 with incidence 28 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2): -2
           (1,3): -2
                      (1,4):0
                                 (1,5):2
                                            (1,6): -2
                                                       (1,7):3
(1,8):1
                                 (2,7):2
                                            (2,8):3
                                                       (2,9): -2
           (1,9):0
                      (2,6): -1
(3,6): -2
                                 (3,9):2
                                            (4,6):3
                                                       (4,7):4
           (3,7):1
                      (3,8):1
(4,8):1
                                            (5,8):2
           (4,9):2
                      (5,6):2
                                 (5,7):-4
                                                       (5,9):2
```

114. Inequality 114 with incidence 28 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2): -3
           (1,3): -2
                     (1,4):-1
                                 (1,5):1
                                           (1,6):3
                                                     (1,7):1
(1,8):1
                                 (2,7):2
                                           (2,8):2
                                                     (2,9):-3
           (1,9):0
                      (2,6):2
(3,6):2
                                                     (4,7): -2
           (3,7):2
                      (3,8):1
                                 (3,9):3
                                           (4,6):1
(4,8):1
                     (5,6): -2
           (4,9):1
                                 (5,7):1
                                           (5,8):1
                                                     (5,9):1
```

115. Inequality 115 with incidence 28 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2):-1
           (1,3): -2
                      (1,4):-2
                                 (1,5): -1
                                            (1,6):1
                                                      (1,7):1
                                                      (2,9): -2
(1,8):2
           (1,9):2
                      (2,6): -1
                                 (2,7):1
                                            (2,8):3
(3,6):-4
                      (3,8):2
                                            (4,6):3
                                                      (4,7):2
           (3,7):0
                                 (3,9):4
           (4,9):2
                                            (5,8):2
(4,8):1
                      (5,6):3
                                 (5,7): -2
                                                      (5,9):2
```

116. Inequality 116 with incidence 28 and stabilizer of size 2. Orbit size is 147456 nature: unknown

```
(1,2): -2
           (1,3): -2
                      (1,4):0
                                (1,5):0
                                           (1,6):2
                                                      (1,7):0
(1,8):0
                                           (2,8):2
                                                      (2,9):2
           (1,9):2
                      (2,6):1
                                (2,7):1
(3,6):1
           (3,7):1
                                (3,9):2
                                                     (4,7):-1
                     (3,8): -2
                                          (4,6):-1
(4,8):1
           (4,9):1
                      (5,6):1
                                (5,7):1
                                           (5,8):1
                                                     (5,9):-1
```

117. Inequality 117 with incidence 28 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2): -3
           (1,3): -2
                      (1,4): -1
                                (1,5):1
                                           (1,6):2
                                                      (1,7):1
(1,8):1
           (1,9):3
                      (2,6):2
                                (2,7):2
                                           (2,8):2
                                                      (2,9):1
(3,6):3
                                                      (4,7):3
          (3,7):-3
                     (3,8):-1
                                (3,9):3
                                           (4,6):1
                                                      (5,9):-3
           (4,9):2
(4,8):-1
                      (5,6):2
                                (5,7):1
                                           (5,8):-1
```

118. Inequality 118 with incidence 28 and stabilizer of size 2. Orbit size is 147456 nature: unknown

```
(1,2): -2
           (1,3): -2
                      (1,4):-1
                                 (1,5):1
                                           (1,6):1
                                                      (1,7):2
           (1,9):2
(1,8):1
                      (2,6):2
                                 (2,7):3
                                           (2,8):2
                                                      (2,9):-1
                                                      (4,7):4
(3,6):4
           (3,7):2
                                (3,9):3
                      (3,8): -1
                                           (4,6):-4
(4,8):-1
           (4,9):2
                      (5,6):1
                                 (5,7):1
                                           (5,8):-1
                                                      (5,9): -2
```

119. Inequality 119 with incidence 28 and stabilizer of size 2. Orbit size is 147456 nature: unknown

```
(1,7):2
(1,2): -2
           (1,3): -4
                      (1,4):-1
                                 (1,5):1
                                           (1,6):4
(1,8):-1
                                 (2,7):1
                                           (2,8):2
                                                     (2,9):-1
           (1,9):1
                      (2,6):2
(3,6):2
                                           (4,6):2
                                                     (4,7): -2
           (3,7):2
                      (3,8): -2
                                 (3,9):2
(4,8):1
           (4,9):2
                      (5,6): -2
                                           (5,8):2
                                 (5,7):1
                                                      (5,9):2
```

120. Inequality 120 with incidence 28 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2): -2
          (1,3):-1
                     (1,4):-3
                                (1,5):0
                                           (1,6):2
                                                     (1,7):1
                                                     (2,9):2
(1,8):3
          (1,9):2
                     (2,6):2
                                (2,7):-2
                                           (2,8):4
(3,6):3
                                (3,9):4
                                                     (4,7):3
          (3,7):-1
                     (3,8):-5
                                           (4,6):1
(4,8):3
          (4,9):2
                     (5,6): -2
                                (5,7):-1
                                           (5,8):1
                                                     (5,9):2
```

121. Inequality 121 with incidence 28 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2):-1
          (1,3): -2
                      (1,4):1
                                (1,5):0
                                          (1,6):1
                                                     (1,7):0
(1,8):0
           (1,9):1
                      (2,6):2
                                (2,7):1
                                          (2,8):3
                                                     (2,9):1
                                (3,9):3
(3,6):2
           (3,7):0
                     (3,8): -3
                                                     (4,7):3
                                          (4,6):1
                                          (5,8):2
(4,8): -2
          (4,9):-1
                     (5,6): -2
                                (5,7):2
                                                     (5,9):2
```

122. Inequality 122 with incidence 28 and stabilizer of size 2. Orbit size is 147456 nature: unknown

```
(1,2):1
          (1,3): -3
                     (1,4):1
                                (1,5):1
                                           (1,6):1
                                                      (1,7):1
(1,8):1
          (1,9):-3
                     (2,6):1
                                (2,7):2
                                           (2,8): -2
                                                      (2,9):2
(3,6):2
                                                      (4,7): -2
          (3,7):2
                     (3,8):2
                                (3,9):-1
                                           (4,6):1
                                                      (5,9):2
(4,8):0
          (4,9):2
                     (5,6): -1
                                (5,7):1
                                           (5,8):1
```

123. Inequality 123 with incidence 28 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2):0
          (1,3): -2
                     (1,4):-1
                                (1,5):0
                                           (1,6):1
                                                      (1,7):2
(1,8):0
          (1,9):2
                                                      (2,9): -2
                     (2,6):2
                                (2,7):-1
                                           (2,8):1
(3,6):2
          (3,7):2
                     (3,8):-1
                                                      (4,7):2
                                (3,9):3
                                           (4,6): -1
(4,8):1
          (4,9):1
                     (5,6):0
                                (5,7): -3
                                           (5,8):1
                                                      (5,9):4
```

124. Inequality 124 with incidence 28 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2):-1
          (1,3): -2
                      (1,4):1
                                (1,5):0
                                           (1,6):1
                                                     (1,7):0
(1,8):0
                                (2,7):2
                                                     (2,9):1
           (1,9):1
                      (2,6):1
                                          (2,8): -3
(3,6):3
                                (3,9):2
                                                     (4,7):2
           (3,7):2
                      (3,8):3
                                           (4,6):1
(4,8):1
                     (5,6): -4
          (4,9):-1
                                (5,7):2
                                           (5,8):1
                                                     (5,9):1
```

125. Inequality 125 with incidence 28 and stabilizer of size 2. Orbit size is 147456 nature: unknown

```
(1,3): -2
(1,2): -2
                      (1,4):1
                                 (1,5):1
                                            (1,6):2
                                                       (1,7):1
(1,8):1
           (1,9):2
                      (2,6):2
                                 (2,7):2
                                            (2,8):2
                                                       (2,9):0
(3,6):3
           (3,7):2
                      (3,8):-1
                                 (3,9):2
                                            (4,6): -2
                                                       (4,7):4
(4,8): -1
           (4,9): -2
                      (5,6):1
                                 (5,7):-1
                                            (5,8):1
                                                       (5,9): -2
```

126. Inequality 126 with incidence 28 and stabilizer of size 2. Orbit size is 147456 nature: unknown

```
(1,2):-1
          (1,3): -1
                      (1,4):0
                                 (1,5):1
                                           (1,6):1
                                                     (1,7):0
(1,8):0
           (1,9):0
                      (2,6):2
                                (2,7):-1
                                           (2,8):1
                                                     (2,9):-1
(3,6):2
          (3,7):-1
                                 (3,9):1
                                           (4,6):2
                                                     (4,7):4
                     (3,8):-1
(4,8):1
           (4,9):1
                      (5,6):1
                                (5,7):-2
                                           (5,8):1
                                                     (5,9):1
```

127. Inequality 127 with incidence 28 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2): -3
           (1,3): -2
                      (1,4):1
                                 (1,5):1
                                           (1,6):2
                                                     (1,7):0
(1,8):2
           (1,9):-1
                      (2,6):0
                                 (2,7):3
                                           (2,8):3
                                                     (2,9):-3
(3,6):2
           (3,7):0
                      (3,8):2
                                 (3,9):2
                                           (4,6):2
                                                     (4,7):4
                                                     (5,9):1
                     (5,6): -2
(4,8): -2
           (4,9):1
                                 (5,7):1
                                           (5,8):1
```

128. Inequality 128 with incidence 28 and stabilizer of size 3. Orbit size is 98304 nature: unknown

```
(1,2):0
          (1,3): -2
                     (1,4):0
                                (1,5):0
                                          (1,6):1
                                                    (1,7):1
(1,8):1
                                          (2,8):2
          (1,9):1
                     (2,6): -1
                                (2,7):0
                                                    (2,9):-1
(3,6):2
          (3,7):2
                                (3,9):2
                                          (4,6):0
                                                    (4,7):-2
                     (3,8):2
(4,8):1
          (4,9):1
                     (5,6): -2
                                (5,7):1
                                          (5,8):0
                                                    (5,9):1
```

129. Inequality 129 with incidence 27 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,7):2
(1,2): -2
          (1,3): -2
                     (1,4):1
                                (1,5):0
                                          (1,6):3
(1,8): -1
                     (2,6):3
                                (2,7):2
                                                     (2,9):-1
           (1,9):1
                                          (2,8):-2
(3,6):1
                                                     (4,7):3
           (3,7):2
                     (3,8):1
                               (3,9):2
                                          (4,6):-4
(4,8):1
          (4,9):-1
                     (5,6):3
                                          (5,8):3
                                                     (5,9):-1
                               (5,7):1
```

130. Inequality 130 with incidence 27 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,4):0
(1,2): -1
           (1,3):-1
                                 (1,5): -1
                                            (1,6):0
                                                      (1,7):1
                                                      (2,9):1
(1,8):1
           (1,9):1
                      (2,6):2
                                 (2,7):1
                                            (2,8):3
                                 (3,9):3
                                                      (4,7):3
(3,6):1
           (3,7):1
                      (3,8): -2
                                            (4,6):1
                                            (5,8):2
(4,8): -2
           (4,9): -2
                      (5,6): -2
                                 (5,7):2
                                                      (5,9):1
```

131. Inequality 131 with incidence 27 and stabilizer of size 2. Orbit size is 147456 nature: unknown

```
(1,2):-1
           (1,3): -1
                     (1,4):-1
                                (1,5):0
                                           (1,6):1
                                                      (1,7):0
(1,8):1
           (1,9):1
                      (2,6):2
                                (2,7):1
                                           (2,8):3
                                                      (2,9):1
                                                      (4,7):-2
(3,6):2
           (3,7):1
                                (3,9):3
                     (3,8): -3
                                           (4,6):-1
(4,8):2
           (4,9):2
                     (5,6): -2
                                (5,7):2
                                           (5,8):1
                                                      (5,9):1
```

132. Inequality 132 with incidence 27 and stabilizer of size 2. Orbit size is 147456 nature: unknown

```
(1,2): -2
           (1,3): -2
                      (1,4):1
                                  (1,5):1
                                             (1,6):2
                                                        (1,7):1
(1,8):1
           (1,9):2
                      (2,6):2
                                 (2,7):2
                                             (2,8):3
                                                        (2,9):1
(3,6):4
           (3,7):2
                      (3,8): -2
                                 (3,9):2
                                            (4,6): -2
                                                        (4,7):4
                      (5,6):2
(4,8): -1
           (4,9): -2
                                 (5,7):-1
                                             (5,8):1
                                                       (5,9): -3
```

133. Inequality 133 with incidence 27 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2):-1
           (1,3):-1
                      (1,4):-1
                                (1,5):1
                                           (1,6):0
                                                      (1,7):1
                                (2,7):2
(1,8):1
           (1,9):2
                      (2,6):2
                                           (2,8):2
                                                      (2,9):-1
                                                      (4,7):3
(3,6):4
                                (3,9):3
           (3,7):1
                      (3,8): -1
                                           (4,6): -3
(4,8):-1
           (4,9):2
                      (5,6):1
                                 (5,7):1
                                           (5,8):-1
                                                      (5,9): -2
```

134. Inequality 134 with incidence 27 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2): -2
           (1,3): -3
                      (1,4):-1
                                 (1,5):2
                                            (1,6): -2
                                                        (1,7):4
(1,8):1
           (1,9):1
                                            (2,8):3
                                                       (2,9):-2
                      (2,6): -1
                                 (2,7):2
                                                       (4,7):4
(3,6): -3
           (3,7):2
                      (3,8):1
                                 (3,9):3
                                            (4,6):4
(4,8):1
           (4,9):2
                      (5,6):2
                                 (5,7):-4
                                            (5,8):2
                                                       (5,9):2
```

135. Inequality 135 with incidence 27 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2):0
           (1,3):-1
                      (1,4):0
                                (1,5):2
                                           (1,6): -2
                                                     (1,7):-1
(1,8):1
           (1,9):1
                      (2,6):1
                                (2,7):3
                                           (2,8):3
                                                      (2,9):1
                                                     (4,7):-3
(3,6):-1
                                (3,9):3
                                           (4,6):3
           (3,7):1
                     (3,8): -2
           (4,9):2
                                (5,7):2
(4,8):2
                      (5,6):3
                                           (5,8): -2
                                                     (5,9):-1
```

136. Inequality 136 with incidence 27 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2):0
          (1,3): -2
                     (1,4):-1
                                (1,5): -1
                                            (1,6):1
                                                       (1,7):2
(1,8):0
          (1,9):1
                     (2,6): -1
                                (2,7): -2
                                            (2,8):2
                                                       (2,9):1
                     (3,8):-1
(3,6):2
          (3,7):1
                                (3,9):2
                                           (4,6): -2
                                                       (4,7):3
                                            (5,8):2
(4,8):1
          (4,9):1
                     (5,6):2
                                (5,7):2
                                                      (5,9):-1
```

137. Inequality 137 with incidence 27 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2):0
           (1,3):-1
                      (1,4):-1
                                 (1,5): -1
                                            (1,6): -1
                                                        (1,7):2
(1,8):1
           (1,9):1
                      (2,6):2
                                 (2,7): -3
                                            (2,8):3
                                                        (2,9):2
(3,6): -2
           (3,7):1
                      (3,8):-1
                                 (3,9):3
                                            (4,6):3
                                                       (4,7):4
                      (5,6): -2
                                 (5,7):2
(4,8):1
           (4,9):1
                                            (5,8):2
                                                       (5,9):-1
```

138. Inequality 138 with incidence 27 and stabilizer of size 2. Orbit size is 147456 nature: unknown

```
(1,2): -1
           (1,3): -2
                      (1,4):-1
                                  (1,5):1
                                            (1,6): -1
                                                        (1,7):2
                      (2,6): -1
                                                        (2,9): -2
(1,8):1
           (1,9):1
                                 (2,7):1
                                             (2,8):3
(3,6): -3
                                 (3,9):3
                                                        (4,7):3
           (3,7):1
                      (3,8):1
                                             (4,6):3
(4,8):1
           (4,9):2
                      (5,6):2
                                 (5,7): -3
                                             (5,8):2
                                                        (5,9):2
```

139. Inequality 139 with incidence 27 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2): -2
           (1,3): -2
                      (1,4):0
                                 (1,5):1
                                            (1,6):3
                                                       (1,7):1
(1,8):1
           (1,9):0
                      (2,6):2
                                                       (2,9):-2
                                 (2,7):-1
                                            (2,8):3
(3,6):2
           (3,7):1
                      (3,8):1
                                 (3,9):2
                                            (4,6): -1
                                                       (4,7):2
(4,8):1
           (4,9): -2
                      (5,6): -2
                                            (5,8):2
                                 (5,7):1
                                                       (5,9):2
```

140. Inequality 140 with incidence 27 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2):2
          (1,3):1
                    (1,4):-1
                               (1,5): -1
                                          (1,6): -2
                                                      (1,7):2
(1,8):2
                                                      (2,9):1
          (1,9):1
                     (2,6):3
                               (2,7):-2
                                          (2,8): -2
(3,6):3
                               (3,9): -2
                                                     (4,7):-3
          (3,7):1
                     (3,8):3
                                          (4,6): -1
(4,8):4
          (4,9):1
                     (5,6):1
                                (5,7):2
                                           (5,8):1
                                                      (5,9):1
```

141. Inequality 141 with incidence 27 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2): -2
           (1,3): -2
                      (1,4):0
                                 (1,5):1
                                           (1,6):2
                                                     (1,7):0
                                           (2,8):2
                                                     (2,9): -2
(1,8):1
           (1,9):0
                     (2,6): -1
                                 (2,7):3
(3,6):3
                      (3,8):1
                                 (3,9):2
                                                     (4,7):6
          (3,7):-2
                                           (4,6):3
           (4,9):2
                                           (5,8):1
                                                     (5,9):2
(4,8):-1
                     (5,6): -3
                                 (5,7):1
```

142. Inequality 142 with incidence 27 and stabilizer of size 2. Orbit size is 147456 nature: unknown

```
(1,2):0
           (1,3): -2
                     (1,4):0
                                (1,5):1
                                           (1,6): -2
                                                      (1,7):1
(1,8):1
           (1,9):1
                     (2,6):3
                                (2,7):-1
                                           (2,8):3
                                                      (2,9):1
(3,6): -3
                                                      (4,7):3
           (3,7):1
                     (3,8):1
                                (3,9):3
                                           (4,6):3
                     (5,6):3
                                                      (5,9):2
(4,8): -1
           (4,9):1
                                (5,7):-2
                                           (5,8): -2
```

143. Inequality 143 with incidence 27 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,3): -4
(1,2): -2
                     (1,4):-1
                                 (1,5):1
                                           (1,6):2
                                                      (1,7):2
                                 (2,7):2
                                                      (2,9):2
(1,8):1
           (1,9):1
                      (2,6):2
                                           (2,8):-4
(3,6):3
                                           (4,6): -1
                                                      (4,7):3
           (3,7):2
                      (3,8):5
                                 (3,9):4
(4,8):1
           (4,9): -2
                     (5,6): -2
                                           (5,8):-1
                                                      (5,9):3
                                 (5,7):1
```

144. Inequality 144 with incidence 27 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2):0
          (1,3): -2
                     (1,4):1
                                (1,5):1
                                          (1,6): -2
                                                     (1,7):1
(1,8):0
          (1,9):1
                     (2,6):2
                                (2,7):2
                                          (2,8):3
                                                     (2,9):1
(3,6):0
                                          (4,6):2
                     (3,8): -2
                                                     (4,7): -2
          (3,7):2
                                (3,9):2
(4,8):0
                     (5,6):2
                                          (5,8):-1
                                                     (5,9):-1
          (4,9):1
                                (5,7):1
```

145. Inequality 145 with incidence 27 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2): -2
           (1,3): -3
                      (1,4):0
                                 (1,5):1
                                           (1,6):3
                                                     (1,7):-1
(1,8):2
                                           (2,8):2
                                                     (2,9): -2
           (1,9):0
                      (2,6):1
                                 (2,7):1
(3,6):2
                                           (4,6):2
                                                      (4,7):2
           (3,7):-1
                      (3,8):2
                                 (3,9):2
(4,8): -1
           (4,9):1
                      (5,6): -2
                                 (5,7):1
                                           (5,8):1
                                                      (5,9):1
```

146. Inequality 146 with incidence 27 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2):-1
           (1,3): -2
                      (1,4):-1
                                 (1,5):1
                                            (1,6):1
                                                       (1,7):1
(1,8):0
           (1,9):1
                      (2,6):1
                                 (2,7):-1
                                            (2,8):2
                                                       (2,9):1
(3,6):2
           (3,7):1
                                 (3,9):3
                                                       (4,7):2
                      (3,8): -2
                                            (4,6): -1
(4,8):1
           (4,9):1
                                 (5,7):-1
                                            (5,8):1
                                                       (5,9):2
                      (5,6):-1
```

147. Inequality 147 with incidence 27 and stabilizer of size 2. Orbit size is 147456 nature: unknown

```
(1,2): -1
          (1,3): -3
                      (1,4): -2
                                 (1,5): -2
                                            (1,6):2
                                                       (1,7):3
(1,8):1
           (1,9):2
                      (2,6):2
                                 (2,7): -3
                                            (2,8):5
                                                       (2,9):1
(3,6):3
           (3,7):0
                      (3,8):-3
                                 (3,9):3
                                            (4,6): -1
                                                       (4,7):3
           (4,9):2
                      (5,6):2
(4,8):2
                                 (5,7):3
                                            (5,8):1
                                                       (5,9): -2
```

148. Inequality 148 with incidence 27 and stabilizer of size 2. Orbit size is 147456 nature: unknown

```
(1,2): -1
           (1,3):-1
                      (1,4):1
                                (1,5):0
                                           (1,6):1
                                                     (1,7):0
(1,8):-1
           (1,9):1
                      (2,6):1
                                (2,7):3
                                           (2,8):-4
                                                     (2,9):1
                                          (4,6): -1
                                                     (4,7):3
(3,6):4
           (3,7):2
                      (3,8):3
                                (3,9):2
(4,8):2
           (4,9): -3
                     (5,6): -3
                                (5,7):2
                                           (5,8):2
                                                      (5,9):3
```

149. Inequality 149 with incidence 26 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
\overline{(1,2)}: -3
           (1,3): -2
                       (1,4):0
                                   (1,5):2
                                              (1,6):3
                                                          (1,7):1
(1,8):1
           (1,9):0
                       (2,6):3
                                   (2,7):0
                                              (2,8):4
                                                         (2,9):-4
(3,6):3
                       (3,8):2
           (3,7):-1
                                   (3,9):4
                                              (4,6): -1
                                                          (4,7):2
(4,8):2
                       (5,6): -2
                                  (5,7):-2
           (4,9):1
                                              (5,8):3
                                                          (5,9):1
```

150. Inequality 150 with incidence 26 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2):0
          (1,3):-1
                     (1,4):-1
                                (1,5):0
                                          (1,6):1
                                                    (1,7):-1
                                                    (2,9):-3
(1,8):1
          (1,9):1
                     (2,6): -1
                                (2,7):1
                                          (2,8):3
                                                    (4,7):-3
(3,6):4
                     (3,8):2
                                (3,9):2
                                         (4,6):1
          (3,7):3
(4,8):2
                                (5,7):2
          (4,9):1
                     (5,6): -3
                                          (5,8):2
                                                    (5,9):3
```

151. Inequality 151 with incidence 26 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2):-1
           (1,3): -2
                      (1,4):1
                                (1,5): -2
                                           (1,6):1
                                                      (1,7):2
(1,8):1
           (1,9):2
                      (2,6):2
                                 (2,7):1
                                           (2,8):3
                                                      (2,9):-1
(3,6):2
           (3,7):1
                                 (3,9):2
                                           (4,6):1
                                                      (4,7):4
                     (3,8):-1
(4,8):-3
           (4,9):-3
                     (5,6): -2
                                 (5,7):4
                                           (5,8):2
                                                      (5,9):2
```

152. Inequality 152 with incidence 26 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2): -1
          (1,3): -2
                     (1,4):-1
                                 (1,5):1
                                            (1,6):0
                                                       (1,7):0
(1,8):2
           (1,9):1
                      (2,6):2
                                (2,7):-1
                                            (2,8):3
                                                      (2,9):-3
(3,6):3
          (3,7):-1
                      (3,8):2
                                 (3,9):4
                                           (4,6): -2
                                                       (4,7):2
           (4,9):1
                      (5,6):3
                                 (5,7):2
(4,8):2
                                           (5,8):-1
                                                      (5,9):-1
```

153. Inequality 153 with incidence 26 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2):-1
           (1,3):-1
                      (1,4):1
                                 (1,5):1
                                            (1,6):1
                                                       (1,7):0
                                 (2,7):2
(1,8):-1
           (1,9):0
                      (2,6):1
                                            (2,8):-1
                                                       (2,9):3
                                 (3,9): -2
                                                      (4,7):-1
(3,6):2
                      (3,8):2
                                           (4,6): -1
           (3,7):1
(4,8):3
           (4,9):2
                      (5,6): -1
                                 (5,7):2
                                            (5,8):1
                                                       (5,9):-1
```

154. Inequality 154 with incidence 26 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2):1
           (1,3):1
                      (1,4):1
                                (1,5):1
                                           (1,6): -1
                                                      (1,7):0
(1,8):0
                                (2,7):2
                                           (2,8):-2
                                                      (2,9):2
           (1,9):-1
                      (2,6):1
(3,6):2
                                (3,9): -3
                                                      (4,7): -2
           (3,7):1
                      (3,8):1
                                           (4,6):1
(4,8): -1
           (4,9):1
                                           (5,8):2
                                                      (5,9):3
                      (5,6):1
                                (5,7):1
```

155. Inequality 155 with incidence 26 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2):0
           (1,3):-1
                      (1,4):0
                                (1,5):2
                                           (1,6): -2
                                                     (1,7):-1
                                (2,7):2
                                                      (2,9):1
(1,8):1
           (1,9):1
                      (2,6):1
                                           (2,8):2
(3,6):-1
                                (3,9):2
                                           (4,6):2
                                                     (4,7): -2
           (3,7):1
                     (3,8):-1
                                (5,7):2
(4,8):1
           (4,9):1
                      (5,6):2
                                           (5,8):-1
                                                     (5,9):-1
```

156. Inequality 156 with incidence 26 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2):1
          (1,3): -3
                     (1,4):0
                                (1,5):2
                                          (1,6):-4
                                                     (1,7):2
(1,8):1
          (1,9):1
                     (2,6):3
                               (2,7):-2
                                           (2,8):3
                                                     (2,9):1
           (3,7):2
                                (3,9):3
                                           (4,6):4
                                                     (4,7):4
(3,6): -3
                     (3,8):1
                                                     (5,9):2
          (4,9):-1
                               (5,7):-2
                                          (5,8): -2
(4,8):1
                     (5,6):4
```

157. Inequality 157 with incidence 26 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2): -2
           (1,3): -3
                      (1,4):1
                                 (1,5):1
                                             (1,6):3
                                                       (1,7):1
(1,8):1
           (1,9):2
                      (2,6):2
                                 (2,7):2
                                            (2,8):4
                                                       (2,9):2
(3,6):4
                                                       (4,7):5
           (3,7):3
                      (3,8): -3
                                 (3,9):5
                                            (4,6): -3
(4,8):-1
           (4,9): -2
                      (5,6): -4
                                 (5,7):-1
                                            (5,8):1
                                                       (5,9):3
```

158. Inequality 158 with incidence 26 and stabilizer of size 2. Orbit size is 147456 nature: unknown

```
(1,2): -1
          (1,3):1
                     (1,4):0
                                (1,5):0
                                          (1,6):0
                                                     (1,7):0
                               (2,7):-1
(1,8):0
                                          (2,8):2
                                                     (2,9):-1
          (1,9):0
                     (2,6):1
(3,6):1
                               (3,9):-2
                                          (4,6):2
                                                     (4,7):1
          (3,7):1
                     (3,8):1
                                (5,7):1
                                          (5,8):2
(4,8):1
          (4,9):2
                     (5,6): -2
                                                     (5,9):1
```

159. Inequality 159 with incidence 26 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,7):0
(1,2): -2
           (1,3): -2
                     (1,4):-1
                                 (1,5):1
                                           (1,6):3
(1,8):1
                                (2,7):1
                                           (2,8):2
                                                     (2,9):-2
           (1,9):0
                      (2,6):1
(3,6):2
                                           (4,6):2
                                                     (4,7):3
           (3,7):-1
                      (3,8):1
                                (3,9):2
(4,8):-1
           (4,9):1
                     (5,6): -2
                                                     (5,9):1
                                (5,7):1
                                          (5,8):1
```

160. Inequality 160 with incidence 26 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2):-1
          (1,3): -3
                     (1,4):-1
                                 (1,5):0
                                           (1,6):2
                                                      (1,7):2
                                                     (2,9): -2
(1,8):0
           (1,9):1
                     (2,6):2
                                (2,7):-2
                                           (2,8):3
(3,6):3
                                 (3,9):3
                                                      (4,7):4
           (3,7):2
                     (3,8):-1
                                           (4,6):1
(4,8):1
          (4,9):-3
                     (5,6): -2
                                 (5,7):2
                                           (5,8):3
                                                      (5,9):3
```

161. Inequality 161 with incidence 26 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2):0
           (1,3): -2
                     (1,4):-1
                                 (1,5):1
                                           (1,6): -2
                                                      (1,7):2
(1,8):1
           (1,9):1
                      (2,6):3
                                (2,7):-3
                                            (2,8):3
                                                      (2,9):3
           (3,7):2
(3,6):-4
                     (3,8):-1
                                 (3,9):5
                                           (4,6):4
                                                      (4,7):5
(4,8):1
           (4,9):1
                      (5,6):3
                                (5,7):-2
                                           (5,8):-2
                                                      (5,9):2
```

162. Inequality 162 with incidence 26 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2): -1
           (1,3): -2
                      (1,4):0
                                 (1,5):0
                                           (1,6):1
                                                      (1,7):1
(1,8):0
           (1,9):1
                      (2,6):1
                                 (2,7):2
                                           (2,8): -3
                                                      (2,9):1
(3,6):3
                                                      (4,7):2
           (3,7):2
                      (3,8):3
                                 (3,9):2
                                           (4,6): -1
                     (5,6): -2
                                                      (5,9):2
(4,8):1
          (4,9): -2
                                 (5,7):1
                                           (5,8):1
```

163. Inequality 163 with incidence 25 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2):-1
           (1,3): -3
                     (1,4):-1
                                 (1,5): -1
                                            (1,6):2
                                                       (1,7):2
(1,8):2
                                 (2,7):-2
                                                       (2,9):-1
           (1,9):2
                      (2,6):1
                                            (2,8):3
(3,6):3
                                 (3,9):3
                                                       (4,7):4
           (3,7):2
                      (3,8):1
                                            (4,6): -1
(4,8):2
           (4,9): -4
                      (5,6): -3
                                 (5,7):2
                                            (5,8):2
                                                       (5,9):4
```

164. Inequality 164 with incidence 25 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2):0
          (1,3):-1
                     (1,4):-1
                                (1,5): -1
                                           (1,6):1
                                                      (1,7):2
(1,8):1
          (1,9):1
                                (2,7):-3
                                           (2,8):3
                                                      (2,9):1
                     (2,6): -1
(3,6):2
                                                      (4,7):3
          (3,7):0
                                (3,9):2
                                           (4,6): -2
                     (3,8):-1
(4,8):1
          (4,9):1
                     (5,6):2
                                (5,7):2
                                           (5,8):2
                                                      (5,9):-1
```

165. Inequality 165 with incidence 25 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,3):2
(1,2):3
                     (1,4):0
                                (1,5): -1
                                           (1,6): -2
                                                      (1,7):0
(1,8):3
                                                      (2,9):3
          (1,9):-1
                     (2,6):2
                                (2,7):1
                                           (2,8): -3
                                                     (4,7):-3
(3,6):4
                                (3,9):-4
                                           (4,6):2
          (3,7):-1
                     (3,8):-1
                                           (5,8):3
(4,8):2
          (4,9):3
                     (5,6):2
                                (5,7):3
                                                      (5,9):1
```

166. Inequality 166 with incidence 25 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2): -2
           (1,3):-1
                      (1,4):2
                                 (1,5):2
                                            (1,6): -2
                                                       (1,7):0
(1,8):1
           (1,9):2
                      (2,6): -2
                                 (2,7):4
                                            (2,8):5
                                                       (2,9):1
(3,6):4
           (3,7):2
                      (3,8): -3
                                 (3,9):4
                                            (4,6):2
                                                       (4,7):4
(4,8): -3
           (4,9):-3
                      (5,6):6
                                 (5,7):-2
                                            (5,8):4
                                                       (5,9): -2
```

167. Inequality 167 with incidence 25 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2): -2
           (1,3):-1
                      (1,4):2
                                  (1,5):2
                                             (1,6): -2
                                                        (1,7):0
(1,8):1
           (1,9):2
                      (2,6): -2
                                  (2,7):3
                                             (2,8):4
                                                        (2,9):1
(3,6):3
           (3,7):1
                      (3,8): -2
                                  (3,9):3
                                             (4,6):2
                                                        (4,7):4
(4,8): -2
           (4,9): -2
                      (5,6):5
                                 (5,7): -2
                                             (5,8):3
                                                        (5,9): -2
```

168. Inequality 168 with incidence 25 and stabilizer of size 2. Orbit size is 147456 nature: unknown

```
(1,2): -2
           (1,3): -1
                      (1,4):-1
                                  (1,5):2
                                            (1,6): -2
                                                        (1,7):1
(1,8):1
           (1,9):2
                      (2,6): -2
                                 (2,7):4
                                             (2,8):5
                                                        (2,9):1
                                 (3,9):5
                                                       (4,7):-4
(3,6):4
           (3,7):3
                      (3,8): -3
                                            (4,6): -2
                      (5,6):6
(4,8):3
           (4,9):4
                                 (5,7): -2
                                             (5,8):4
                                                        (5,9): -2
```

169. Inequality 169 with incidence 25 and stabilizer of size 2. Orbit size is 147456 nature: unknown

```
(1,2): -1
           (1,3):-1
                      (1,4): -2
                                 (1,5):1
                                            (1,6): -1
                                                        (1,7):1
(1,8):1
                      (2,6):-1
                                                        (2,9):1
           (1,9):2
                                 (2,7): -3
                                            (2,8):4
(3,6):3
                                                        (4,7):3
           (3,7):-1
                      (3,8): -2
                                 (3,9):3
                                            (4,6): -1
(4,8):2
                                            (5,8):3
           (4,9):2
                      (5,6):4
                                 (5,7):2
                                                       (5,9): -2
```

170. Inequality 170 with incidence 24 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2): -2
           (1,3): -2
                      (1,4):1
                                (1,5):0
                                           (1,6):1
                                                     (1,7):0
(1,8):2
                                                     (2,9):-4
           (1,9):0
                      (2,6):0
                                (2,7):3
                                           (2,8):3
(3,6):2
                                (3,9):3
                                           (4,6):1
                                                     (4,7):3
           (3,7):1
                      (3,8):2
(4,8): -2
           (4,9):1
                     (5,6): -2
                                (5,7):1
                                           (5,8):1
                                                     (5,9):2
```

171. Inequality 171 with incidence 24 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2):0
          (1,3): -3
                      (1,4):1
                                (1,5):0
                                          (1,6):2
                                                     (1,7):0
(1,8):2
           (1,9):2
                     (2,6): -2
                                (2,7):3
                                          (2,8):3
                                                     (2,9):-4
(3,6):3
           (3,7):1
                      (3,8):2
                                (3,9):3
                                                     (4,7):3
                                          (4,6):1
(4,8): -2
           (4,9):1
                                          (5,8):1
                                                     (5,9):4
                     (5,6):-4
                                (5,7):1
```

172. Inequality 172 with incidence 24 and stabilizer of size 2. Orbit size is 147456 nature: unknown

```
(1,2): -1
           (1,3): -3
                      (1,4):2
                                 (1,5):0
                                           (1,6):2
                                                     (1,7):0
(1,8):3
           (1,9):1
                     (2,6): -2
                                 (2,7):4
                                           (2,8):3
                                                     (2,9):-4
(3,6):3
           (3,7):1
                      (3,8):2
                                 (3,9):3
                                           (4,6):1
                                                     (4,7):4
                                                     (5,9):4
           (4,9):2
(4,8): -3
                     (5,6): -4
                                 (5,7):1
                                           (5,8):1
```

173. Inequality 173 with incidence 24 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,3): -2
(1,2):-1
                     (1,4): -2
                                 (1,5):0
                                           (1,6):1
                                                      (1,7):1
(1,8):1
           (1,9):2
                      (2,6):2
                                (2,7):-3
                                           (2,8):5
                                                      (2,9):1
(3,6):4
          (3,7):-2
                     (3,8):-3
                                (3,9):3
                                           (4,6): -1
                                                      (4,7):3
(4,8):2
           (4,9):2
                      (5,6):4
                                 (5,7):3
                                           (5,8):1
                                                      (5,9): -2
```

174. Inequality 174 with incidence 24 and stabilizer of size 1. Orbit size is 294912 nature: unknown

```
(1,2):-1
          (1,3): -2
                     (1,4): -2
                                (1,5):-1
                                            (1,6):1
                                                       (1,7):2
(1,8):1
                                (2,7):-3
                                            (2,8):5
                                                       (2,9):2
           (1,9):2
                      (2,6):1
(3,6):3
          (3,7):-1
                     (3,8): -3
                                 (3,9):3
                                           (4,6): -2
                                                      (4,7):3
(4,8):1
           (4,9):2
                      (5,6):3
                                 (5,7):3
                                            (5,8):2
                                                      (5,9):-1
```

175. Inequality 175 with incidence 24 and stabilizer of size 2. Orbit size is 147456 nature: unknown

```
(1,2):-1
          (1,3):-2
                     (1,4):1
                               (1,5):0
                                         (1,6):1
                                                   (1,7):0
(1,8):2
          (1,9):1
                     (2,6): -1
                               (2,7):3
                                         (2,8):3
                                                   (2,9):-4
(3,6):2
                     (3,8):2
                               (3,9):3
                                         (4,6):1
                                                    (4,7):3
          (3,7):1
(4,8):-2
          (4,9):1
                     (5,6):-3
                                         (5,8):1
                                                    (5,9):3
                               (5,7):1
```