Задания к расчетной работе № 4 по курсу "Надежная передача данных"

15 декабря 2019 г.

Задан (31, 21) код Рида-Соломона в широком смысле над полем $GF(2^5)$ с указанным в задании параметром b. Необходимо продекодировать вектор y и указать в ответе номера ошибочных позиций и значения ошибок. Нумерация позиций ведется с 0, значения указывать в виде степени примитивного элемента α , удовлетворяющего $\alpha^5 + \alpha^2 + 1 = 0$.

Пример оформления ответа:

- Иванов Иван Иванович, гр. 12345
- Вариант 0
- Ошибки в позициях 0,5,10,15.
- Значения ошибок $\alpha^1, \alpha^{10}, \alpha^{20}, \alpha^{30}$

До 29.12 за правильно выполненное задание начисляются 10 баллов. Далее до 7.01 за правильно выполненное задание начисляются 5 баллов. После этой даты ответы не принимаются. Решения присылать преподавателю, ведущему практические занятия, с темой письма CodingTask4.

Номер варианта указан в журнале курса.

```
1. b = 0, y = (\alpha^7, \alpha^{25}, \alpha^{10}, \alpha^{26}, \alpha^{13}, \alpha^1, \alpha^{12}, \alpha^4, \alpha^2, \alpha^{26}, \alpha^{13}, \alpha^4, \alpha^{20}, \alpha^6, \alpha^{13}, \alpha^{18}, \alpha^{30}, \alpha^6, \alpha^6, 0, \alpha^{29}, \alpha^7, \alpha^7, \alpha^{23}, \alpha^{20}, \alpha^{27}, \alpha^{22}, \alpha^{20}, \alpha^{17}, \alpha^{27}, \alpha^{30})

2. b = 0, y = (\alpha^3, \alpha^4, \alpha^{29}, \alpha^{22}, \alpha^{26}, \alpha^{22}, \alpha^{29}, \alpha^6, \alpha^{18}, \alpha^{18}, \alpha^{16}, \alpha^4, \alpha^{11}, \alpha^{14}, \alpha^{10}, \alpha^{25}, \alpha^{20}, \alpha^4, \alpha^{25}, \alpha^{19}, \alpha^{16}, \alpha^{27}, \alpha^2, \alpha^0, \alpha^{22}, \alpha^{30}, \alpha^{30}, \alpha^{16}, \alpha^{15}, \alpha^{11}, \alpha^{17})

3. b = 0, y = (\alpha^3, \alpha^{15}, \alpha^7, \alpha^3, \alpha^0, \alpha^{14}, \alpha^{23}, 0, \alpha^{28}, \alpha^{18}, \alpha^{14}, \alpha^{15}, \alpha^{17}, \alpha^{27}, \alpha^{29}, \alpha^{17}, \alpha^{26}, \alpha^{26}, \alpha^{17}, \alpha^2, \alpha^{25}, \alpha^2, \alpha^5, \alpha^9, \alpha^9, \alpha^{15}, \alpha^{29}, \alpha^{14}, \alpha^{24}, \alpha^7, \alpha^8)

4. b = 0, y = (\alpha^8, \alpha^0, \alpha^1, \alpha^{26}, \alpha^7, \alpha^{22}, \alpha^{29}, \alpha^{13}, \alpha^{15}, \alpha^9, \alpha^{23}, \alpha^5, \alpha^{18}, \alpha^{14}, \alpha^{15}, \alpha^{14}, \alpha^1, \alpha^{15}, \alpha^{13}, \alpha^6, \alpha^{20}, \alpha^{17}, \alpha^8, \alpha^{20}, \alpha^3, \alpha^{24}, \alpha^{30}, \alpha^{14}, \alpha^{20}, \alpha^{18}, \alpha^{29}, \alpha^{25})

5. b = 0, y = (\alpha^{18}, \alpha^{13}, \alpha^{30}, \alpha^{29}, \alpha^1, \alpha^{25}, \alpha^{22}, \alpha^{26}, \alpha^0, \alpha^{22}, \alpha^{12}, \alpha^{16}, \alpha^{27}, 0, \alpha^{27}, \alpha^{22}, \alpha^{17}, 0, \alpha^{15}, \alpha^7, \alpha^{13}, 0, \alpha^{10}, \alpha^8, \alpha^{30}, \alpha^{16}, \alpha^{24}, \alpha^0, \alpha^{11}, \alpha^{22}, \alpha^{28})

6. b = 1, y = (\alpha^7, \alpha^{23}, \alpha^5, \alpha^3, \alpha^4, \alpha^{20}, \alpha^{13}, \alpha^0, \alpha^{27}, \alpha^{10}, \alpha^{18}, \alpha^{16}, \alpha^{10}, \alpha^{25}, \alpha^{10}, \alpha^{11}, \alpha^{13}, \alpha^{18}, \alpha^4, 0, \alpha^3, \alpha^{17}, \alpha^5, \alpha^{10}, \alpha^{30}, \alpha^{27}, \alpha^0, \alpha^1, 0, 0, \alpha^{24})

7. b = 1, y = (\alpha^{12}, \alpha^{21}, \alpha^{12}, \alpha^{18}, \alpha^{26}, \alpha^7, \alpha^{13}, \alpha^{30}, \alpha^{19}, \alpha^{10}, \alpha^7, \alpha^{13}, \alpha^0, \alpha^{17}, \alpha^{23}, \alpha^{15}, \alpha^{11}, \alpha^{28}, \alpha^{17}, \alpha^{22}, \alpha^{16}, \alpha^7, \alpha^{24}, \alpha^{28}, 0, \alpha^{26}, \alpha^{26}, \alpha^{30}, \alpha^6, \alpha^{30}, \alpha^{25})

8. b = 1, y = (\alpha^{16}, \alpha^{11}, \alpha^{23}, \alpha^{26}, \alpha^{19}, \alpha^4, \alpha^{23}, \alpha^2, \alpha^{12}, \alpha^{13}, \alpha^{16}, \alpha^{15}, \alpha^{22}, \alpha^{14}, \alpha^{25}, \alpha^{13}, \alpha^7, \alpha^{11}, 0, \alpha^{16}, \alpha^{16}, \alpha^{24}, \alpha^{20}, \alpha^{29}, \alpha^7, \alpha^{12}, \alpha^{20}, \alpha^4, \alpha^{27}, \alpha^{17}, \alpha^{15})

9. b = 1, y = (\alpha^{16}, \alpha^{11}, \alpha^{23}, \alpha^{26}, \alpha^{19}, \alpha^4, \alpha^{23}, \alpha^2, \alpha^{12}, \alpha^{13}, \alpha^{16}, \alpha^{15}, \alpha^{22}, \alpha^{14}, \alpha^{25}, \alpha^{13}, \alpha^7, \alpha^{11
```

```
11. \quad b=2, \\ y=(\alpha^{12},\alpha^{17},\alpha^{12},\alpha^{22},\alpha^{28},\alpha^{1},\alpha^{7},\alpha^{25},\alpha^{14},\alpha^{6},\alpha^{2},\alpha^{9},\alpha^{25},\alpha^{24},\alpha^{8},\alpha^{29},\alpha^{26},\alpha^{24},\alpha^{9},\alpha^{17},\alpha^{13},\alpha^{6},\alpha^{18},\alpha^{5},\alpha^{7},\alpha^{29},0,\alpha^{22},\alpha^{16},\alpha^{19},\alpha^{3})
12. \quad b=2, \\ y=(\alpha^{12}, \alpha^3, \alpha^{20}, \alpha^{26}, \alpha^{25}, \alpha^{24}, \alpha^{29}, \alpha^6, \alpha^{22}, \alpha^{26}, \alpha^{20}, \alpha^{19}, \alpha^{10}, \alpha^9, \alpha^{21}, \alpha^{21}, \alpha^{24}, \alpha^{17}, \alpha^{24}, \alpha^{26}, \alpha^{15}, \alpha^{26}, \alpha^{14}, \alpha^1, \alpha^{29}, \alpha^{12}, \alpha^{24}, \alpha^{29}, \alpha^{14}, \alpha^4)
13. \quad b = 2, y = (\alpha^{28}, \alpha^{4}, \alpha^{25}, \alpha^{21}, \alpha^{20}, \alpha^{10}, \alpha^{18}, 0, \alpha^{0}, \alpha^{9}, \alpha^{12}, \alpha^{23}, \alpha^{20}, \alpha^{13}, \alpha^{24}, \alpha^{19}, \alpha^{18}, \alpha^{8}, \alpha^{5}, \alpha^{16}, \alpha^{11}, \alpha^{11}, \alpha^{28}, \alpha^{13}, \alpha^{7}, \alpha^{0}, \alpha^{28}, \alpha^{4}, \alpha^{17}, \alpha^{3}, \alpha^{4})
14. \quad b = 2, \\ y = (\alpha^{19}, \alpha^{13}, \alpha^{28}, \alpha^{6}, \alpha^{4}, \alpha^{7}, \alpha^{23}, \alpha^{6}, \alpha^{29}, \alpha^{29}, \alpha^{29}, \alpha^{20}, \alpha^{14}, \alpha^{5}, \alpha^{10}, \alpha^{22}, \alpha^{23}, \alpha^{16}, \alpha^{21}, \alpha^{11}, \alpha^{11}, \alpha^{15}, \alpha^{2}, \alpha^{23}, \alpha^{12}, \alpha^{18}, \alpha^{9}, \alpha^{4}, \alpha^{7}, \alpha^{30}, \alpha^{28})
15. \quad b=2, y=(\alpha^{29},\alpha^{18},\alpha^5,\alpha^{20},\alpha^5,\alpha^{25},\alpha^5,\alpha^{27},\alpha^8,\alpha^{10},\alpha^{20},\alpha^{17},\alpha^9,\alpha^{15},\alpha^{15},\alpha^{19},\alpha^{12},\alpha^6,\alpha^2,\alpha^{15},\alpha^{25},\alpha^1,\alpha^{10},\alpha^{24},\alpha^{21},\alpha^0,\alpha^{27},\alpha^2,\alpha^{14},\alpha^7,\alpha^{14})
16. \ \ b=3, y=(\alpha^{23}, \alpha^{11}, \alpha^{26}, \alpha^{25}, \alpha^{22}, \alpha^{24}, \alpha^{21}, \alpha^{5}, \alpha^{25}, \alpha^{22}, \alpha^{21}, \alpha^{11}, \alpha^{6}, \alpha^{4}, \alpha^{3}, \alpha^{7}, \alpha^{3}, \alpha^{23}, \alpha^{16}, 0, \alpha^{30}, \alpha^{9}, \alpha^{6}, \alpha^{8}, \alpha^{18}, \alpha^{4}, \alpha^{15}, \alpha^{15}, \alpha^{27}, \alpha^{23}, \alpha^{10})
17. \quad b = 3, y = (\alpha^{18}, \alpha^{11}, \alpha^{19}, \alpha^2, \alpha^{11}, \alpha^5, \alpha^{22}, \alpha^{11}, \alpha^{30}, \alpha^{27}, \alpha^0, \alpha^{14}, \alpha^{20}, 0, \alpha^2, \alpha^9, \alpha^{27}, \alpha^1, \alpha^{17}, \alpha^{29}, \alpha^{23}, \alpha^{30}, \alpha^{13}, \alpha^{17}, \alpha^{18}, \alpha^5, \alpha^{14}, \alpha^8, \alpha^{24}, \alpha^4, \alpha^5)
18. \ \ b = 3, y = (\alpha^{0}, \alpha^{26}, \alpha^{5}, \alpha^{28}, \alpha^{5}, \alpha^{19}, \alpha^{8}, \alpha^{1}, \alpha^{19}, \alpha^{8}, \alpha^{15}, \alpha^{13}, \alpha^{10}, \alpha^{29}, \alpha^{13}, \alpha^{8}, \alpha^{14}, \alpha^{8}, \alpha^{0}, \alpha^{29}, \alpha^{8}, \alpha^{29}, \alpha^{2}, \alpha^{29}, \alpha^{5}, \alpha^{10}, \alpha^{24}, \alpha^{28}, \alpha^{2}, \alpha^{23}, \alpha^{2})
19. \quad b = 3, y = (\alpha^{19}, \alpha^{12}, \alpha^{16}, \alpha^{24}, \alpha^{4}, \alpha^{11}, \alpha^{22}, \alpha^{11}, \alpha^{14}, \alpha^{18}, \alpha^{12}, 0, \alpha^{30}, \alpha^{2}, \alpha^{25}, \alpha^{20}, \alpha^{8}, \alpha^{2}, \alpha^{13}, \alpha^{3}, \alpha^{0}, \alpha^{13}, \alpha^{6}, \alpha^{24}, \alpha^{9}, \alpha^{12}, \alpha^{17}, \alpha^{20}, \alpha^{25}, \alpha^{10})
20. \quad b=3, y=(\alpha^{23}, \alpha^{26}, \alpha^{1}, \alpha^{9}, \alpha^{14}, \alpha^{27}, \alpha^{5}, \alpha^{3}, \alpha^{30}, \alpha^{5}, \alpha^{25}, \alpha^{1}, \alpha^{3}, \alpha^{5}, \alpha^{5}, \alpha^{10}, \alpha^{21}, \alpha^{22}, \alpha^{0}, \alpha^{3}, \alpha^{28}, \alpha^{26}, \alpha^{18}, \alpha^{1}, 0, \alpha^{15}, \alpha^{2}, \alpha^{12}, \alpha^{25}, \alpha^{8}, \alpha^{14})
21. \quad b=4, \\ y=(\alpha^{15}, \alpha^9, \alpha^{10}, \alpha^{18}, \alpha^{17}, \alpha^7, \alpha^{28}, \alpha^{15}, \alpha^{14}, \alpha^{17}, \alpha^2, \alpha^{24}, \alpha^{30}, \alpha^{13}, \alpha^{23}, \alpha^{28}, \alpha^{28}, \alpha^7, \alpha^5, \alpha^{21}, \alpha^6, \alpha^{10}, \alpha^6, \alpha^0, \alpha^{27}, \alpha^{19}, \alpha^{22}, \alpha^{12}, \alpha^{10}, \alpha^{12}, \alpha^7)
22. \quad b=4, \\ y=(\alpha^1,\alpha^{19},\alpha^{18},\alpha^{11},\alpha^{24},\alpha^8,\alpha^1,\alpha^{16},\alpha^3,\alpha^{27},\alpha^{11},\alpha^{29},\alpha^{24},\alpha^{14},\alpha^{21},\alpha^{26},\alpha^3,\alpha^{30},\alpha^{25},\alpha^5,\alpha^{24},\alpha^3,\alpha^{13},\alpha^3,\alpha^{14},\alpha^{16},\alpha^{27},\alpha^{30},\alpha^{24},\alpha^{28},\alpha^{28})
23. \quad b=4, \\ y=(\alpha^{18}, \alpha^{16}, \alpha^{8}, \alpha^{4}, \alpha^{6}, \alpha^{13}, \alpha^{14}, \alpha^{13}, \alpha^{9}, \alpha^{1}, \alpha^{24}, \alpha^{19}, \alpha^{30}, \alpha^{27}, \alpha^{27}, \alpha^{11}, \alpha^{3}, \alpha^{18}, \alpha^{20}, \alpha^{26}, \alpha^{19}, \alpha^{10}, \alpha^{12}, \alpha^{18}, \alpha^{7}, \alpha^{30}, \alpha^{1}, \alpha^{22}, \alpha^{17}, \alpha^{3}, \alpha^{25})
24. \quad b=4, \\ y=(\alpha^{17}, \alpha^{22}, \alpha^{19}, \alpha^{17}, \alpha^{21}, \alpha^{22}, \alpha^{5}, \alpha^{30}, \alpha^{16}, \alpha^{0}, \alpha^{4}, \alpha^{18}, \alpha^{27}, \alpha^{27}, \alpha^{28}, \alpha^{24}, \alpha^{12}, \alpha^{9}, \alpha^{26}, \alpha^{22}, \alpha^{1}, \alpha^{0}, \alpha^{11}, \alpha^{10}, \alpha^{26}, \alpha^{0}, \alpha^{30}, \alpha^{26}, \alpha^{0}, \alpha^{2}, \alpha^{21})
25. \quad b = 4, \\ y = (\alpha^2, \alpha^{26}, \alpha^{15}, \alpha^{15}, \alpha^{15}, \alpha^{11}, \alpha^{20}, \alpha^{16}, \alpha^{29}, \alpha^{7}, \alpha^{26}, \alpha^{7}, \alpha^{12}, \alpha^{12}, \alpha^{12}, \alpha^{13}, \alpha^{10}, \alpha^{8}, \alpha^{14}, \alpha^{27}, \alpha^{9}, \alpha^{5}, \alpha^{25}, \alpha^{12}, \alpha^{16}, 0, \alpha^{14}, \alpha^{24}, \alpha^{30}, \alpha^{28}, \alpha^{10}, \alpha^{26}, \alpha^{28})
26. \quad b = 5, \\ y = (\alpha^{11}, \alpha^{27}, \alpha^{10}, \alpha^{27}, \alpha^4, \alpha^{20}, \alpha^{28}, \alpha^{24}, \alpha^{29}, \alpha^{27}, \alpha^{22}, \alpha^{21}, \alpha^{16}, \alpha^3, \alpha^8, \alpha^{15}, \alpha^6, \alpha^{11}, \alpha^{18}, \alpha^8, \alpha^{11}, \alpha^{26}, \alpha^{24}, \alpha^1, \alpha^9, \alpha^{19}, \alpha^{13}, \alpha^2, \alpha^{29}, \alpha^7, \alpha^{17})
27. \quad b = 5, y = (\alpha^{1}, \alpha^{27}, \alpha^{25}, \alpha^{0}, \alpha^{2}, 0, \alpha^{2}, 0, \alpha^{20}, \alpha^{4}, \alpha^{26}, \alpha^{26}, \alpha^{15}, \alpha^{29}, \alpha^{15}, \alpha^{12}, \alpha^{8}, \alpha^{20}, \alpha^{8}, \alpha^{30}, \alpha^{1}, \alpha^{23}, \alpha^{9}, \alpha^{25}, \alpha^{15}, \alpha^{24}, \alpha^{16}, \alpha^{10}, \alpha^{23}, \alpha^{14}, \alpha^{19}, \alpha^{22}, \alpha^{17})
28. \quad b = 5, y = (\alpha^{22}, \alpha^{12}, \alpha^{6}, \alpha^{21}, \alpha^{25}, \alpha^{22}, \alpha^{3}, \alpha^{5}, \alpha^{9}, \alpha^{20}, \alpha^{25}, \alpha^{5}, \alpha^{24}, \alpha^{18}, \alpha^{7}, \alpha^{15}, \alpha^{12}, \alpha^{17}, \alpha^{18}, \alpha^{5}, \alpha^{12}, \alpha^{1}, \alpha^{9}, \alpha^{24}, \alpha^{16}, \alpha^{21}, \alpha^{22}, \alpha^{28}, \alpha^{4}, \alpha^{26}, \alpha^{11})
29. \quad b = 5, y = (\alpha^{13}, \alpha^{7}, \alpha^{30}, \alpha^{11}, \alpha^{1}, \alpha^{26}, \alpha^{7}, \alpha^{2}, \alpha^{27}, \alpha^{1}, \alpha^{15}, 0, \alpha^{19}, \alpha^{0}, \alpha^{10}, \alpha^{22}, \alpha^{12}, \alpha^{0}, \alpha^{21}, \alpha^{18}, 0, \alpha^{2}, \alpha^{11}, \alpha^{4}, \alpha^{3}, \alpha^{11}, \alpha^{27}, \alpha^{5}, \alpha^{4}, \alpha^{18})
30. \quad b=5, \\ y=(\alpha^{15},\alpha^{30},\alpha^{26},\alpha^{24},\alpha^{5},\alpha^{5},\alpha^{9},\alpha^{18},\alpha^{2},\alpha^{7},\alpha^{28},\alpha^{3},\alpha^{15},\alpha^{12},0,\alpha^{24},\alpha^{3},\alpha^{19},\alpha^{28},\alpha^{22},\alpha^{25},\alpha^{1},\alpha^{12},\alpha^{22},\alpha^{28},\alpha^{2},\alpha^{7},\alpha^{14},\alpha^{20},\alpha^{22},\alpha^{11},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12},\alpha^{12}
31. \quad b=6, \\ y=(\alpha^{24},\alpha^3,\alpha^{15},0,\alpha^{26},\alpha^{26},\alpha^{10},\alpha^{27},\alpha^{30},\alpha^{30},\alpha^{25},\alpha^{27},\alpha^{30},0,\alpha^{10},\alpha^3,\alpha^{30},\alpha^4,\alpha^{12},\alpha^5,\alpha^{18},\alpha^{10},\alpha^{11},\alpha^2,\alpha^6,\alpha^{23},\alpha^{28},\alpha^{20},\alpha^{22},\alpha^{28})
32. \quad b=6, y=(\alpha^{24},\alpha^{23},\alpha^{8},\alpha^{1},0,\alpha^{4},\alpha^{13},\alpha^{21},\alpha^{21},\alpha^{3},\alpha^{6},\alpha^{22},\alpha^{5},\alpha^{15},\alpha^{8},\alpha^{16},\alpha^{26},\alpha^{14},\alpha^{9},\alpha^{3},\alpha^{20},\alpha^{5},\alpha^{29},\alpha^{25},\alpha^{2},\alpha^{19},\alpha^{9},\alpha^{18},\alpha^{27},0,\alpha^{1})
33. \quad b=6, \\ y=(\alpha^{28},0,\alpha^{13},\alpha^2,\alpha^{13},\alpha^5,\alpha^5,\alpha^{19},\alpha^{25},\alpha^7,\alpha^{24},\alpha^{27},\alpha^{30},0,\alpha^1,\alpha^{14},\alpha^{18},\alpha^{21},\alpha^{14},\alpha^{12},\alpha^{14},\alpha^{11},\alpha^{21},\alpha^{28},\alpha^{22},\alpha^6,\alpha^0,\alpha^{14},\alpha^6,\alpha^8,\alpha^{22})
34. \quad b=6, \\ y=(\alpha^{14},\alpha^{25},\alpha^{20},\alpha^{21},\alpha^{21},\alpha^{10},\alpha^{5},\alpha^{23},\alpha^{24},\alpha^{2},\alpha^{26},\alpha^{20},\alpha^{9},\alpha^{11},\alpha^{13},\alpha^{1},\alpha^{3},\alpha^{2},\alpha^{12},\alpha^{6},\alpha^{7},\alpha^{10},\alpha^{10},\alpha^{7},\alpha^{28},\alpha^{9},\alpha^{26},\alpha^{10},\alpha^{5},\alpha^{25},\alpha^{7})
35. \quad b=6, y=(\alpha^{22},\alpha^{9},\alpha^{16},\alpha^{2},\alpha^{12},\alpha^{11},\alpha^{17},\alpha^{5},\alpha^{24},\alpha^{0},\alpha^{12},\alpha^{4},0,\alpha^{23},\alpha^{25},\alpha^{16},\alpha^{20},\alpha^{27},\alpha^{21},\alpha^{24},\alpha^{18},\alpha^{26},\alpha^{2},\alpha^{6},\alpha^{24},\alpha^{19},\alpha^{3},\alpha^{13},\alpha^{22},0,\alpha^{18})
36. \quad b=7, \\ y=(\alpha^{25},\alpha^{18},\alpha^{11},\alpha^{29},\alpha^{29},\alpha^{25},\alpha^{20},\alpha^{7},\alpha^{13},\alpha^{8},\alpha^{4},\alpha^{14},\alpha^{22},\alpha^{10},\alpha^{21},\alpha^{14},\alpha^{30},\alpha^{4},\alpha^{19},\alpha^{10},\alpha^{27},\alpha^{28},\alpha^{16},\alpha^{0},\alpha^{15},\alpha^{5},\alpha^{17},\alpha^{14},\alpha^{20},\alpha^{27},\alpha^{6})
37. \quad b = 7, \\ y = (\alpha^{21}, \alpha^{26}, \alpha^{3}, \alpha^{15}, \alpha^{7}, \alpha^{3}, \alpha^{1}, \alpha^{25}, \alpha^{18}, \alpha^{8}, \alpha^{2}, 0, \alpha^{20}, \alpha^{13}, \alpha^{1}, \alpha^{22}, \alpha^{8}, \alpha^{11}, \alpha^{3}, \alpha^{3}, \alpha^{10}, \alpha^{23}, \alpha^{28}, \alpha^{20}, \alpha^{30}, \alpha^{23}, \alpha^{6}, \alpha^{18}, \alpha^{15}, \alpha^{26}, \alpha^{23})
38. \quad b = 7, y = (\alpha^{15}, \alpha^{12}, \alpha^{14}, \alpha^{7}, \alpha^{17}, 0, \alpha^{16}, \alpha^{12}, \alpha^{5}, \alpha^{14}, \alpha^{30}, \alpha^{4}, \alpha^{6}, \alpha^{19}, \alpha^{8}, \alpha^{6}, \alpha^{15}, \alpha^{26}, \alpha^{28}, \alpha^{0}, \alpha^{5}, \alpha^{10}, \alpha^{13}, \alpha^{29}, \alpha^{22}, \alpha^{0}, \alpha^{10}, \alpha^{25}, \alpha^{3}, \alpha^{25}, \alpha^{12})
39. \quad b = 7, \\ y = (\alpha^{21}, \alpha^{10}, \alpha^{24}, \alpha^{29}, \alpha^3, \alpha^0, \alpha^2, \alpha^{11}, \alpha^{23}, \alpha^{18}, \alpha^{25}, \alpha^{30}, 0, \alpha^{18}, \alpha^{20}, \alpha^{13}, \alpha^{12}, \alpha^{25}, \alpha^3, \alpha^{16}, \alpha^{14}, \alpha^{22}, 0, \alpha^{11}, \alpha^{14}, \alpha^{11}, \alpha^{15}, \alpha^{30}, 0, \alpha^{27}, \alpha^{15})
40. \ \ b=7, y=(\alpha^5, \alpha^{24}, \alpha^4, \alpha^{22}, 0, \alpha^{30}, \alpha^{29}, \alpha^{12}, \alpha^0, \alpha^{30}, \alpha^{23}, \alpha^0, \alpha^{17}, \alpha^{24}, \alpha^0, \alpha^{19}, \alpha^0, \alpha^7, \alpha^{10}, \alpha^{17}, \alpha^{28}, \alpha^0, \alpha^{19}, \alpha^{19}, \alpha^{19}, \alpha^{17}, \alpha^{29}, \alpha^{19}, \alpha^{17}, \alpha^{13}, \alpha^{28})
41. \quad b=8, y=(\alpha^{17}, \alpha^4, \alpha^3, \alpha^{28}, \alpha^{14}, \alpha^0, \alpha^{27}, \alpha^{17}, \alpha^{30}, \alpha^3, \alpha^{29}, \alpha^0, \alpha^{26}, 0, \alpha^{25}, \alpha^5, \alpha^{15}, \alpha^2, \alpha^9, \alpha^{20}, \alpha^{20}, \alpha^7, \alpha^8, \alpha^{10}, \alpha^{16}, \alpha^7, \alpha^{29}, \alpha^{24}, \alpha^{26}, \alpha^{14}, \alpha^{25})
42. \quad b=8, \\ y=(\alpha^{28},\alpha^{24},\alpha^{13},\alpha^{8},\alpha^{9},\alpha^{11},\alpha^{19},\alpha^{14},\alpha^{11},\alpha^{16},\alpha^{27},\alpha^{17},\alpha^{10},\alpha^{27},\alpha^{26},\alpha^{21},\alpha^{1},\alpha^{12},\alpha^{12},\alpha^{22},\alpha^{22},\alpha^{19},\alpha^{11},\alpha^{9},\alpha^{21},\alpha^{7},\alpha^{2},\alpha^{1},\alpha^{13},\alpha^{26})
43. \quad b=8, y=(\alpha^{27},\alpha^{17},\alpha^{18},\alpha^{11},\alpha^2,\alpha^6,0,\alpha^6,\alpha^8,\alpha^0,\alpha^{28},\alpha^0,\alpha^8,\alpha^{20},\alpha^{26},\alpha^{29},\alpha^{18},\alpha^{25},\alpha^2,\alpha^{15},\alpha^2,\alpha^{16},\alpha^2,\alpha^{17},\alpha^{24},\alpha^4,\alpha^{17},\alpha^3,\alpha^{10},\alpha^{10},\alpha^2)
44. \quad b=8, \\ y=(\alpha^{17},\alpha^{30},\alpha^4,\alpha^{16},\alpha^{14},0,\alpha^0,\alpha^4,\alpha^4,\alpha^{18},\alpha^6,\alpha^5,\alpha^{23},\alpha^{11},\alpha^{14},\alpha^2,\alpha^9,\alpha^8,\alpha^{10},\alpha^{29},\alpha^{18},\alpha^2,\alpha^{26},\alpha^3,\alpha^0,\alpha^{24},\alpha^2,\alpha^{14},\alpha^{14},\alpha^{20},\alpha^{20})
45. \quad b=8, \\ y=(\alpha^{28},\alpha^{27},\alpha^1,\alpha^5,\alpha^{24},\alpha^{21},\alpha^{19},\alpha^{12},\alpha^9,\alpha^{30},\alpha^{23},\alpha^8,\alpha^{18},\alpha^{21},\alpha^{30},\alpha^{19},\alpha^{30},\alpha^{24},\alpha^{18},\alpha^5,\alpha^{16},\alpha^{10},\alpha^{23},\alpha^{23},\alpha^5,0,\alpha^5,\alpha^{23},\alpha^{15},\alpha^{24},\alpha^{12})
```

```
46. \ \ b=9, y=(\alpha^{26}, \alpha^4, \alpha^{27}, \alpha^{10}, \alpha^7, \alpha^{26}, \alpha^{18}, \alpha^{26}, \alpha^1, \alpha^{25}, \alpha^{11}, \alpha^{22}, \alpha^8, \alpha^{14}, \alpha^8, \alpha^{10}, \alpha^{23}, \alpha^7, \alpha^{19}, \alpha^{11}, \alpha^7, \alpha^{22}, \alpha^1, \alpha^8, \alpha^3, 0, \alpha^4, \alpha^8, \alpha^{13}, \alpha^{16}, \alpha^4)
47. \quad b = 9, y = (\alpha^7, \alpha^{17}, \alpha^{18}, \alpha^{27}, \alpha^{18}, \alpha^{22}, \alpha^{29}, \alpha^{11}, \alpha^{16}, \alpha^{26}, \alpha^{27}, \alpha^{20}, \alpha^{24}, \alpha^7, \alpha^{18}, \alpha^{27}, \alpha^{28}, \alpha^{23}, \alpha^{27}, \alpha^{28}, \alpha^{14}, \alpha^7, \alpha^{13}, \alpha^{13}, \alpha^{13}, \alpha^{15}, \alpha^5, \alpha^{15}, \alpha^{15}, \alpha^{3}, \alpha^{17})
48. \quad b = 9, y = (\alpha^{29}, \alpha^{6}, \alpha^{13}, \alpha^{12}, \alpha^{24}, \alpha^{15}, \alpha^{16}, \alpha^{21}, \alpha^{0}, \alpha^{11}, \alpha^{0}, \alpha^{16}, \alpha^{18}, \alpha^{29}, \alpha^{16}, \alpha^{13}, \alpha^{30}, \alpha^{8}, \alpha^{30}, 0, \alpha^{25}, \alpha^{2}, \alpha^{5}, \alpha^{23}, \alpha^{19}, \alpha^{9}, 0, \alpha^{29}, \alpha^{25}, \alpha^{7}, \alpha^{6})
49. \ \ b = 9, y = (\alpha^{26}, \alpha^{12}, \alpha^{1}, \alpha^{23}, \alpha^{9}, \alpha^{2}, \alpha^{28}, \alpha^{12}, \alpha^{7}, \alpha^{5}, \alpha^{23}, 0, \alpha^{28}, \alpha^{6}, \alpha^{5}, \alpha^{27}, \alpha^{10}, \alpha^{21}, \alpha^{4}, \alpha^{7}, \alpha^{21}, \alpha^{19}, \alpha^{21}, \alpha^{15}, \alpha^{17}, \alpha^{20}, \alpha^{8}, \alpha^{0}, \alpha^{18}, \alpha^{1}, \alpha^{4})
              b = 9, y = (\alpha^{20}, \alpha^{24}, \alpha^{0}, \alpha^{24}, \alpha^{9}, \alpha^{8}, \alpha^{20}, \alpha^{29}, \alpha^{5}, \alpha^{5}, \alpha^{23}, \alpha^{19}, \alpha^{11}, \alpha^{6}, \alpha^{10}, \alpha^{23}, \alpha^{25}, \alpha^{3}, \alpha^{16}, \alpha^{7}, \alpha^{17}, \alpha^{14}, \alpha^{10}, \alpha^{10}, 0, \alpha^{30}, \alpha^{22}, \alpha^{8}, \alpha^{7}, \alpha^{4}, \alpha^{13})
51. \quad b = 10, \\ y = (\alpha^9, \alpha^{23}, \alpha^0, \alpha^{16}, \alpha^{25}, \alpha^{24}, \alpha^{12}, \alpha^{23}, \alpha^{11}, \alpha^{20}, \alpha^3, \alpha^{21}, \alpha^{30}, \alpha^{19}, \alpha^{10}, \alpha^{17}, \alpha^{12}, \alpha^0, \alpha^4, \alpha^3, \alpha^{17}, \alpha^9, \alpha^1, \alpha^{25}, \alpha^{13}, \alpha^0, \alpha^{27}, \alpha^{28}, \alpha^{15}, \alpha^{27})
52. \ \ b = 10, \ y = (\alpha^4, \alpha^{18}, \alpha^{26}, \alpha^{16}, \alpha^{13}, \alpha^{30}, \alpha^{19}, \alpha^{30}, 0, \alpha^{19}, \alpha^{14}, \alpha^{20}, \alpha^{29}, \alpha^{20}, 0, \alpha^{30}, \alpha^{1}, \alpha^{24}, \alpha^{7}, \alpha^{14}, \alpha^{21}, \alpha^{2}, \alpha^{28}, \alpha^{0}, \alpha^{30}, \alpha^{7}, \alpha^{18}, \alpha^{2}, \alpha^{25}, \alpha^{8}, 0)
53. \quad b = 10, \ y = (\alpha^{16}, \alpha^{27}, \alpha^4, \alpha^{12}, \alpha^{23}, \alpha^{15}, \alpha^{24}, \alpha^3, \alpha^0, \alpha^{28}, \alpha^0, \alpha^5, \alpha^{17}, \alpha^{24}, \alpha^{15}, \alpha^3, \alpha^3, \alpha^{23}, \alpha^{12}, \alpha^{28}, \alpha^{17}, \alpha^{16}, \alpha^{17}, \alpha^{25}, \alpha^{12}, \alpha^{20}, \alpha^{12}, \alpha^{23}, \alpha^7, \alpha^1, \alpha^{16})
54. \quad b = 10, \\ y = (\alpha^0, \alpha^{22}, \alpha^{21}, \alpha^{14}, \alpha^{19}, \alpha^{13}, \alpha^{29}, \alpha^{17}, \alpha^{12}, \alpha^{21}, \alpha^{10}, \alpha^3, \alpha^{15}, 0, \alpha^{18}, \alpha^{10}, \alpha^{26}, \alpha^{27}, \alpha^4, \alpha^9, \alpha^1, \alpha^{27}, \alpha^{24}, \alpha^{22}, \alpha^{21}, \alpha^8, \alpha^{29}, \alpha^{16}, \alpha^9, \alpha^{14})
            b=10, y=(\alpha^{24},\alpha^{14},\alpha^{27},\alpha^{20},0,\alpha^{27},\alpha^{10},\alpha^{23},\alpha^{14},\alpha^{17},\alpha^{20},\alpha^{19},\alpha^{3},\alpha^{4},\alpha^{8},\alpha^{25},\alpha^{8},\alpha^{13},\alpha^{22},\alpha^{11},\alpha^{6},\alpha^{19},\alpha^{25},\alpha^{2},\alpha^{6},\alpha^{11},\alpha^{15},\alpha^{13},\alpha^{9},\alpha^{0},\alpha^{21})
56. \quad b = 11, \ y = (\alpha^9, \alpha^{22}, \alpha^2, \alpha^{28}, \alpha^{23}, \alpha^{30}, \alpha^3, \alpha^3, \alpha^{16}, \alpha^9, \alpha^9, \alpha^5, \alpha^{19}, \alpha^8, \alpha^9, \alpha^{12}, \alpha^7, \alpha^2, \alpha^{12}, \alpha^2, \alpha^{16}, \alpha^{12}, \alpha^3, \alpha^{16}, \alpha^{13}, \alpha^{18}, \alpha^{13}, \alpha^{29}, \alpha^{15}, \alpha^1, \alpha^0)
57. \quad b = 11, \ y = (\alpha^{28}, \alpha^{29}, \alpha^{7}, \alpha^{9}, \alpha^{21}, \alpha^{28}, \alpha^{15}, \alpha^{17}, \alpha^{20}, \alpha^{17}, \alpha^{5}, \alpha^{29}, \alpha^{12}, \alpha^{2}, \alpha^{13}, \alpha^{17}, \alpha^{3}, \alpha^{19}, \alpha^{9}, \alpha^{15}, \alpha^{30}, \alpha^{11}, \alpha^{18}, \alpha^{0}, \alpha^{3}, \alpha^{12}, \alpha^{30}, \alpha^{22}, \alpha^{18}, \alpha^{26}, \alpha^{28})
58. \quad b = 11, \ y = (\alpha^{19}, \alpha^{12}, \alpha^{12}, 0, \alpha^{20}, \alpha^{29}, \alpha^{16}, \alpha^{26}, 0, \alpha^{9}, \alpha^{14}, \alpha^{20}, \alpha^{28}, \alpha^{19}, \alpha^{19}, \alpha^{9}, \alpha^{22}, \alpha^{21}, \alpha^{11}, \alpha^{28}, \alpha^{15}, \alpha^{22}, \alpha^{2}, \alpha^{21}, \alpha^{27}, \alpha^{18}, \alpha^{29}, \alpha^{11}, \alpha^{3}, \alpha^{5}, \alpha^{1})
59. \ \ b = 11, \ y = (\alpha^{19}, \alpha^{7}, \alpha^{4}, \alpha^{4}, \alpha^{2}, \alpha^{28}, \alpha^{26}, \alpha^{28}, \alpha^{27}, \alpha^{17}, \alpha^{12}, \alpha^{11}, \alpha^{5}, \alpha^{3}, \alpha^{29}, \alpha^{20}, \alpha^{5}, \alpha^{14}, \alpha^{29}, \alpha^{29}, \alpha^{2}, \alpha^{2}, \alpha^{4}, \alpha^{4}, \alpha^{7}, \alpha^{8}, \alpha^{3}, \alpha^{24}, \alpha^{26}, \alpha^{12}, 0)
60. \ \ b = 11, \ y = (\alpha^{15}, \alpha^{9}, \alpha^{27}, \alpha^{18}, \alpha^{18}, \alpha^{30}, \alpha^{14}, 0, \alpha^{22}, \alpha^{23}, 0, \alpha^{16}, \alpha^{24}, \alpha^{12}, \alpha^{0}, \alpha^{16}, \alpha^{13}, \alpha^{28}, \alpha^{0}, \alpha^{4}, \alpha^{27}, \alpha^{16}, \alpha^{0}, \alpha^{1}, \alpha^{25}, \alpha^{29}, \alpha^{12}, \alpha^{11}, \alpha^{16}, \alpha^{2}, \alpha^{3})
61. \quad b = 12, \ y = (\alpha^{18}, \alpha^{23}, \alpha^2, \alpha^{28}, \alpha^{19}, \alpha^4, \alpha^2, \alpha^{22}, \alpha^{11}, \alpha^1, \alpha^5, \alpha^8, \alpha^2, \alpha^{23}, \alpha^{22}, \alpha^{24}, \alpha^{25}, 0, \alpha^6, \alpha^{24}, \alpha^{15}, \alpha^{26}, \alpha^0, \alpha^0, \alpha^3, \alpha^2, \alpha^7, \alpha^{11}, \alpha^{20}, \alpha^{14}, \alpha^{26})
62. \quad b = 12, \ y = (\alpha^{17}, \alpha^{26}, \alpha^{7}, \alpha^{22}, \alpha^{2}, \alpha^{29}, \alpha^{30}, \alpha^{10}, \alpha^{17}, 0, \alpha^{9}, \alpha^{4}, \alpha^{26}, \alpha^{19}, \alpha^{16}, \alpha^{27}, \alpha^{22}, \alpha^{4}, \alpha^{29}, \alpha^{7}, \alpha^{14}, \alpha^{20}, \alpha^{14}, \alpha^{0}, \alpha^{26}, 0, \alpha^{16}, \alpha^{1}, \alpha^{16}, \alpha^{1})
63. \quad b = 12, \\ y = (\alpha^{12}, \alpha^{8}, \alpha^{1}, \alpha^{24}, \alpha^{4}, \alpha^{5}, \alpha^{4}, \alpha^{8}, \alpha^{17}, \alpha^{14}, \alpha^{18}, \alpha^{18}, \alpha^{9}, \alpha^{10}, \alpha^{4}, \alpha^{4}, \alpha^{9}, \alpha^{24}, \alpha^{30}, \alpha^{1}, \alpha^{10}, \alpha^{13}, \alpha^{13}, \alpha^{11}, \alpha^{17}, \alpha^{16}, \alpha^{11}, \alpha^{22}, \alpha^{2}, \alpha^{1}, \alpha^{12})
64. \quad b = 12, \ y = (\alpha^{14}, \alpha^{28}, \alpha^{15}, \alpha^{19}, \alpha^{24}, \alpha^{2}, \alpha^{27}, \alpha^{23}, \alpha^{25}, \alpha^{17}, \alpha^{27}, \alpha^{13}, \alpha^{22}, \alpha^{13}, \alpha^{28}, \alpha^{26}, \alpha^{11}, \alpha^{28}, \alpha^{8}, \alpha^{4}, \alpha^{22}, \alpha^{13}, \alpha^{24}, \alpha^{11}, \alpha^{20}, \alpha^{27}, \alpha^{14}, \alpha^{19}, \alpha^{16}, \alpha^{7}, \alpha^{14})
65. \quad b = 12, \\ y = (\alpha^{21}, \alpha^{22}, \alpha^{25}, \alpha^{21}, \alpha^{19}, \alpha^{7}, \alpha^{29}, \alpha^{15}, \alpha^{27}, \alpha^{15}, \alpha^{19}, \alpha^{2}, \alpha^{2}, \alpha^{18}, \alpha^{11}, \alpha^{9}, \alpha^{7}, \alpha^{0}, \alpha^{27}, \alpha^{21}, \alpha^{2}, \alpha^{27}, \alpha^{17}, \alpha^{6}, \alpha^{2}, \alpha^{4}, \alpha^{6}, \alpha^{30}, \alpha^{17}, \alpha^{28}, \alpha^{19}, \alpha^
66. \ \ b=13, \ y=(\alpha^{21}, \alpha^{0}, \alpha^{19}, \alpha^{27}, \alpha^{24}, \alpha^{8}, \alpha^{9}, \alpha^{3}, \alpha^{0}, \alpha^{6}, \alpha^{8}, \alpha^{23}, \alpha^{5}, \alpha^{0}, \alpha^{21}, \alpha^{4}, \alpha^{9}, \alpha^{11}, \alpha^{23}, \alpha^{5}, \alpha^{30}, \alpha^{25}, \alpha^{24}, \alpha^{25}, 0, \alpha^{4}, \alpha^{1}, \alpha^{0}, \alpha^{16}, \alpha^{21}, \alpha^{0})
67. \quad b = 13, \ y = (\alpha^6, \alpha^8, \alpha^4, \alpha^{23}, \alpha^9, \alpha^0, \alpha^6, \alpha^3, \alpha^{25}, \alpha^{21}, \alpha^{12}, \alpha^{13}, \alpha^{28}, \alpha^{13}, \alpha^{16}, \alpha^8, \alpha^{14}, \alpha^6, \alpha^{30}, \alpha^{12}, \alpha^{14}, \alpha^3, \alpha^3, \alpha^{15}, \alpha^3, \alpha^{17}, \alpha^{19}, \alpha^{26}, \alpha^{24}, \alpha^8, \alpha^{18})
68. \ \ b = 13, \ y = (\alpha^9, \alpha^{20}, \alpha^{12}, \alpha^7, \alpha^{19}, \alpha^{27}, \alpha^{17}, \alpha^3, \alpha^{28}, \alpha^{14}, \alpha^7, \alpha^{19}, \alpha^3, \alpha^{13}, \alpha^0, \alpha^{17}, \alpha^3, \alpha^8, \alpha^{20}, \alpha^1, \alpha^2, \alpha^1, \alpha^{15}, \alpha^{13}, \alpha^1, \alpha^5, \alpha^{25}, \alpha^{26}, \alpha^1, \alpha^4, \alpha^{17})
69. \quad b = 13, \ y = (\alpha^{13}, \alpha^{8}, \alpha^{15}, \alpha^{26}, \alpha^{13}, \alpha^{6}, \alpha^{12}, \alpha^{21}, \alpha^{4}, \alpha^{8}, \alpha^{8}, \alpha^{14}, \alpha^{7}, 0, \alpha^{19}, \alpha^{27}, \alpha^{5}, \alpha^{13}, \alpha^{22}, \alpha^{20}, \alpha^{15}, \alpha^{18}, \alpha^{30}, \alpha^{11}, \alpha^{14}, \alpha^{22}, \alpha^{28}, \alpha^{17}, \alpha^{1}, \alpha^{21}, \alpha^{24})
70. \quad b = 13, \ y = (\alpha^{28}, \alpha^{3}, \alpha^{1}, \alpha^{17}, \alpha^{17}, \alpha^{12}, \alpha^{24}, \alpha^{22}, \alpha^{25}, \alpha^{18}, \alpha^{23}, \alpha^{17}, \alpha^{12}, \alpha^{21}, \alpha^{19}, \alpha^{4}, \alpha^{13}, \alpha^{24}, \alpha^{28}, \alpha^{9}, \alpha^{21}, \alpha^{21}, \alpha^{18}, \alpha^{12}, \alpha^{29}, \alpha^{8}, \alpha^{14}, \alpha^{18}, \alpha^{27}, \alpha^{5})
71. \quad b = 14, \ y = (\alpha^{11}, \alpha^{9}, \alpha^{3}, \alpha^{6}, \alpha^{6}, \alpha^{9}, \alpha^{4}, \alpha^{1}, \alpha^{5}, \alpha^{10}, \alpha^{1}, \alpha^{24}, \alpha^{21}, 0, \alpha^{3}, \alpha^{2}, \alpha^{14}, \alpha^{25}, \alpha^{22}, \alpha^{1}, \alpha^{29}, \alpha^{21}, \alpha^{24}, \alpha^{15}, \alpha^{19}, \alpha^{15}, \alpha^{27}, \alpha^{6}, \alpha^{13}, \alpha^{1}, \alpha^{8})
72. \quad b = 14, \ y = (\alpha^{22}, \alpha^{5}, \alpha^{22}, \alpha^{5}, \alpha^{20}, \alpha^{20}, \alpha^{20}, \alpha^{5}, \alpha^{17}, \alpha^{12}, \alpha^{4}, \alpha^{0}, \alpha^{16}, \alpha^{15}, \alpha^{22}, \alpha^{16}, \alpha^{2}, \alpha^{29}, \alpha^{20}, \alpha^{28}, \alpha^{11}, \alpha^{29}, \alpha^{9}, \alpha^{27}, \alpha^{2}, \alpha^{29}, \alpha^{13}, \alpha^{8}, \alpha^{16}, \alpha^{23}, \alpha^{9}, \alpha^{0})
73. \quad b = 14, \\ y = (\alpha^4, \alpha^{27}, \alpha^{22}, \alpha^{14}, \alpha^{23}, \alpha^{22}, \alpha^{15}, \alpha^3, \alpha^{27}, \alpha^{13}, \alpha^{24}, \alpha^{20}, \alpha^9, \alpha^{14}, \alpha^{27}, \alpha^9, \alpha^{20}, \alpha^{10}, \alpha^7, \alpha^{10}, \alpha^9, \alpha^2, \alpha^{22}, \alpha^{13}, \alpha^{11}, \alpha^{25}, \alpha^{17}, \alpha^{20}, \alpha^3, 0, \alpha^8)
74. \quad b = 14, \ y = (\alpha^{13}, \alpha^{15}, \alpha^{22}, \alpha^{19}, \alpha^{23}, \alpha^{9}, \alpha^{8}, \alpha^{0}, \alpha^{18}, \alpha^{22}, \alpha^{20}, \alpha^{5}, \alpha^{1}, \alpha^{21}, \alpha^{28}, \alpha^{24}, \alpha^{27}, \alpha^{24}, \alpha^{22}, \alpha^{18}, \alpha^{9}, \alpha^{0}, 0, \alpha^{18}, \alpha^{14}, \alpha^{0}, \alpha^{11}, \alpha^{23}, \alpha^{24}, \alpha^{0})
75. \quad b = 14, \\ y = (\alpha^{23}, \alpha^{11}, \alpha^{15}, \alpha^{22}, \alpha^{22}, \alpha^{22}, \alpha^{5}, \alpha^{7}, \alpha^{5}, \alpha^{25}, \alpha^{2}, \alpha^{27}, \alpha^{18}, \alpha^{23}, \alpha^{8}, \alpha^{9}, \alpha^{28}, \alpha^{15}, 0, \alpha^{28}, 0, \alpha^{16}, \alpha^{24}, \alpha^{16}, \alpha^{4}, \alpha^{12}, \alpha^{26}, \alpha^{2}, \alpha^{28}, \alpha^{28}, \alpha^{16})
76. \quad b = 15, \\ y = (\alpha^{15}, \alpha^{30}, \alpha^{20}, \alpha^{19}, \alpha^{1}, \alpha^{21}, \alpha^{7}, \alpha^{28}, \alpha^{24}, \alpha^{0}, \alpha^{2}, \alpha^{3}, \alpha^{3}, \alpha^{8}, \alpha^{17}, \alpha^{28}, \alpha^{9}, \alpha^{10}, \alpha^{22}, \alpha^{12}, \alpha^{28}, \alpha^{21}, \alpha^{5}, \alpha^{27}, \alpha^{7}, \alpha^{29}, \alpha^{9}, \alpha^{12}, \alpha^{18}, \alpha^{22}, \alpha^{18})
77. \quad b = 15, \\ y = (\alpha^{19}, \alpha^{26}, \alpha^{6}, \alpha^{4}, \alpha^{19}, \alpha^{6}, \alpha^{11}, 0, \alpha^{23}, \alpha^{3}, \alpha^{1}, \alpha^{26}, \alpha^{18}, \alpha^{25}, \alpha^{11}, \alpha^{9}, \alpha^{20}, \alpha^{10}, \alpha^{11}, \alpha^{24}, \alpha^{2}, \alpha^{20}, \alpha^{25}, \alpha^{5}, \alpha^{15}, \alpha^{5}, \alpha^{18}, \alpha^{24}, \alpha^{23}, \alpha^{8}, \alpha^{5})
78. \quad b = 15, \\ y = (\alpha^8, \alpha^{19}, \alpha^7, \alpha^{29}, \alpha^{14}, \alpha^4, 0, \alpha^{28}, \alpha^{16}, \alpha^{25}, \alpha^1, \alpha^9, \alpha^4, \alpha^{21}, \alpha^{29}, \alpha^9, \alpha^8, \alpha^0, \alpha^{26}, \alpha^4, \alpha^{27}, \alpha^5, \alpha^3, \alpha^{26}, \alpha^{25}, \alpha^{12}, \alpha^8, \alpha^{10}, \alpha^{10}, \alpha^{27}, \alpha^{29})
            b = 15, y = (\alpha^3, \alpha^{10}, \alpha^{13}, \alpha^{14}, \alpha^4, \alpha^{29}, \alpha^{19}, \alpha^{30}, \alpha^{15}, \alpha^4, 0, \alpha^{13}, \alpha^6, \alpha^7, \alpha^{30}, \alpha^{17}, \alpha^9, \alpha^{13}, 0, \alpha^{30}, \alpha^2, \alpha^{13}, \alpha^{26}, \alpha^{17}, \alpha^{18}, \alpha^{24}, \alpha^{26}, \alpha^{10}, \alpha^8, \alpha^{28}, \alpha^{15})
80. \ \ b = 15, \ y = (\alpha^3, \alpha^6, \alpha^{27}, \alpha^0, \alpha^{16}, 0, \alpha^{29}, \alpha^{27}, \alpha^{20}, \alpha^{21}, \alpha^2, \alpha^0, \alpha^6, \alpha^{13}, \alpha^{18}, \alpha^{12}, \alpha^1, \alpha^{27}, \alpha^{22}, \alpha^{29}, \alpha^{27}, \alpha^{27}, \alpha^{30}, \alpha^{12}, \alpha^6, 0, \alpha^{19}, \alpha^5, \alpha^{28}, \alpha^{20}, \alpha^{13})
```

```
81. \quad b = 16, \\ y = (\alpha^{25}, \alpha^{11}, \alpha^{19}, \alpha^{14}, \alpha^{25}, \alpha^3, 0, \alpha^{29}, \alpha^3, \alpha^{21}, \alpha^0, \alpha^5, \alpha^{15}, \alpha^{19}, \alpha^{10}, \alpha^{16}, \alpha^{26}, \alpha^{21}, \alpha^{27}, \alpha^{28}, \alpha^4, \alpha^{14}, \alpha^{25}, \alpha^{25}, \alpha^{20}, \alpha^{11}, \alpha^4, \alpha^{19}, \alpha^{28}, \alpha^{19}, \alpha^9)
    82. \quad b = 16, \, y = (\alpha^{18}, \alpha^{18}, \alpha^{4}, \alpha^{24}, \alpha^{16}, \alpha^{16}, \alpha^{16}, \alpha^{12}, \alpha^{13}, \alpha^{1}, \alpha^{28}, \alpha^{23}, \alpha^{27}, \alpha^{29}, \alpha^{3}, \alpha^{8}, \alpha^{0}, \alpha^{2}, \alpha^{13}, \alpha^{12}, \alpha^{19}, \alpha^{9}, \alpha^{16}, \alpha^{29}, \alpha^{28}, \alpha^{29}, \alpha^{1}, \alpha^{12}, \alpha^{13}, \alpha^{22}, \alpha^{23})
    83. \quad b = 16, y = (\alpha^6, \alpha^{16}, \alpha^8, \alpha^9, \alpha^{30}, \alpha^{30}, \alpha^{19}, \alpha^7, \alpha^7, \alpha^{16}, \alpha^{30}, 0, \alpha^{22}, \alpha^6, \alpha^{25}, \alpha^{30}, \alpha^{13}, \alpha^{15}, \alpha^5, \alpha^0, \alpha^0, \alpha^{14}, 0, \alpha^2, \alpha^{11}, \alpha^{25}, \alpha^{26}, \alpha^{10}, \alpha^{24}, \alpha^{14}, \alpha^{27})
    84. \ \ b = 16, \ y = (\alpha^{21}, \alpha^{10}, \alpha^{11}, \alpha^{5}, \alpha^{9}, \alpha^{17}, \alpha^{3}, \alpha^{29}, \alpha^{14}, \alpha^{29}, \alpha^{9}, \alpha^{12}, \alpha^{24}, \alpha^{16}, \alpha^{20}, \alpha^{22}, \alpha^{11}, \alpha^{0}, \alpha^{17}, \alpha^{5}, \alpha^{26}, \alpha^{10}, \alpha^{20}, \alpha^{4}, \alpha^{20}, \alpha^{27}, \alpha^{19}, \alpha^{24}, \alpha^{17}, \alpha^{10})
                    b=16, y=(\alpha^{8},\alpha^{12},\alpha^{15},\alpha^{18},\alpha^{16},\alpha^{6},\alpha^{7},\alpha^{2},\alpha^{16},\alpha^{62},\alpha^{28},\alpha^{28},\alpha^{15},\alpha^{19},\alpha^{28},\alpha^{15},\alpha^{22},\alpha^{30},\alpha^{2},\alpha^{10},\alpha^{23},\alpha^{9},\alpha^{1},\alpha^{26},\alpha^{23},\alpha^{1},\alpha^{14},\alpha^{12},\alpha^{9},\alpha^{22},\alpha^{21})
    86. \quad b = 17, \ y = (\alpha^{23}, \alpha^{3}, \alpha^{13}, 0, \alpha^{2}, \alpha^{9}, \alpha^{19}, \alpha^{16}, \alpha^{30}, \alpha^{12}, \alpha^{0}, \alpha^{4}, \alpha^{12}, \alpha^{17}, \alpha^{10}, \alpha^{14}, \alpha^{13}, \alpha^{29}, \alpha^{23}, \alpha^{5}, \alpha^{10}, \alpha^{7}, \alpha^{13}, \alpha^{1}, \alpha^{30}, \alpha^{9}, 0, \alpha^{24}, \alpha^{28}, \alpha^{2}, \alpha^{0})
    87. \quad b = 17, \\ y = (\alpha^{22}, \alpha^{16}, \alpha^{30}, \alpha^{17}, \alpha^{14}, \alpha^{15}, \alpha^{1}, \alpha^{29}, \alpha^{20}, \alpha^{22}, \alpha^{5}, \alpha^{25}, \alpha^{13}, \alpha^{5}, \alpha^{29}, \alpha^{2}, \alpha^{19}, \alpha^{26}, \alpha^{10}, \alpha^{28}, \alpha^{5}, \alpha^{1}, \alpha^{22}, \alpha^{15}, \alpha^{3}, \alpha^{14}, \alpha^{25}, \alpha^{9}, \alpha^{3}, \alpha^{24}, \alpha^{22})
    88. \quad b = 17, \\ y = (\alpha^2, \alpha^{17}, \alpha^8, \alpha^5, 0, \alpha^{12}, \alpha^{22}, \alpha^9, \alpha^{24}, \alpha^{19}, \alpha^1, \alpha^4, \alpha^{28}, \alpha^{28}, \alpha^1, \alpha^{22}, \alpha^3, \alpha^0, \alpha^{22}, \alpha^{25}, \alpha^{15}, \alpha^{29}, \alpha^{14}, \alpha^{29}, \alpha^1, \alpha^5, 0, \alpha^2, \alpha^{26}, \alpha^{15}, \alpha^{28})
    89. \quad b = 17, \\ y = (\alpha^3, \alpha^{14}, \alpha^8, \alpha^{11}, \alpha^{22}, \alpha^{20}, \alpha^{30}, \alpha^{10}, \alpha^{10}, \alpha^{20}, \alpha^0, \alpha^1, \alpha^3, \alpha^9, \alpha^{25}, \alpha^{12}, \alpha^{17}, \alpha^5, \alpha^0, \alpha^{16}, \alpha^3, \alpha^0, \alpha^4, \alpha^4, \alpha^{27}, \alpha^{30}, \alpha^{23}, \alpha^{29}, \alpha^4, \alpha^{18}, \alpha^{17})
    90. \quad b = 17, \\ y = (\alpha^{22}, \alpha^{15}, \alpha^{11}, \alpha^{2}, \alpha^{29}, \alpha^{6}, \alpha^{5}, \alpha^{28}, \alpha^{2}, \alpha^{13}, \alpha^{23}, \alpha^{7}, \alpha^{2}, \alpha^{26}, \alpha^{0}, \alpha^{3}, \alpha^{8}, \alpha^{0}, \alpha^{27}, \alpha^{15}, \alpha^{10}, \alpha^{4}, \alpha^{27}, \alpha^{27}, \alpha^{2}, \alpha^{22}, \alpha^{14}, \alpha^{18}, \alpha^{20}, \alpha^{21}, \alpha^{3})
    91. \quad b = 18, \ y = (\alpha^9, \alpha^{23}, \alpha^3, \alpha^{15}, \alpha^{28}, \alpha^1, \alpha^{26}, \alpha^{10}, \alpha^{29}, \alpha^{27}, \alpha^{10}, \alpha^{22}, \alpha^2, \alpha^{15}, \alpha^{23}, \alpha^6, \alpha^{25}, \alpha^6, \alpha^{11}, \alpha^5, \alpha^{26}, \alpha^{20}, \alpha^{19}, \alpha^{27}, \alpha^{24}, 0, 0, \alpha^{18}, \alpha^2, \alpha^{23}, \alpha^{21}, \alpha^{24}, \alpha
    92. \quad b = 18, \\ y = (\alpha^{16}, \alpha^{3}, \alpha^{1}, \alpha^{30}, \alpha^{0}, \alpha^{17}, \alpha^{9}, \alpha^{22}, \alpha^{17}, \alpha^{19}, \alpha^{27}, \alpha^{5}, \alpha^{3}, \alpha^{12}, \alpha^{20}, 0, \alpha^{20}, \alpha^{28}, \alpha^{2}, \alpha^{22}, \alpha^{15}, \alpha^{11}, \alpha^{5}, \alpha^{9}, \alpha^{18}, \alpha^{4}, \alpha^{7}, \alpha^{5}, \alpha^{13}, \alpha^{3}, \alpha^{25})
    93. \ \ b = 18, \ y = (\alpha^{24}, \alpha^{5}, 0, \alpha^{5}, 0, \alpha^{7}, \alpha^{7}, \alpha^{16}, \alpha^{2}, \alpha^{26}, \alpha^{11}, \alpha^{25}, \alpha^{16}, \alpha^{5}, \alpha^{30}, \alpha^{3}, \alpha^{21}, \alpha^{21}, \alpha^{11}, \alpha^{20}, \alpha^{2}, \alpha^{11}, \alpha^{10}, \alpha^{19}, \alpha^{21}, \alpha^{5}, \alpha^{27}, \alpha^{10}, \alpha^{2}, \alpha^{2}, \alpha^{22})
    94. \quad b = 18, \\ y = (\alpha^{22}, \alpha^{6}, \alpha^{6}, \alpha^{21}, \alpha^{16}, \alpha^{5}, \alpha^{7}, \alpha^{14}, \alpha^{1}, \alpha^{0}, \alpha^{6}, \alpha^{18}, \alpha^{26}, \alpha^{19}, \alpha^{9}, \alpha^{24}, \alpha^{13}, \alpha^{15}, \alpha^{8}, \alpha^{26}, 0, \alpha^{25}, \alpha^{29}, \alpha^{1}, \alpha^{5}, \alpha^{15}, \alpha^{24}, \alpha^{26}, \alpha^{0}, \alpha^{13}, \alpha^{16})
    95. \ \ b = 18, \ y = (\alpha^0, \alpha^{12}, \alpha^{16}, \alpha^8, \alpha^{24}, \alpha^{23}, \alpha^{26}, \alpha^{25}, \alpha^{22}, 0, \alpha^{27}, \alpha^{12}, \alpha^{17}, \alpha^9, \alpha^{29}, \alpha^8, \alpha^{11}, \alpha^{14}, \alpha^0, 0, \alpha^{16}, \alpha^9, \alpha^1, \alpha^0, 0, \alpha^{13}, \alpha^{14}, \alpha^6, \alpha^{18}, \alpha^{23}, \alpha^{27})
    96. \quad b = 19, \\ y = (\alpha^2, \alpha^{10}, \alpha^{21}, \alpha^6, \alpha^6, \alpha^7, \alpha^{25}, \alpha^{27}, \alpha^{20}, \alpha^6, \alpha^{10}, \alpha^{10}, \alpha^{12}, \alpha^{19}, \alpha^{14}, \alpha^{18}, \alpha^{29}, \alpha^{17}, \alpha^{26}, \alpha^{23}, \alpha^{17}, \alpha^6, \alpha^{13}, \alpha^{30}, \alpha^2, \alpha^{14}, \alpha^{13}, \alpha^{22}, \alpha^1, \alpha^{21}, \alpha^{30})
    97. \quad b = 19, \\ y = (\alpha^{12}, \alpha^{21}, \alpha^{26}, \alpha^{15}, \alpha^{11}, \alpha^{21}, \alpha^{25}, \alpha^{7}, \alpha^{1}, \alpha^{14}, \alpha^{16}, \alpha^{26}, \alpha^{19}, \alpha^{8}, \alpha^{11}, \alpha^{10}, \alpha^{5}, \alpha^{30}, \alpha^{14}, \alpha^{3}, \alpha^{7}, \alpha^{13}, \alpha^{7}, \alpha^{19}, \alpha^{2}, \alpha^{1}, \alpha^{15}, \alpha^{0}, \alpha^{7}, \alpha^{2}, \alpha^{4})
    98. \ \ b = 19, \ y = (\alpha^{14}, \alpha^{28}, \alpha^{29}, \alpha^{4}, \alpha^{14}, \alpha^{21}, \alpha^{6}, \alpha^{21}, \alpha^{25}, \alpha^{2}, \alpha^{30}, \alpha^{28}, \alpha^{12}, \alpha^{4}, \alpha^{2}, \alpha^{15}, \alpha^{26}, \alpha^{14}, \alpha^{28}, \alpha^{9}, \alpha^{24}, \alpha^{28}, \alpha^{5}, \alpha^{1}, \alpha^{6}, \alpha^{24}, \alpha^{7}, \alpha^{9}, \alpha^{29}, \alpha^{18})
    99. \quad b = 19, \ y = (\alpha^5, \alpha^9, \alpha^1, \alpha^{30}, \alpha^3, \alpha^{17}, \alpha^{26}, \alpha^{13}, \alpha^{19}, \alpha^{15}, \alpha^4, \alpha^{24}, \alpha^{14}, \alpha^4, \alpha^6, \alpha^{14}, \alpha^{15}, \alpha^{10}, \alpha^6, 0, \alpha^{19}, \alpha^{26}, 0, \alpha^{29}, \alpha^4, \alpha^1, \alpha^5, \alpha^9, \alpha^{11}, \alpha^5, \alpha^{23})
100. \ \ b = 19, \ y = (\alpha^1, \alpha^{25}, \alpha^{24}, \alpha^{18}, \alpha^4, \alpha^6, \alpha^0, \alpha^{19}, \alpha^{23}, \alpha^{10}, \alpha^{21}, 0, \alpha^{17}, \alpha^5, \alpha^{17}, \alpha^{19}, \alpha^{13}, \alpha^{28}, \alpha^{13}, \alpha^1, \alpha^{28}, \alpha^{30}, \alpha^1, \alpha^{23}, \alpha^0, \alpha^0, \alpha^7, \alpha^{15}, \alpha^{30}, \alpha^{30}, \alpha^6)
101. \quad b = 20, \\ y = (\alpha^0, \alpha^6, \alpha^3, \alpha^{18}, \alpha^{11}, \alpha^1, \alpha^{25}, \alpha^8, \alpha^7, \alpha^2, \alpha^{16}, \alpha^{13}, \alpha^{12}, \alpha^{25}, \alpha^7, 0, \alpha^8, \alpha^{16}, \alpha^4, \alpha^{26}, \alpha^4, \alpha^{27}, \alpha^8, \alpha^{19}, \alpha^{17}, \alpha^{28}, \alpha^{11}, \alpha^{14}, \alpha^{21}, \alpha^4, \alpha^8)
                   b = 20, y = (\alpha^{1}, \alpha^{26}, \alpha^{0}, \alpha^{11}, \alpha^{24}, \alpha^{23}, \alpha^{17}, \alpha^{25}, \alpha^{13}, \alpha^{4}, \alpha^{30}, \alpha^{3}, \alpha^{18}, \alpha^{28}, \alpha^{5}, \alpha^{9}, \alpha^{7}, \alpha^{29}, \alpha^{6}, \alpha^{9}, 0, \alpha^{18}, \alpha^{27}, \alpha^{23}, \alpha^{4}, \alpha^{14}, \alpha^{24}, \alpha^{13}, \alpha^{21}, \alpha^{25})
103. \ \ b = 20, \ y = (\alpha^{23}, \alpha^{19}, \alpha^3, \alpha^{23}, \alpha^4, \alpha^{30}, \alpha^{12}, \alpha^{16}, \alpha^5, \alpha^{29}, \alpha^{29}, \alpha^{14}, \alpha^{24}, \alpha^{13}, \alpha^{20}, \alpha^3, \alpha^7, \alpha^{20}, \alpha^3, \alpha^{20}, \alpha^{16}, \alpha^{30}, \alpha^{22}, \alpha^0, \alpha^{25}, \alpha^{17}, \alpha^6, \alpha^{22}, \alpha^{25}, 0, \alpha^0)
104. \quad b = 20, \\ y = (\alpha^0, \alpha^{24}, \alpha^{22}, \alpha^{21}, \alpha^7, \alpha^{11}, \alpha^8, \alpha^{27}, \alpha^{12}, \alpha^{25}, \alpha^4, \alpha^{27}, \alpha^{17}, \alpha^{21}, \alpha^1, \alpha^6, \alpha^{22}, \alpha^6, \alpha^6, \alpha^{21}, \alpha^{23}, \alpha^{20}, \alpha^3, \alpha^{26}, \alpha^4, \alpha^{25}, \alpha^2, \alpha^{11}, \alpha^{23}, \alpha^{10}, \alpha^5)
105. \ \ b = 20, \ y = (\alpha^{11}, \alpha^{21}, \alpha^{8}, \alpha^{2}, \alpha^{7}, \alpha^{16}, \alpha^{18}, \alpha^{26}, \alpha^{9}, \alpha^{13}, \alpha^{4}, \alpha^{4}, \alpha^{2}, \alpha^{10}, \alpha^{8}, \alpha^{3}, \alpha^{11}, \alpha^{30}, \alpha^{26}, 0, \alpha^{6}, \alpha^{18}, \alpha^{23}, \alpha^{8}, \alpha^{13}, \alpha^{2}, \alpha^{0}, \alpha^{30}, \alpha^{13}, \alpha^{6}, \alpha^{15})
106. \ \ b = 21, \ y = (\alpha^{29}, \alpha^{23}, \alpha^{25}, \alpha^{5}, \alpha^{5}, \alpha^{5}, \alpha^{14}, \alpha^{23}, \alpha^{22}, \alpha^{1}, \alpha^{29}, \alpha^{4}, \alpha^{12}, \alpha^{1}, \alpha^{19}, 0, \alpha^{10}, \alpha^{9}, \alpha^{10}, 0, \alpha^{8}, \alpha^{9}, \alpha^{2}, \alpha^{14}, \alpha^{30}, \alpha^{4}, \alpha^{28}, \alpha^{13}, \alpha^{29}, \alpha^{4}, \alpha^{8}, \alpha^{3})
107. \quad b = 21, \\ y = (\alpha^8, \alpha^2, \alpha^6, \alpha^{15}, \alpha^{30}, \alpha^{24}, \alpha^6, \alpha^{28}, \alpha^{22}, \alpha^{13}, \alpha^3, \alpha^{13}, 0, \alpha^{22}, \alpha^{28}, \alpha^{19}, \alpha^{16}, \alpha^{29}, \alpha^{7}, \alpha^{28}, \alpha^{14}, \alpha^4, \alpha^{29}, \alpha^{25}, \alpha^0, \alpha^7, \alpha^{12}, \alpha^{13}, \alpha^{19}, 0, \alpha^{28})
108. \ \ b = 21, \ y = (\alpha^{16}, \alpha^{30}, \alpha^{19}, \alpha^{11}, \alpha^{3}, \alpha^{6}, \alpha^{19}, \alpha^{1}, \alpha^{28}, \alpha^{15}, \alpha^{18}, \alpha^{25}, \alpha^{23}, \alpha^{3}, \alpha^{5}, \alpha^{24}, \alpha^{26}, \alpha^{21}, \alpha^{29}, \alpha^{13}, \alpha^{23}, \alpha^{15}, \alpha^{6}, \alpha^{10}, \alpha^{6}, \alpha^{13}, \alpha^{28}, \alpha^{17}, 0, \alpha^{1}, \alpha^{17})
109. \quad b = 21, \\ y = (\alpha^{12}, \alpha^{24}, \alpha^{18}, \alpha^{23}, \alpha^{27}, \alpha^{21}, \alpha^{11}, \alpha^{25}, \alpha^{28}, \alpha^{30}, \alpha^{28}, 0, \alpha^{6}, \alpha^{17}, \alpha^{17}, \alpha^{12}, \alpha^{14}, \alpha^{29}, \alpha^{30}, \alpha^{21}, \alpha^{11}, \alpha^{0}, \alpha^{27}, \alpha^{7}, \alpha^{7}, \alpha^{4}, \alpha^{8}, \alpha^{13}, \alpha^{29}, \alpha^{28})
110. \quad b = 21, \\ y = (\alpha^0, \alpha^{15}, \alpha^7, \alpha^{10}, \alpha^{22}, \alpha^{25}, \alpha^{17}, \alpha^{11}, \alpha^2, \alpha^{13}, \alpha^{20}, \alpha^6, \alpha^{12}, \alpha^{17}, \alpha^{10}, 0, \alpha^6, \alpha^{15}, \alpha^0, \alpha^{23}, \alpha^{24}, \alpha^9, \alpha^5, \alpha^5, \alpha^8, \alpha^{25}, \alpha^{15}, \alpha^{26}, \alpha^{11}, \alpha^{24}, \alpha^{11}, \alpha
111. \quad b = 22, \ y = (\alpha^{25}, \alpha^{24}, \alpha^{16}, \alpha^{20}, \alpha^{25}, \alpha^{1}, \alpha^{27}, \alpha^{24}, \alpha^{2}, \alpha^{1}, \alpha^{10}, \alpha^{16}, \alpha^{20}, \alpha^{28}, \alpha^{8}, \alpha^{2}, \alpha^{9}, \alpha^{21}, \alpha^{3}, \alpha^{29}, 0, \alpha^{18}, \alpha^{30}, \alpha^{2}, \alpha^{29}, \alpha^{8}, \alpha^{23}, \alpha^{15}, \alpha^{1}, \alpha^{23}, \alpha^{25})
112. \quad b = 22, y = (\alpha^{19}, \alpha^{25}, 0, \alpha^{29}, \alpha^{20}, \alpha^{23}, \alpha^{27}, \alpha^{1}, \alpha^{27}, \alpha^{6}, \alpha^{29}, \alpha^{27}, \alpha^{11}, \alpha^{12}, \alpha^{20}, \alpha^{11}, \alpha^{29}, \alpha^{25}, \alpha^{16}, \alpha^{16}, \alpha^{14}, \alpha^{4}, \alpha^{14}, \alpha^{23}, \alpha^{0}, \alpha^{15}, \alpha^{4}, \alpha^{3}, 0, \alpha^{5}, \alpha^{23})
113. \quad b = 22, \ y = (\alpha^{16}, \alpha^4, \alpha^{14}, \alpha^{15}, \alpha^{10}, \alpha^{25}, \alpha^3, \alpha^{19}, \alpha^{21}, \alpha^{16}, \alpha^{30}, \alpha^{23}, \alpha^{15}, \alpha^{26}, \alpha^4, \alpha^{21}, \alpha^{16}, 0, \alpha^{20}, \alpha^{21}, \alpha^{28}, \alpha^0, \alpha^{11}, \alpha^{26}, \alpha^{12}, \alpha^{13}, \alpha^{27}, \alpha^{20}, \alpha^{12}, \alpha^{22}, \alpha^{25})
114. \quad b = 22, \\ y = (\alpha^3, \alpha^6, \alpha^{25}, 0, \alpha^8, \alpha^{16}, \alpha^{30}, \alpha^{20}, \alpha^{20}, \alpha^7, \alpha^{18}, \alpha^0, \alpha^{20}, \alpha^4, \alpha^{29}, \alpha^0, \alpha^6, \alpha^{27}, \alpha^{10}, 0, \alpha^{14}, \alpha^9, \alpha^{10}, \alpha^{21}, \alpha^{30}, \alpha^7, \alpha^{15}, \alpha^3, \alpha^4, \alpha^{26}, \alpha^{23})
115. \ \ b = 22, \ y = (\alpha^{15}, \alpha^{21}, \alpha^{19}, \alpha^5, \alpha^{26}, \alpha^{11}, \alpha^3, \alpha^3, \alpha^0, \alpha^2, \alpha^{27}, \alpha^{20}, \alpha^{10}, \alpha^{26}, \alpha^{19}, \alpha^{12}, \alpha^0, \alpha^{23}, \alpha^{10}, \alpha^8, \alpha^{30}, \alpha^9, \alpha^{21}, \alpha^{15}, 0, \alpha^7, 0, \alpha^{25}, \alpha^{28}, \alpha^{11}, \alpha^{26})
```

```
116. \ \ b = 23, \ y = (\alpha^{29}, \alpha^{28}, \alpha^{15}, \alpha^{10}, \alpha^{29}, \alpha^{17}, 0, \alpha^{8}, \alpha^{21}, \alpha^{14}, \alpha^{7}, \alpha^{14}, \alpha^{22}, \alpha^{24}, 0, \alpha^{8}, \alpha^{2}, \alpha^{4}, \alpha^{10}, \alpha^{2}, \alpha^{7}, \alpha^{16}, \alpha^{25}, \alpha^{0}, \alpha^{18}, \alpha^{13}, \alpha^{5}, \alpha^{3}, \alpha^{3}, \alpha^{29}, \alpha^{12})
117. \quad b = 23, \\ y = (\alpha^{18}, \alpha^{25}, \alpha^{28}, \alpha^{24}, \alpha^{6}, \alpha^{0}, \alpha^{22}, \alpha^{10}, \alpha^{20}, \alpha^{10}, \alpha^{27}, \alpha^{30}, \alpha^{22}, \alpha^{15}, \alpha^{8}, \alpha^{5}, \alpha^{27}, \alpha^{8}, \alpha^{24}, \alpha^{23}, \alpha^{12}, \alpha^{30}, \alpha^{28}, \alpha^{30}, \alpha^{12}, \alpha^{25}, \alpha^{14}, \alpha^{14}, \alpha^{20}, \alpha^{5}, \alpha^{11}, \alpha^{14}, \alpha^{1
                           b = 23, y = (\alpha^3, \alpha^9, \alpha^{22}, \alpha^7, \alpha^{24}, \alpha^{24}, \alpha^{20}, \alpha^{26}, \alpha^4, \alpha^{12}, \alpha^0, \alpha^3, \alpha^{24}, \alpha^7, \alpha^{10}, \alpha^2, \alpha^{12}, 0, \alpha^{17}, \alpha^{29}, \alpha^{25}, \alpha^{28}, \alpha^{26}, \alpha^{30}, \alpha^6, \alpha^{18}, \alpha^{28}, \alpha^{30}, \alpha^{18}, \alpha^{29}, \alpha^{10})
119. \ \ b = 23, \ y = (\alpha^7, \alpha^4, \alpha^{12}, \alpha^{11}, \alpha^{20}, \alpha^0, \alpha^1, 0, \alpha^{10}, \alpha^{27}, 0, \alpha^{21}, \alpha^{16}, \alpha^{26}, \alpha^1, \alpha^{21}, \alpha^{10}, \alpha^{15}, \alpha^{26}, \alpha^{14}, \alpha^{19}, \alpha^{18}, \alpha^{21}, \alpha^{14}, \alpha^8, \alpha^2, 0, \alpha^1, \alpha^{29}, \alpha^{15}, \alpha^7)
                             b=23, y=(\alpha^{13}, \alpha^{10}, \alpha^2, \alpha^8, \alpha^{18}, \alpha^{30}, \alpha^{27}, \alpha^{30}, \alpha^{18}, \alpha^{27}, \alpha^{30}, \alpha^4, \alpha^{26}, \alpha^8, \alpha^1, \alpha^{11}, \alpha^{27}, \alpha^1, \alpha^2, \alpha^{11}, \alpha^3, \alpha^3, \alpha^9, \alpha^{13}, 0, \alpha^7, \alpha^{10}, \alpha^2, \alpha^{10}, \alpha^{26}, \alpha^{12})
 121. \quad b = 24, \\ y = (\alpha^{14}, \alpha^{23}, \alpha^{29}, 0, \alpha^{26}, \alpha^{13}, \alpha^{6}, \alpha^{8}, \alpha^{26}, \alpha^{9}, \alpha^{9}, \alpha^{5}, \alpha^{1}, \alpha^{14}, \alpha^{16}, \alpha^{2}, \alpha^{1}, \alpha^{10}, \alpha^{9}, \alpha^{21}, \alpha^{16}, 0, \alpha^{5}, \alpha^{9}, \alpha^{23}, \alpha^{16}, \alpha^{12}, \alpha^{21}, \alpha^{11}, \alpha^{9}, 0)
122. \quad b = 24, \\ y = (\alpha^{25}, \alpha^{10}, \alpha^{21}, \alpha^{19}, \alpha^{19}, \alpha^{13}, \alpha^{2}, \alpha^{30}, \alpha^{15}, \alpha^{19}, \alpha^{24}, \alpha^{25}, \alpha^{2}, \alpha^{29}, \alpha^{25}, \alpha^{29}, \alpha^{6}, \alpha^{2}, \alpha^{8}, \alpha^{5}, \alpha^{2}, \alpha^{20}, \alpha^{18}, \alpha^{16}, \alpha^{25}, \alpha^{16}, \alpha^{3}, \alpha^{1}, \alpha^{17}, \alpha^{1})
 123. \quad b = 24, \\ y = (\alpha^{6}, \alpha^{2}, \alpha^{24}, \alpha^{26}, \alpha^{25}, \alpha^{26}, \alpha^{0}, \alpha^{14}, \alpha^{20}, 0, \alpha^{25}, \alpha^{27}, \alpha^{11}, \alpha^{14}, \alpha^{26}, \alpha^{25}, \alpha^{21}, \alpha^{0}, \alpha^{13}, \alpha^{6}, \alpha^{15}, \alpha^{3}, \alpha^{20}, 0, \alpha^{22}, \alpha^{15}, \alpha^{7}, \alpha^{15}, \alpha^{28}, \alpha^{25}, \alpha^{11}, \alpha^{14}, \alpha^{26}, \alpha^{25}, \alpha^{21}, \alpha^{0}, \alpha^{13}, \alpha^{6}, \alpha^{15}, \alpha^{3}, \alpha^{20}, 0, \alpha^{22}, \alpha^{15}, \alpha^{7}, \alpha^{15}, \alpha^{28}, \alpha^{25}, \alpha^{11}, \alpha^{14}, \alpha^{26}, \alpha^{25}, \alpha^{21}, \alpha^{15}, 
124. \quad b = 24, \\ y = (\alpha^{10}, \alpha^3, \alpha^{17}, \alpha^6, \alpha^{21}, \alpha^{10}, \alpha^{20}, \alpha^{24}, \alpha^6, \alpha^{18}, \alpha^5, \alpha^{19}, \alpha^{24}, \alpha^6, \alpha^{23}, \alpha^{12}, \alpha^{26}, \alpha^0, \alpha^{20}, \alpha^5, \alpha^4, \alpha^{13}, \alpha^{18}, 0, \alpha^{17}, \alpha^1, \alpha^{25}, \alpha^{22}, \alpha^{29}, \alpha^8, \alpha^{24})
125. \ \ b = 24, \ y = (\alpha^{14}, \alpha^{21}, \alpha^{25}, \alpha^{23}, \alpha^{21}, 0, \alpha^{8}, \alpha^{22}, \alpha^{16}, \alpha^{18}, \alpha^{26}, \alpha^{17}, \alpha^{6}, \alpha^{29}, \alpha^{6}, \alpha^{23}, \alpha^{5}, \alpha^{12}, \alpha^{30}, \alpha^{3}, \alpha^{30}, \alpha^{3}, \alpha^{27}, \alpha^{19}, \alpha^{6}, \alpha^{1}, \alpha^{19}, \alpha^{3}, \alpha^{27}, \alpha^
 126. \quad b = 25, \\ y = (\alpha^{24}, \alpha^5, \alpha^{21}, \alpha^{17}, \alpha^1, \alpha^0, \alpha^{19}, \alpha^{24}, \alpha^{21}, \alpha^3, \alpha^0, \alpha^5, \alpha^{13}, \alpha^7, \alpha^{18}, \alpha^{10}, \alpha^{10}, 0, \alpha^{27}, \alpha^9, \alpha^{11}, \alpha^{11}, \alpha^{22}, 0, \alpha^{21}, \alpha^{10}, \alpha^8, \alpha^{25}, \alpha^{20}, \alpha^{17}, \alpha^{18})
127. \quad b = 25, \\ y = (\alpha^{13}, \alpha^6, \alpha^{16}, \alpha^{26}, \alpha^{21}, \alpha^{19}, \alpha^{10}, \alpha^6, \alpha^{21}, \alpha^5, \alpha^{15}, \alpha^{16}, \alpha^{26}, \alpha^{18}, \alpha^{17}, \alpha^{26}, \alpha^3, \alpha^{22}, \alpha^{30}, \alpha^0, \alpha^{15}, \alpha^{13}, \alpha^{25}, \alpha^{30}, \alpha^{17}, \alpha^{20}, \alpha^{13}, \alpha^{19}, \alpha^1, \alpha^{10}, \alpha^{25})
 128. \ \ b = 25, \ y = (\alpha^0, \alpha^9, \alpha^{14}, \alpha^{23}, \alpha^2, \alpha^{25}, \alpha^{14}, \alpha^{30}, \alpha^{23}, \alpha^3, \alpha^4, \alpha^8, \alpha^{11}, \alpha^{22}, \alpha^{26}, \alpha^{19}, \alpha^7, \alpha^6, \alpha^2, \alpha^3, \alpha^1, \alpha^{29}, \alpha^{29}, \alpha^{13}, \alpha^5, \alpha^{14}, \alpha^{13}, \alpha^{17}, \alpha^{24}, \alpha^{19}, \alpha^{14})
                           b = 25, y = (\alpha^{6}, \alpha^{25}, \alpha^{4}, \alpha^{4}, \alpha^{21}, \alpha^{6}, \alpha^{12}, \alpha^{19}, \alpha^{10}, \alpha^{21}, \alpha^{24}, \alpha^{23}, \alpha^{19}, \alpha^{24}, \alpha^{6}, \alpha^{28}, \alpha^{22}, \alpha^{22}, \alpha^{14}, \alpha^{7}, \alpha^{15}, \alpha^{29}, \alpha^{21}, \alpha^{10}, 0, \alpha^{3}, \alpha^{22}, \alpha^{4}, \alpha^{18}, \alpha^{7}, \alpha^{8})
130. \ \ b = 25, \ y = (\alpha^7, \alpha^8, \alpha^{27}, \alpha^{30}, \alpha^8, \alpha^{10}, 0, \alpha^{27}, \alpha^{18}, \alpha^4, \alpha^4, \alpha^{10}, \alpha^{28}, \alpha^5, \alpha^{14}, \alpha^{18}, \alpha^{27}, \alpha^{13}, \alpha^2, \alpha^{30}, \alpha^{27}, \alpha^4, \alpha^{16}, \alpha^{10}, \alpha^1, \alpha^{16}, \alpha^{18}, \alpha^3, \alpha^{27}, 0, \alpha^{17})
 131. \quad b = 26, \\ y = (\alpha^{7}, \alpha^{2}, \alpha^{6}, \alpha^{21}, \alpha^{1}, \alpha^{8}, \alpha^{8}, \alpha^{5}, \alpha^{29}, \alpha^{9}, \alpha^{29}, \alpha^{10}, \alpha^{18}, \alpha^{22}, \alpha^{8}, \alpha^{21}, \alpha^{16}, \alpha^{22}, \alpha^{7}, \alpha^{28}, \alpha^{12}, \alpha^{20}, \alpha^{0}, \alpha^{13}, \alpha^{10}, \alpha^{12}, \alpha^{29}, \alpha^{67}, \alpha^{18}, \alpha^{10}, \alpha^{11}, \alpha
132. \ \ b = 26, \ y = (\alpha^{12}, \alpha^{21}, \alpha^{24}, \alpha^{12}, \alpha^{16}, \alpha^{12}, \alpha^{19}, \alpha^{7}, \alpha^{11}, \alpha^{24}, \alpha^{9}, \alpha^{3}, \alpha^{9}, \alpha^{4}, \alpha^{14}, \alpha^{25}, \alpha^{13}, \alpha^{17}, \alpha^{18}, \alpha^{17}, \alpha^{9}, \alpha^{14}, \alpha^{29}, \alpha^{30}, \alpha^{15}, \alpha^{3}, \alpha^{29}, \alpha^{29}, \alpha^{8}, \alpha^{29}, \alpha^{0})
133. \ \ b = 26, \ y = (\alpha^9, \alpha^{11}, \alpha^5, 0, \alpha^{20}, \alpha^{29}, \alpha^{27}, \alpha^{16}, \alpha^{26}, \alpha^{17}, \alpha^{20}, \alpha^{14}, \alpha^{10}, \alpha^{12}, \alpha^9, \alpha^7, \alpha^{15}, \alpha^0, \alpha^{24}, \alpha^{27}, \alpha^6, \alpha^9, \alpha^{11}, \alpha^{14}, \alpha^{16}, \alpha^{27}, \alpha^{10}, \alpha^{17}, \alpha^{30}, \alpha^{22}, \alpha^{11})
 134. \quad b = 26, \\ y = (\alpha^{21}, \alpha^{20}, \alpha^{9}, \alpha^{11}, \alpha^{28}, \alpha^{24}, \alpha^{5}, \alpha^{10}, \alpha^{12}, \alpha^{1}, \alpha^{8}, \alpha^{14}, \alpha^{21}, \alpha^{22}, \alpha^{27}, \alpha^{21}, \alpha^{8}, \alpha^{30}, \alpha^{12}, 0, \alpha^{17}, \alpha^{10}, \alpha^{8}, \alpha^{20}, \alpha^{23}, \alpha^{15}, \alpha^{6}, \alpha^{30}, \alpha^{21}, \alpha^{10}, \alpha^{21}, \alpha^{10}, \alpha^
135. \ \ b = 26, \ y = (\alpha^{23}, \alpha^{8}, \alpha^{28}, \alpha^{29}, \alpha^{19}, \alpha^{8}, \alpha^{27}, \alpha^{26}, \alpha^{3}, \alpha^{30}, \alpha^{25}, \alpha^{13}, \alpha^{4}, \alpha^{17}, \alpha^{25}, \alpha^{24}, \alpha^{23}, \alpha^{27}, \alpha^{9}, \alpha^{29}, \alpha^{14}, \alpha^{10}, \alpha^{18}, \alpha^{10}, \alpha^{29}, \alpha^{16}, \alpha^{15}, \alpha^{4}, \alpha^{11}, \alpha^{21})
 136. \ \ b = 27, \ y = (\alpha^6, \alpha^{23}, \alpha^9, \alpha^{23}, \alpha^{11}, \alpha^{24}, \alpha^{23}, \alpha^{26}, \alpha^{21}, \alpha^{10}, \alpha^0, \alpha^{10}, \alpha^{11}, \alpha^{15}, \alpha^{21}, \alpha^{25}, \alpha^{24}, \alpha^7, \alpha^{18}, \alpha^{30}, \alpha^7, \alpha^{30}, \alpha^{23}, \alpha^{29}, \alpha^{17}, \alpha^{10}, \alpha^0, \alpha^3, \alpha^{10}, \alpha^7, \alpha^{26})
 137. \quad b = 27, \\ y = (\alpha^{14}, \alpha^{21}, \alpha^{17}, \alpha^{28}, \alpha^5, \alpha^3, \alpha^9, \alpha^6, \alpha^{19}, \alpha^{30}, \alpha^{18}, \alpha^1, \alpha^{24}, \alpha^{30}, \alpha^{29}, \alpha^{29}, \alpha^{15}, \alpha^{16}, 0, \alpha^7, \alpha^{19}, \alpha^{26}, \alpha^4, \alpha^{14}, \alpha^{13}, \alpha^{23}, \alpha^{22}, \alpha^{23}, \alpha^{17}, \alpha^{21}, \alpha^2)
138. \ \ b = 27, \ y = (\alpha^0, \alpha^{17}, \alpha^{10}, \alpha^8, \alpha^{20}, \alpha^{28}, \alpha^{15}, \alpha^{21}, \alpha^{23}, \alpha^{22}, \alpha^{26}, \alpha^{16}, \alpha^{14}, \alpha^{11}, \alpha^{28}, \alpha^{22}, \alpha^4, \alpha^{11}, \alpha^2, 0, \alpha^{26}, \alpha^{28}, \alpha^{29}, \alpha^8, \alpha^0, \alpha^{30}, \alpha^6, \alpha^9, \alpha^{12}, \alpha^{10})
139. \ \ b = 27, \ y = (\alpha^{22}, \alpha^{11}, \alpha^{7}, \alpha^{26}, \alpha^{21}, \alpha^{7}, \alpha^{18}, \alpha^{23}, \alpha^{27}, \alpha^{21}, \alpha^{9}, \alpha^{10}, \alpha^{8}, \alpha^{24}, \alpha^{14}, \alpha^{6}, \alpha^{8}, \alpha^{8}, \alpha^{3}, \alpha^{16}, \alpha^{25}, \alpha^{4}, \alpha^{1}, \alpha^{4}, \alpha^{17}, 0, \alpha^{15}, \alpha^{30}, \alpha^{2}, \alpha^{16}, \alpha^{19})
 140. \quad b = 27, \\ y = (\alpha^{1}, \alpha^{15}, \alpha^{18}, \alpha^{9}, \alpha^{12}, \alpha^{23}, 0, \alpha^{16}, \alpha^{19}, \alpha^{10}, \alpha^{21}, \alpha^{29}, \alpha^{26}, \alpha^{5}, \alpha^{4}, \alpha^{8}, \alpha^{9}, \alpha^{2}, \alpha^{18}, \alpha^{10}, \alpha^{18}, \alpha^{16}, \alpha^{22}, \alpha^{18}, \alpha^{10}, \alpha^{19}, \alpha^{30}, \alpha^{7}, 0, \alpha^{14}, \alpha^{5})
141. \quad b = 28, \\ y = (\alpha^3, \alpha^6, \alpha^{20}, \alpha^{16}, \alpha^8, \alpha^5, \alpha^{27}, \alpha^5, \alpha^4, \alpha^9, \alpha^{26}, \alpha^6, \alpha^{15}, \alpha^{19}, \alpha^1, \alpha^{18}, \alpha^{13}, \alpha^5, \alpha^{24}, \alpha^{23}, \alpha^{13}, \alpha^{23}, \alpha^{11}, \alpha^1, \alpha^{21}, \alpha^{30}, \alpha^{30}, \alpha^{19}, \alpha^1, \alpha^2, \alpha^{30})
142. \ \ b = 28, \ y = (\alpha^{18}, \alpha^{27}, 0, \alpha^3, \alpha^{15}, \alpha^7, \alpha^{11}, \alpha^{26}, \alpha^{30}, \alpha^0, \alpha^{26}, \alpha^{21}, \alpha^6, \alpha^{15}, \alpha^{25}, \alpha^{11}, \alpha^2, \alpha^9, \alpha^{20}, \alpha^{23}, \alpha^{15}, \alpha^2, \alpha^2, \alpha^{24}, \alpha^{22}, \alpha^{16}, \alpha^6, \alpha^{24}, \alpha^6, \alpha^3, \alpha^{10})
 143. \quad b = 28, \\ y = (\alpha^{14}, \alpha^{14}, \alpha^{28}, \alpha^{5}, \alpha^{26}, \alpha^{3}, \alpha^{8}, \alpha^{10}, \alpha^{12}, \alpha^{24}, \alpha^{16}, 0, \alpha^{5}, \alpha^{17}, \alpha^{14}, \alpha^{11}, \alpha^{11}, \alpha^{3}, \alpha^{14}, \alpha^{10}, \alpha^{25}, 0, \alpha^{29}, \alpha^{18}, \alpha^{4}, \alpha^{17}, \alpha^{0}, \alpha^{15}, \alpha^{13}, \alpha^{4}, \alpha^{8})
144. \quad b = 28, \\ y = (\alpha^{14}, \alpha^{6}, \alpha^{15}, \alpha^{7}, \alpha^{16}, \alpha^{22}, \alpha^{21}, \alpha^{18}, \alpha^{29}, \alpha^{4}, \alpha^{16}, \alpha^{19}, \alpha^{19}, \alpha^{29}, \alpha^{21}, \alpha^{7}, \alpha^{6}, \alpha^{12}, \alpha^{29}, \alpha^{20}, \alpha^{25}, \alpha^{9}, \alpha^{15}, \alpha^{23}, \alpha^{4}, \alpha^{12}, \alpha^{20}, \alpha^{3}, \alpha^{30}, \alpha^{10}, \alpha^{2})
 145. \ \ b = 28, \ y = (\alpha^{12}, \alpha^{17}, \alpha^{12}, \alpha^{22}, \alpha^{25}, 0, \alpha^{15}, \alpha^{24}, \alpha^{16}, \alpha^{16}, \alpha^{17}, \alpha^{27}, \alpha^{8}, 0, \alpha^{10}, \alpha^{6}, \alpha^{9}, \alpha^{12}, \alpha^{21}, \alpha^{15}, \alpha^{28}, \alpha^{4}, \alpha^{26}, \alpha^{14}, \alpha^{4}, \alpha^{14}, \alpha^{3}, \alpha^{6}, \alpha^{0}, \alpha^{30}, \alpha^{0})
146. \ \ b = 29, \ y = (\alpha^{22}, \alpha^{30}, \alpha^{10}, \alpha^{19}, \alpha^{1}, \alpha^{0}, \alpha^{24}, \alpha^{8}, \alpha^{27}, \alpha^{5}, \alpha^{28}, 0, \alpha^{22}, \alpha^{11}, \alpha^{20}, \alpha^{22}, \alpha^{14}, \alpha^{2}, \alpha^{13}, \alpha^{21}, \alpha^{3}, \alpha^{3}, \alpha^{28}, \alpha^{4}, \alpha^{13}, \alpha^{3}, \alpha^{27}, \alpha^{0}, \alpha^{28}, \alpha^{0}, \alpha^{6})
147. \quad b = 29, \\ y = (\alpha^{16}, \alpha^{25}, \alpha^{18}, \alpha^{17}, \alpha^{16}, \alpha^{11}, \alpha^{2}, \alpha^{20}, \alpha^{8}, \alpha^{1}, \alpha^{21}, \alpha^{21}, \alpha^{5}, 0, \alpha^{29}, \alpha^{13}, \alpha^{24}, \alpha^{8}, \alpha^{28}, \alpha^{11}, \alpha^{20}, \alpha^{29}, \alpha^{23}, \alpha^{21}, \alpha^{14}, \alpha^{17}, \alpha^{7}, \alpha^{9}, \alpha^{26}, \alpha^{19}, \alpha^{23})
 148. \ \ b = 29, \ y = (\alpha^4, \alpha^{13}, \alpha^8, \alpha^2, \alpha^6, \alpha^{17}, \alpha^{17}, \alpha^0, \alpha^1, \alpha^{25}, \alpha^1, \alpha^{17}, \alpha^2, \alpha^9, \alpha^7, \alpha^{24}, \alpha^5, \alpha^4, \alpha^{15}, \alpha^{24}, \alpha^{12}, \alpha^9, \alpha^{10}, \alpha^{16}, \alpha^{28}, \alpha^{25}, \alpha^{12}, \alpha^{14}, \alpha^{23}, \alpha^{10})
149. \ \ b = 29, y = (\alpha^{28}, \alpha^{29}, \alpha^{22}, \alpha^{9}, \alpha^{7}, \alpha^{10}, \alpha^{3}, \alpha^{17}, \alpha^{24}, \alpha^{5}, \alpha^{17}, \alpha^{9}, \alpha^{21}, \alpha^{7}, \alpha^{19}, \alpha^{12}, \alpha^{5}, \alpha^{7}, \alpha^{24}, \alpha^{25}, \alpha^{9}, \alpha^{10}, \alpha^{26}, \alpha^{1}, \alpha^{23}, 0, \alpha^{5}, \alpha^{12}, \alpha^{21}, \alpha^{28}, \alpha^{4})
 150. \ \ b = 29, \ y = (\alpha^{20}, \alpha^5, \alpha^7, \alpha^6, \alpha^{30}, \alpha^{18}, \alpha^{15}, \alpha^{21}, \alpha^1, \alpha^{28}, \alpha^{21}, \alpha^{16}, \alpha^{10}, \alpha^{19}, \alpha^{15}, \alpha^{23}, \alpha^{25}, \alpha^{21}, \alpha^5, \alpha^6, \alpha^{11}, \alpha^3, \alpha^7, \alpha^{17}, \alpha^2, \alpha^9, \alpha^{14}, 0, \alpha^3, \alpha^3, \alpha^6)
```

```
151. \quad b = 30, y = (\alpha^{0}, \alpha^{0}, \alpha^{14}, \alpha^{30}, \alpha^{7}, \alpha^{30}, \alpha^{29}, \alpha^{26}, \alpha^{21}, \alpha^{17}, \alpha^{13}, \alpha^{7}, \alpha^{27}, \alpha^{13}, \alpha^{11}, \alpha^{22}, \alpha^{6}, \alpha^{0}, \alpha^{3}, \alpha^{26}, \alpha^{24}, \alpha^{20}, \alpha^{1}, \alpha^{1}, \alpha^{26}, \alpha^{1}, \alpha^{0}, \alpha^{17}, \alpha^{27}, \alpha^{5}, \alpha^{4})
152. \quad b = 30, y = (\alpha^{2}, \alpha^{20}, \alpha^{21}, \alpha^{23}, \alpha^{10}, \alpha^{0}, \alpha^{19}, \alpha^{22}, \alpha^{0}, \alpha^{6}, \alpha^{23}, \alpha^{9}, \alpha^{8}, \alpha^{10}, \alpha^{20}, \alpha^{3}, \alpha^{5}, \alpha^{2}, \alpha^{22}, \alpha^{2}, \alpha^{2}, \alpha^{29}, \alpha^{28}, \alpha^{12}, \alpha^{24}, \alpha^{4}, \alpha^{16}, \alpha^{5}, \alpha^{28}, \alpha^{23})
153. \quad b = 30, y = (\alpha^{24}, \alpha^{16}, \alpha^{4}, \alpha^{14}, \alpha^{17}, \alpha^{13}, \alpha^{20}, \alpha^{13}, \alpha^{6}, \alpha^{12}, \alpha^{24}, \alpha^{10}, \alpha^{1}, \alpha^{5}, \alpha^{28}, \alpha^{17}, \alpha^{13}, 0, \alpha^{16}, \alpha^{11}, \alpha^{24}, \alpha^{15}, \alpha^{25}, \alpha^{27}, 0, \alpha^{14}, \alpha^{12}, \alpha^{10}, \alpha^{21}, \alpha^{26}, \alpha^{26})
154. \quad b = 30, y = (\alpha^{24}, \alpha^{12}, \alpha^{15}, \alpha^{13}, \alpha^{26}, \alpha^{16}, \alpha^{12}, \alpha^{6}, \alpha^{14}, \alpha^{25}, \alpha^{19}, \alpha^{28}, \alpha^{16}, \alpha^{30}, \alpha^{21}, \alpha^{19}, \alpha^{27}, \alpha^{2}, \alpha^{14}, \alpha^{5}, \alpha^{30}, \alpha^{9}, \alpha^{21}, \alpha^{8}, \alpha^{29}, \alpha^{6}, \alpha^{22}, \alpha^{11}, \alpha^{23}, \alpha^{19}, \alpha^{7})
155. \quad b = 30, y = (\alpha^{14}, \alpha^{4}, \alpha^{8}, \alpha^{9}, \alpha^{14}, \alpha^{27}, \alpha^{23}, \alpha^{1}, \alpha^{11}, \alpha^{20}, \alpha^{23}, \alpha^{28}, \alpha^{19}, \alpha^{10}, \alpha^{12}, \alpha^{22}, \alpha^{27}, \alpha^{25}, \alpha^{8}, \alpha^{14}, \alpha^{19}, \alpha^{14}, \alpha^{14}, \alpha^{2}, \alpha^{4}, \alpha^{6}, \alpha^{11}, \alpha^{13}, 0, \alpha^{9}, \alpha^{13})
```