Индивидуальное задание 3.

Исследовать на совместность СЛАУ с параметром a при заданных значениях параметра a и найти решение, если оно единственно и провести проверку подстановкой.

N 1

$$A = \begin{bmatrix} -5 & 6 & -5 & 8 \\ -8 & a & -5 & 8 \\ -2 & -4 & -9 & 5 \\ 27 & 34 & 15 & -24 \end{bmatrix}, \qquad b = \begin{bmatrix} 0 \\ -15 \\ -60 \\ 68 \end{bmatrix}, \alpha = -7, \alpha = -6.$$

N 2

$$A = \begin{bmatrix} 3 & 3 & a & 1 \\ -2 & -3 & -2 & 2 \\ 0 & -1 & -2 & -3 \\ -12 & -13 & 14 & -7 \end{bmatrix}, \qquad b = \begin{bmatrix} 8 \\ -9 \\ 38 \\ -50 \end{bmatrix}, \alpha = -4, \alpha = -2.$$

N 3

$$A = \begin{bmatrix} 9 & 5 & -4 & 6 \\ a & -4 & 6 & -8 \\ -9 & -8 & -7 & 1 \\ -9 & 0 & -19 & 17 \end{bmatrix}, \qquad b = \begin{bmatrix} -32 \\ 64 \\ 44 \\ -72 \end{bmatrix}, \alpha = 0, \alpha = 2.$$

N 4

$$A = \begin{bmatrix} 6 & 3 & -4 & 7 \\ -6 & 3 & a & -6 \\ -7 & 7 & 2 & 9 \\ 24 & -6 & -13 & 25 \end{bmatrix}, \qquad b = \begin{bmatrix} 31 \\ -19 \\ 14 \\ 184 \end{bmatrix}, \alpha = 3, \alpha = 7.$$

N 5

$$A = \begin{bmatrix} -9 & -3 & a & 2 \\ -9 & -4 & 3 & -4 \\ 2 & -1 & -9 & 4 \\ 20 & 5 & -9 & 0 \end{bmatrix}, \qquad b = \begin{bmatrix} -20 \\ -32 \\ -45 \\ 37 \end{bmatrix}, \alpha = 0, \alpha = 3.$$

N 6

$$A = \begin{bmatrix} 7 & 6 & a & -3 \\ 1 & -2 & -4 & 8 \\ 5 & 4 & 5 & 1 \\ -20 & -20 & -28 & 17 \end{bmatrix}, \qquad b = \begin{bmatrix} 104 \\ -16 \\ 62 \\ -301 \end{bmatrix}, \alpha = 8, \alpha = 11.$$

N 7

$$A = \begin{bmatrix} 9 & a & -2 & 4 \\ -7 & 1 & 1 & -8 \\ 9 & -3 & -1 & 2 \\ -34 & 7 & 7 & -20 \end{bmatrix}, \qquad b = \begin{bmatrix} 79 \\ -109 \\ 61 \\ -334 \end{bmatrix}, \alpha = -2, \alpha = -1.$$

$$A = \begin{bmatrix} -2 & 0 & a & -4 \\ 4 & 5 & 4 & -7 \\ 9 & -9 & -2 & 0 \\ 17 & -9 & 30 & 16 \end{bmatrix}, \qquad b = \begin{bmatrix} 30 \\ -11 \\ 53 \\ -115 \end{bmatrix}, \alpha = -8, \alpha = -5.$$

$$A = \begin{bmatrix} a & -9 & 9 & -3 \\ -7 & -8 & -1 & 8 \\ -5 & -3 & 3 & -7 \\ -17 & 24 & -24 & 2 \end{bmatrix}, \qquad b = \begin{bmatrix} 133 \\ -1 \\ -39 \\ -414 \end{bmatrix}, \alpha = 4, \alpha = 5.$$

$$A = \begin{bmatrix} a & 5 & 3 & -8 \\ -7 & 6 & -5 & 3 \\ 5 & -9 & 7 & 5 \\ -7 & -4 & -11 & 19 \end{bmatrix}, \qquad b = \begin{bmatrix} -42 \\ 50 \\ -44 \\ 142 \end{bmatrix}, \alpha = 0, \alpha = 2.$$

N 11

$$A = \begin{bmatrix} 8 & 1 & -2 & 0 \\ a & -3 & 4 & -5 \\ -3 & 4 & -9 & 0 \\ -7 & 10 & -17 & 10 \end{bmatrix}, \qquad b = \begin{bmatrix} -8 \\ 28 \\ -40 \\ -96 \end{bmatrix}, \alpha = 2, \alpha = 3.$$

N 12

$$A = \begin{bmatrix} -8 & -7 & 4 & 2 \\ 6 & 7 & a & -9 \\ 0 & -7 & 8 & -4 \\ -20 & -21 & 2 & 20 \end{bmatrix}, \qquad b = \begin{bmatrix} -5 \\ -1 \\ -17 \\ -51 \end{bmatrix}, \alpha = 1, \alpha = 5.$$

N 13

$$A = \begin{bmatrix} 9 & 1 & 0 & 4 \\ a & 2 & 9 & 7 \\ 1 & 9 & 7 & 9 \\ 30 & -5 & -27 & -17 \end{bmatrix}, \qquad b = \begin{bmatrix} 92 \\ -68 \\ 4 \\ 344 \end{bmatrix}, \alpha = -7, \alpha = -5.$$

N 14

$$A = \begin{bmatrix} a & -7 & -2 & -9 \\ 0 & -7 & -4 & 2 \\ 6 & -3 & 9 & 6 \\ -10 & 11 & 13 & 24 \end{bmatrix}, \qquad b = \begin{bmatrix} -70 \\ 95 \\ -57 \\ 67 \end{bmatrix}, \alpha = 8, \alpha = 9.$$

N 15

$$A = \begin{bmatrix} 5 & 5 & 3 & -9 \\ 1 & 2 & a & 0 \\ -4 & -4 & -9 & -7 \\ -6 & -8 & -1 & -7 \end{bmatrix}, \qquad b = \begin{bmatrix} -20 \\ -8 \\ -122 \\ -58 \end{bmatrix}, \alpha = -4, \alpha = -1.$$

N 16

$$A = \begin{bmatrix} -1 & 0 & 1 & 2 \\ a & 8 & -6 & -5 \\ 4 & 9 & 1 & 0 \\ 15 & -16 & 13 & 12 \end{bmatrix}, \qquad b = \begin{bmatrix} 13 \\ 36 \\ 60 \\ -99 \end{bmatrix}, \alpha = -8, \alpha = -4.$$

$$A = \begin{bmatrix} -3 & -4 & 1 & 6 \\ -9 & 1 & a & 3 \\ -6 & 1 & -7 & 0 \\ 12 & -1 & -7 & -6 \end{bmatrix}, \qquad b = \begin{bmatrix} -1 \\ -22 \\ -89 \\ -29 \end{bmatrix}, \alpha = 0, \alpha = 1.$$

$$A = \begin{bmatrix} a & 4 & -6 & 0 \\ 3 & 0 & 6 & 7 \\ -9 & -4 & -2 & -1 \\ 19 & -16 & 30 & 7 \end{bmatrix}, \qquad b = \begin{bmatrix} 45 \\ -43 \\ 53 \\ -235 \end{bmatrix}, \alpha = -4, \alpha = -3.$$

N 19

$$A = \begin{bmatrix} -8 & -1 & a & -9 \\ 3 & 3 & 2 & -1 \\ 1 & -5 & -7 & -1 \\ 27 & 6 & 29 & 26 \end{bmatrix}, \qquad b = \begin{bmatrix} -157 \\ 24 \\ -46 \\ 591 \end{bmatrix}, \alpha = -9, \alpha = -5.$$

N 20

$$A = \begin{bmatrix} -2 & a & 7 & 8 \\ 8 & -5 & 7 & -4 \\ -2 & -3 & -1 & -9 \\ 4 & 9 & -22 & -33 \end{bmatrix}, \qquad b = \begin{bmatrix} -121 \\ 3 \\ 30 \\ 489 \end{bmatrix}, \alpha = -4, \alpha = 0.$$

N 21

$$A = \begin{bmatrix} -5 & 5 & -9 & -4 \\ 3 & 8 & a & -4 \\ -7 & 5 & 2 & 6 \\ -16 & -19 & 20 & 18 \end{bmatrix}, \qquad b = \begin{bmatrix} 72 \\ 83 \\ -75 \\ -366 \end{bmatrix}, \alpha = -6, \alpha = -4.$$

N 22

$$A = \begin{bmatrix} a & 5 & 4 & -2 \\ -9 & 5 & -6 & 5 \\ -3 & -6 & 2 & 6 \\ -25 & -15 & -22 & 13 \end{bmatrix}, \qquad b = \begin{bmatrix} -75 \\ 31 \\ 61 \\ 307 \end{bmatrix}, \alpha = 4, \alpha = 6.$$

N 23

$$A = \begin{bmatrix} a & -2 & -7 & -8 \\ -3 & 5 & 5 & 2 \\ 8 & -4 & 3 & -7 \\ -16 & 2 & 24 & 17 \end{bmatrix}, \qquad b = \begin{bmatrix} 152 \\ -55 \\ 63 \\ -321 \end{bmatrix}, \alpha = 8, \alpha = 11.$$

N 24

$$A = \begin{bmatrix} a & -1 & 8 & -9 \\ -3 & 7 & 3 & 3 \\ -2 & 2 & -2 & 0 \\ -29 & 5 & -26 & 27 \end{bmatrix}, \qquad b = \begin{bmatrix} 93 \\ -113 \\ -12 \\ -243 \end{bmatrix}, \alpha = 9, \alpha = 13.$$

N 25

$$A = \begin{bmatrix} -5 & 8 & 3 & -5 \\ a & 4 & -3 & -3 \\ 5 & 4 & -9 & 0 \\ 11 & -8 & 0 & 9 \end{bmatrix}, \qquad b = \begin{bmatrix} -93 \\ -21 \\ 18 \\ 105 \end{bmatrix}, \alpha = -2, \alpha = 2.$$

$$A = \begin{bmatrix} -4 & -4 & a & -6 \\ -5 & -4 & 0 & 2 \\ 5 & -8 & 6 & -6 \\ 3 & 4 & 2 & 14 \end{bmatrix}, \qquad b = \begin{bmatrix} -6 \\ 61 \\ 35 \\ 105 \end{bmatrix}, \alpha = -1, \alpha = 1.$$

$$A = \begin{bmatrix} a & 2 & -6 & -7 \\ 0 & 6 & -1 & -6 \\ 0 & -7 & 6 & 2 \\ -21 & -13 & 24 & 23 \end{bmatrix}, \qquad b = \begin{bmatrix} -61 \\ -43 \\ 6 \\ 129 \end{bmatrix}, \alpha = 7, \alpha = 11.$$

N 28

$$A = \begin{bmatrix} -7 & 6 & -3 & -8 \\ -7 & a & -1 & -1 \\ -8 & 5 & 9 & -8 \\ 20 & -15 & 13 & -4 \end{bmatrix}, \qquad b = \begin{bmatrix} -118 \\ -98 \\ -179 \\ 141 \end{bmatrix}, \alpha = 5, \alpha = 8.$$

N 29

$$A = \begin{bmatrix} 2 & -8 & 9 & 5 \\ a & 9 & 8 & 5 \\ -7 & -9 & 3 & -4 \\ 17 & -35 & -15 & -10 \end{bmatrix}, \qquad b = \begin{bmatrix} 84 \\ -30 \\ -44 \\ 228 \end{bmatrix}, \alpha = -5, \alpha = -3.$$

N 30

$$A = \begin{bmatrix} -1 & a & -2 & 9 \\ -4 & 3 & 8 & 2 \\ 0 & 7 & 9 & -6 \\ -1 & -9 & 14 & -25 \end{bmatrix}, \qquad b = \begin{bmatrix} 87 \\ 24 \\ 9 \\ -219 \end{bmatrix}, \alpha = 4, \alpha = 5.$$

N 31

$$A = \begin{bmatrix} 1 & 9 & -3 & 5 \\ -7 & a & 7 & -1 \\ -3 & -4 & -4 & -4 \\ 11 & -8 & -18 & -2 \end{bmatrix}, \qquad b = \begin{bmatrix} -51 \\ 7 \\ -4 \\ -30 \end{bmatrix}, \alpha = 2, \alpha = 3.$$

N 32

$$A = \begin{bmatrix} a & 8 & -4 & -6 \\ 2 & -9 & -3 & -8 \\ -4 & 5 & 4 & 8 \\ -31 & -19 & 16 & 26 \end{bmatrix}, \qquad b = \begin{bmatrix} -60 \\ -34 \\ 40 \\ 196 \end{bmatrix}, \alpha = 9, \alpha = 11.$$

N 33

$$A = \begin{bmatrix} 6 & -1 & a & 0 \\ 2 & -7 & 9 & -5 \\ 9 & 5 & 0 & -7 \\ -3 & 7 & -2 & -7 \end{bmatrix}, \qquad b = \begin{bmatrix} 15 \\ 44 \\ -77 \\ -59 \end{bmatrix}, \alpha = 1, \alpha = 5.$$

N 34

$$A = \begin{bmatrix} -3 & a & 6 & -7 \\ 7 & 3 & 0 & -2 \\ -2 & 5 & -6 & 3 \\ 10 & 1 & -30 & 31 \end{bmatrix}, \qquad b = \begin{bmatrix} 41 \\ -27 \\ 12 \\ -104 \end{bmatrix}, \alpha = 1, \alpha = 4.$$

$$A = \begin{bmatrix} 6 & 3 & -7 & 5 \\ -2 & 2 & a & 6 \\ 7 & 1 & -5 & 1 \\ 11 & -3 & -3 & -11 \end{bmatrix}, \qquad b = \begin{bmatrix} 4 \\ -37 \\ 17 \\ 67 \end{bmatrix}, \alpha = -1, \alpha = 3.$$

$$A = \begin{bmatrix} 2 & 5 & 9 & 5 \\ 8 & -8 & a & 6 \\ 9 & 6 & 5 & 9 \\ -15 & 30 & -10 & -9 \end{bmatrix}, \qquad b = \begin{bmatrix} 7 \\ -70 \\ 21 \\ 231 \end{bmatrix}, \alpha = 5, \alpha = 9.$$

$$A = \begin{bmatrix} 3 & 8 & 5 & -8 \\ a & 6 & -1 & 5 \\ 4 & 4 & 5 & -8 \\ -24 & -20 & 9 & -28 \end{bmatrix}, \qquad b = \begin{bmatrix} -44 \\ -45 \\ -45 \\ 75 \end{bmatrix}, \alpha = 7, \alpha = 10.$$

N 38

$$A = \begin{bmatrix} -6 & 0 & 0 & 8 \\ 4 & -5 & a & 1 \\ 9 & 7 & 2 & 3 \\ 1 & 17 & 4 & 1 \end{bmatrix}, \qquad b = \begin{bmatrix} -30 \\ -5 \\ 58 \\ 132 \end{bmatrix}, \alpha = -1, \alpha = 3.$$

N 39

$$A = \begin{bmatrix} -1 & a & -7 & 6 \\ 4 & -7 & -6 & 1 \\ -2 & 9 & -7 & -8 \\ 2 & 1 & 21 & -32 \end{bmatrix}, \qquad b = \begin{bmatrix} 25 \\ -31 \\ 64 \\ -8 \end{bmatrix}, \alpha = 2, \alpha = 3.$$

N 40

$$A = \begin{bmatrix} -9 & 8 & 4 & 8 \\ -8 & -3 & a & -5 \\ -2 & -3 & 1 & 5 \\ 15 & 17 & 1 & 23 \end{bmatrix}, \qquad b = \begin{bmatrix} 0 \\ 64 \\ -28 \\ -96 \end{bmatrix}, \alpha = 1, \alpha = 5.$$

N 41

$$A = \begin{bmatrix} -5 & 5 & -8 & 3 \\ a & 3 & -9 & -6 \\ -3 & 4 & 7 & 6 \\ -9 & -5 & 34 & 24 \end{bmatrix}, \qquad b = \begin{bmatrix} -78 \\ -91 \\ 25 \\ 328 \end{bmatrix}, \alpha = 2, \alpha = 4.$$

N 42

$$A = \begin{bmatrix} 8 & 1 & -2 & 2 \\ 7 & -3 & a & 4 \\ -3 & -4 & 2 & 7 \\ -24 & 5 & -7 & -5 \end{bmatrix}, \qquad b = \begin{bmatrix} -10 \\ 23 \\ 38 \\ -22 \end{bmatrix}, \alpha = 3, \alpha = 4.$$

N 43

$$A = \begin{bmatrix} 2 & -3 & 9 & 1 \\ -9 & 2 & a & -2 \\ -3 & 8 & 2 & -5 \\ 38 & -11 & -7 & 9 \end{bmatrix}, \qquad b = \begin{bmatrix} 65 \\ -11 \\ 4 \\ 221 \end{bmatrix}, \alpha = 4, \alpha = 8.$$

$$A = \begin{bmatrix} -8 & a & 8 & 1 \\ 6 & 0 & -2 & -7 \\ 6 & 4 & -3 & -6 \\ 22 & 10 & -18 & -9 \end{bmatrix}, \qquad b = \begin{bmatrix} -108 \\ 110 \\ 130 \\ 340 \end{bmatrix}, \alpha = -5, \alpha = -4.$$

$$A = \begin{bmatrix} -7 & -9 & 7 & -9 \\ a & -6 & -8 & -1 \\ -1 & 3 & 1 & 4 \\ -7 & 21 & 25 & 7 \end{bmatrix}, \qquad b = \begin{bmatrix} 42 \\ -36 \\ 6 \\ 42 \end{bmatrix}, \alpha = 2, \alpha = 6.$$

N 46

$$A = \begin{bmatrix} 5 & -2 & 3 & -4 \\ -2 & 2 & a & 9 \\ 8 & 9 & -8 & 3 \\ 12 & 5 & 8 & -15 \end{bmatrix}, \qquad b = \begin{bmatrix} 19 \\ 20 \\ 87 \\ 43 \end{bmatrix}, \alpha = -8, \alpha = -7.$$

N 47

$$A = \begin{bmatrix} a & -8 & 6 & 2 \\ 6 & -5 & -5 & -2 \\ 6 & -2 & -1 & -9 \\ -12 & 14 & -13 & -13 \end{bmatrix}, \qquad b = \begin{bmatrix} -36 \\ 17 \\ 14 \\ 70 \end{bmatrix}, \alpha = 9, \alpha = 11.$$

N 48

$$A = \begin{bmatrix} -2 & -2 & -1 & 5 \\ 2 & a & 3 & 7 \\ 6 & 2 & 2 & 3 \\ -6 & -18 & -7 & -9 \end{bmatrix}, \qquad b = \begin{bmatrix} -31 \\ 51 \\ 15 \\ -101 \end{bmatrix}, \alpha = 8, \alpha = 12.$$

N 49

$$A = \begin{bmatrix} 3 & a & -7 & -6 \\ -3 & 2 & 4 & -5 \\ 7 & -7 & -4 & -8 \\ -15 & 10 & 32 & 19 \end{bmatrix}, \qquad b = \begin{bmatrix} -132 \\ 21 \\ -166 \\ 553 \end{bmatrix}, \alpha = -2, \alpha = -1.$$

N 50

$$A = \begin{bmatrix} 9 & -1 & a & 4 \\ 1 & -7 & -7 & 9 \\ 8 & 2 & -1 & 6 \\ -10 & 4 & -9 & -2 \end{bmatrix}, \qquad b = \begin{bmatrix} 43 \\ -125 \\ -9 \\ -77 \end{bmatrix}, \alpha = 4, \alpha = 5.$$

N 51

$$A = \begin{bmatrix} a & 7 & -9 & -8 \\ 6 & 7 & 8 & 8 \\ -7 & 4 & 9 & -7 \\ -15 & -24 & 45 & 25 \end{bmatrix}, \qquad b = \begin{bmatrix} 31 \\ -53 \\ -26 \\ -166 \end{bmatrix}, \alpha = 2, \alpha = 6.$$

N 52

$$A = \begin{bmatrix} 5 & -7 & -1 & -3 \\ -7 & a & 8 & 2 \\ 1 & -6 & 1 & -1 \\ 26 & -28 & -25 & -9 \end{bmatrix}, \qquad b = \begin{bmatrix} -26 \\ -3 \\ -17 \\ -8 \end{bmatrix}, \alpha = 7, \alpha = 10.$$

$$A = \begin{bmatrix} 1 & 1 & 9 & 2 \\ -7 & 7 & a & 8 \\ 9 & 6 & 7 & 4 \\ 15 & -13 & -1 & -14 \end{bmatrix}, \qquad b = \begin{bmatrix} 63 \\ 1 \\ 117 \\ 73 \end{bmatrix}, \alpha = 5, \alpha = 6.$$

$$A = \begin{bmatrix} 6 & -4 & 5 & -8 \\ a & -7 & -8 & 4 \\ -8 & -9 & 3 & -4 \\ -6 & 17 & 29 & -20 \end{bmatrix}, \qquad b = \begin{bmatrix} -11 \\ 52 \\ 135 \\ -191 \end{bmatrix}, \alpha = 4, \alpha = 5.$$

N 55

$$A = \begin{bmatrix} 7 & 3 & -2 & 7 \\ a & -5 & 6 & 5 \\ 3 & -2 & 4 & 6 \\ 11 & 18 & -20 & -14 \end{bmatrix}, \qquad b = \begin{bmatrix} -118 \\ -18 \\ -73 \\ -37 \end{bmatrix}, \alpha = -2, \alpha = -1.$$

N 56

$$A = \begin{bmatrix} -4 & 2 & -1 & 0 \\ a & -7 & -8 & -6 \\ 7 & -8 & -4 & -3 \\ -14 & 13 & 20 & 15 \end{bmatrix}, \qquad b = \begin{bmatrix} 4 \\ -73 \\ -32 \\ 178 \end{bmatrix}, \alpha = 7, \alpha = 8.$$

N 57

$$A = \begin{bmatrix} 3 & -1 & -3 & 5 \\ 1 & a & -6 & -3 \\ -5 & 1 & -8 & -4 \\ -9 & 17 & 16 & 8 \end{bmatrix}, \qquad b = \begin{bmatrix} 37 \\ 73 \\ 13 \\ -311 \end{bmatrix}, \alpha = -4, \alpha = -3.$$

N 58

$$A = \begin{bmatrix} -9 & -3 & -9 & 1 \\ -2 & 7 & a & -5 \\ -6 & 5 & -4 & -3 \\ -1 & -31 & -33 & 21 \end{bmatrix}, \qquad b = \begin{bmatrix} -37 \\ 76 \\ 4 \\ -245 \end{bmatrix}, \alpha = 6, \alpha = 10.$$

N 59

$$A = \begin{bmatrix} 4 & -1 & a & 0 \\ -6 & 1 & 9 & -4 \\ 3 & 5 & -4 & 3 \\ -18 & 4 & -3 & -4 \end{bmatrix}, \qquad b = \begin{bmatrix} 65 \\ 103 \\ -18 \\ 4 \end{bmatrix}, \alpha = 4, \alpha = 8.$$

N 60

$$A = \begin{bmatrix} 8 & -2 & 5 & -5 \\ a & -2 & 2 & 3 \\ 6 & 1 & 9 & -9 \\ 8 & 6 & -3 & -17 \end{bmatrix}, \qquad b = \begin{bmatrix} -40 \\ 6 \\ -43 \\ -112 \end{bmatrix}, \alpha = 0, \alpha = 3.$$

N 61

$$A = \begin{bmatrix} a & 8 & -9 & 0 \\ -8 & -7 & 1 & 3 \\ 3 & 1 & 8 & -9 \\ -28 & -39 & 37 & 3 \end{bmatrix}, \qquad b = \begin{bmatrix} 27 \\ -21 \\ -46 \\ -113 \end{bmatrix}, \alpha = 5, \alpha = 7.$$

$$A = \begin{bmatrix} a & 0 & -3 & -4 \\ -6 & -6 & 0 & 2 \\ 4 & 6 & 7 & -4 \\ 12 & -6 & 9 & 14 \end{bmatrix}, \qquad b = \begin{bmatrix} -3 \\ 0 \\ -52 \\ 0 \end{bmatrix}, \alpha = -6, \alpha = -3.$$

$$A = \begin{bmatrix} -5 & -7 & a & 0 \\ -4 & 0 & -4 & -2 \\ -1 & -8 & -4 & -2 \\ 11 & 21 & 14 & -2 \end{bmatrix}, \qquad b = \begin{bmatrix} 67 \\ -14 \\ 24 \\ -143 \end{bmatrix}, \alpha = -6, \alpha = -2.$$

N 64

$$A = \begin{bmatrix} -1 & -4 & 0 & 4 \\ a & 1 & 3 & 4 \\ 7 & 7 & -2 & 2 \\ 3 & 5 & -8 & -6 \end{bmatrix}, \qquad b = \begin{bmatrix} -3 \\ 68 \\ 70 \\ -54 \end{bmatrix}, \alpha = 2, \alpha = 4.$$

N 65

$$A = \begin{bmatrix} 4 & -4 & 5 & -4 \\ -1 & a & -8 & -5 \\ -9 & -1 & -7 & -4 \\ 7 & -7 & 29 & 11 \end{bmatrix}, \qquad b = \begin{bmatrix} 38 \\ 54 \\ 43 \\ -136 \end{bmatrix}, \alpha = 1, \alpha = 3.$$

N 66

$$A = \begin{bmatrix} -8 & -1 & -2 & 1 \\ -7 & 2 & a & -5 \\ 9 & -3 & 0 & -8 \\ 20 & -9 & -14 & 21 \end{bmatrix}, \qquad b = \begin{bmatrix} -27 \\ 28 \\ 77 \\ -75 \end{bmatrix}, \alpha = 3, \alpha = 5.$$

N 67

$$A = \begin{bmatrix} -8 & 2 & a & -7 \\ 1 & 2 & 5 & 7 \\ 3 & 9 & -3 & -2 \\ 17 & -2 & 13 & 21 \end{bmatrix}, \qquad b = \begin{bmatrix} 40 \\ -33 \\ 73 \\ -149 \end{bmatrix}, \alpha = -4, \alpha = -1.$$

N 68

$$A = \begin{bmatrix} 0 & a & 3 & -5 \\ 5 & -6 & 3 & 3 \\ -9 & -5 & 0 & -8 \\ -9 & 31 & -12 & 12 \end{bmatrix}, \qquad b = \begin{bmatrix} -38 \\ -27 \\ 35 \\ 163 \end{bmatrix}, \alpha = -9, \alpha = -6.$$

N 69

$$A = \begin{bmatrix} a & 4 & -2 & 8 \\ -6 & -4 & 5 & 5 \\ -1 & -1 & -1 & -8 \\ -26 & -20 & 13 & -27 \end{bmatrix}, \qquad b = \begin{bmatrix} -30 \\ -9 \\ 36 \\ 183 \end{bmatrix}, \alpha = 5, \alpha = 8.$$

N 70

$$A = \begin{bmatrix} 8 & a & -3 & -1 \\ 5 & 2 & -3 & -5 \\ -9 & 6 & 6 & 8 \\ -25 & 24 & 12 & 10 \end{bmatrix}, \qquad b = \begin{bmatrix} -32 \\ -118 \\ 121 \\ 149 \end{bmatrix}, \alpha = -9, \alpha = -7.$$

$$A = \begin{bmatrix} 9 & a & 3 & -5 \\ 1 & 8 & -9 & 3 \\ -7 & 3 & 0 & 1 \\ -34 & -15 & -9 & 16 \end{bmatrix}, \qquad b = \begin{bmatrix} -111 \\ -71 \\ 23 \\ 320 \end{bmatrix}, \alpha = 6, \alpha = 8.$$

$$A = \begin{bmatrix} 1 & 5 & 3 & -5 \\ 9 & a & -3 & -6 \\ -8 & -5 & -5 & 2 \\ -26 & 5 & 1 & 14 \end{bmatrix}, \qquad b = \begin{bmatrix} 7 \\ 81 \\ -67 \\ -301 \end{bmatrix}, \alpha = -5, \alpha = -1.$$

N 73

$$A = \begin{bmatrix} 6 & 8 & -6 & 6 \\ 6 & -9 & a & 9 \\ -8 & 3 & -5 & -5 \\ -6 & 26 & -22 & -12 \end{bmatrix}, \qquad b = \begin{bmatrix} 30 \\ 55 \\ -34 \\ -52 \end{bmatrix}, \alpha = 8, \alpha = 10.$$

N 74

$$A = \begin{bmatrix} -4 & a & -6 & 7 \\ -2 & 8 & 0 & -9 \\ -9 & 1 & -7 & 5 \\ 3 & -14 & 11 & -16 \end{bmatrix}, \qquad b = \begin{bmatrix} -23 \\ -69 \\ 36 \\ 84 \end{bmatrix}, \alpha = 5, \alpha = 6.$$

N 75

$$A = \begin{bmatrix} a & -9 & -3 & -9 \\ -8 & 9 & 7 & 1 \\ 7 & 5 & -9 & 0 \\ -28 & 45 & 19 & 37 \end{bmatrix}, \qquad b = \begin{bmatrix} 27 \\ -15 \\ -8 \\ -155 \end{bmatrix}, \alpha = 5, \alpha = 6.$$

N 76

$$A = \begin{bmatrix} -5 & 8 & a & -3 \\ -3 & 3 & 0 & -4 \\ 9 & -7 & 9 & -8 \\ 24 & -31 & 36 & 1 \end{bmatrix}, \qquad b = \begin{bmatrix} 11 \\ -12 \\ -133 \\ -154 \end{bmatrix}, \alpha = -9, \alpha = -5.$$

N 77

$$A = \begin{bmatrix} -2 & a & -1 & -4 \\ 0 & -8 & 4 & 7 \\ -2 & -2 & -4 & 2 \\ 4 & -18 & 6 & 15 \end{bmatrix}, \qquad b = \begin{bmatrix} -19 \\ 8 \\ 52 \\ 34 \end{bmatrix}, \alpha = 5, \alpha = 8.$$

N 78

$$A = \begin{bmatrix} -5 & 5 & a & -4 \\ 4 & -3 & -9 & 8 \\ -4 & 2 & -9 & -7 \\ 16 & -18 & -21 & 9 \end{bmatrix}, \qquad b = \begin{bmatrix} -41 \\ 56 \\ -138 \\ 86 \end{bmatrix}, \alpha = 3, \alpha = 6.$$

N 79

$$A = \begin{bmatrix} a & 8 & -7 & 4 \\ -2 & 5 & -3 & -4 \\ 4 & -1 & -2 & -9 \\ -14 & -27 & 25 & -20 \end{bmatrix}, \qquad b = \begin{bmatrix} -77 \\ -68 \\ -101 \\ 220 \end{bmatrix}, \alpha = 3, \alpha = 4.$$

$$A = \begin{bmatrix} a & 1 & 0 & -4 \\ 4 & -8 & 6 & -1 \\ -7 & 0 & -4 & -7 \\ -28 & -3 & -4 & 5 \end{bmatrix}, \qquad b = \begin{bmatrix} -2 \\ 10 \\ 63 \\ 60 \end{bmatrix}, \alpha = 7, \alpha = 8.$$

$$A = \begin{bmatrix} 2 & 5 & -6 & 0 \\ 1 & a & 5 & -6 \\ 5 & 2 & 7 & 6 \\ -1 & -1 & -21 & 18 \end{bmatrix}, \qquad b = \begin{bmatrix} -75 \\ -2 \\ -3 \\ -114 \end{bmatrix}, \alpha = 2, \alpha = 5.$$

N 82

$$A = \begin{bmatrix} 7 & 1 & 1 & -4 \\ a & 1 & -2 & -4 \\ 4 & -1 & 7 & -6 \\ -1 & -1 & 5 & 4 \end{bmatrix}, \qquad b = \begin{bmatrix} 22 \\ -6 \\ 46 \\ 50 \end{bmatrix}, \alpha = 4, \alpha = 6.$$

N 83

$$A = \begin{bmatrix} a & 6 & 6 & 1 \\ 8 & 5 & 3 & 8 \\ -5 & 0 & -2 & 7 \\ 31 & -24 & -26 & 3 \end{bmatrix}, \qquad b = \begin{bmatrix} -108 \\ -71 \\ -52 \\ 428 \end{bmatrix}, \alpha = -9, \alpha = -6.$$

N 84

$$A = \begin{bmatrix} 2 & 4 & a & -8 \\ 5 & 0 & -2 & -4 \\ 1 & -4 & 3 & 5 \\ -3 & -12 & 3 & 21 \end{bmatrix}, \qquad b = \begin{bmatrix} -51 \\ -12 \\ 6 \\ 78 \end{bmatrix}, \alpha = 0, \alpha = 3.$$

N 85

$$A = \begin{bmatrix} -2 & -1 & 1 & -5 \\ -9 & a & 0 & 5 \\ 1 & 1 & -1 & 8 \\ 19 & -7 & -1 & -2 \end{bmatrix}, \qquad b = \begin{bmatrix} -41 \\ -6 \\ 43 \\ 83 \end{bmatrix}, \alpha = 4, \alpha = 6.$$

N 86

$$A = \begin{bmatrix} -9 & 4 & -9 & -4 \\ a & -3 & 0 & -6 \\ 2 & -6 & -4 & 7 \\ 18 & 6 & -4 & 31 \end{bmatrix}, \qquad b = \begin{bmatrix} 40 \\ -3 \\ -2 \\ -22 \end{bmatrix}, \alpha = -4, \alpha = 0.$$

N 87

$$A = \begin{bmatrix} -9 & 7 & 2 & -2 \\ a & 7 & 8 & -6 \\ 4 & -3 & 7 & -8 \\ -7 & -7 & -14 & 10 \end{bmatrix}, \qquad b = \begin{bmatrix} 11 \\ -11 \\ 42 \\ 25 \end{bmatrix}, \alpha = -1, \alpha = 0.$$

N 88

$$A = \begin{bmatrix} a & 9 & 0 & 5 \\ -6 & 9 & 3 & 3 \\ -1 & 5 & 5 & 2 \\ 15 & -31 & 5 & -18 \end{bmatrix}, \qquad b = \begin{bmatrix} -20 \\ -15 \\ 16 \\ 144 \end{bmatrix}, \alpha = -4, \alpha = -1.$$

$$A = \begin{bmatrix} 7 & 5 & a & 9 \\ 6 & -5 & -2 & 4 \\ 0 & 0 & -9 & -7 \\ -21 & -15 & 9 & -34 \end{bmatrix}, \qquad b = \begin{bmatrix} -126 \\ -55 \\ -3 \\ 420 \end{bmatrix}, \alpha = -6, \alpha = -3.$$

$$A = \begin{bmatrix} 0 & -1 & -5 & -9 \\ -5 & a & 5 & -2 \\ 7 & 5 & 2 & 4 \\ 20 & 31 & -25 & -1 \end{bmatrix}, \qquad b = \begin{bmatrix} 28 \\ -28 \\ 56 \\ 212 \end{bmatrix}, \alpha = -8, \alpha = -5.$$

N 91

$$A = \begin{bmatrix} a & 5 & 5 & 5 \\ -5 & -6 & 8 & -9 \\ -7 & 3 & 6 & 0 \\ -29 & -21 & -7 & -24 \end{bmatrix}, \qquad b = \begin{bmatrix} 110 \\ 68 \\ 7 \\ -214 \end{bmatrix}, \alpha = 8, \alpha = 10.$$

N 92

$$A = \begin{bmatrix} -1 & 3 & -5 & -5 \\ -4 & a & 8 & -2 \\ 0 & 3 & 5 & -2 \\ 15 & 11 & -37 & 3 \end{bmatrix}, \qquad b = \begin{bmatrix} 29 \\ -32 \\ -26 \\ 173 \end{bmatrix}, \alpha = -2, \alpha = -1.$$

N 93

$$A = \begin{bmatrix} a & -3 & -6 & 3 \\ 9 & -2 & -6 & -4 \\ 5 & -2 & -8 & -6 \\ -19 & 10 & 18 & -16 \end{bmatrix}, \qquad b = \begin{bmatrix} 27 \\ -36 \\ -40 \\ -160 \end{bmatrix}, \alpha = 7, \alpha = 9.$$

N 94

$$A = \begin{bmatrix} 6 & -9 & -1 & -1 \\ 3 & a & -2 & 3 \\ -8 & -7 & -4 & 7 \\ -14 & -17 & 0 & 1 \end{bmatrix}, \qquad b = \begin{bmatrix} 97 \\ -48 \\ -23 \\ 25 \end{bmatrix}, \alpha = 5, \alpha = 9.$$

N 95

$$A = \begin{bmatrix} 2 & 5 & -9 & -5 \\ -1 & -1 & a & 5 \\ 8 & 6 & 4 & 8 \\ 10 & 8 & -10 & -2 \end{bmatrix}, \qquad b = \begin{bmatrix} 44 \\ -38 \\ -36 \\ 48 \end{bmatrix}, \alpha = 7, \alpha = 11.$$

N 96

$$A = \begin{bmatrix} -9 & -9 & 4 & -2 \\ 9 & -8 & a & 8 \\ -9 & 5 & 0 & -2 \\ -27 & 7 & 12 & -18 \end{bmatrix}, \qquad b = \begin{bmatrix} -31 \\ 178 \\ -121 \\ -423 \end{bmatrix}, \alpha = -4, \alpha = -2.$$

N 97

$$A = \begin{bmatrix} -8 & a & 1 & -7 \\ -8 & -7 & -3 & -3 \\ 7 & -5 & 1 & 9 \\ 8 & -5 & -5 & 11 \end{bmatrix}, \qquad b = \begin{bmatrix} -19 \\ -87 \\ 17 \\ -33 \end{bmatrix}, \alpha = -1, \alpha = 1.$$

$$A = \begin{bmatrix} -9 & 3 & -7 & -7 \\ 3 & a & 9 & -9 \\ -3 & -7 & 3 & 8 \\ -12 & -13 & -24 & 35 \end{bmatrix}, \qquad b = \begin{bmatrix} -19 \\ 57 \\ -33 \\ -186 \end{bmatrix}, \alpha = 2, \alpha = 3.$$

$$A = \begin{bmatrix} -1 & -8 & a & -2 \\ 2 & -2 & 5 & 0 \\ -3 & 3 & -8 & -7 \\ 0 & 27 & 4 & -1 \end{bmatrix}, \qquad b = \begin{bmatrix} 60 \\ -14 \\ 32 \\ -220 \end{bmatrix}, \alpha = -4, \alpha = -1.$$

$$A = \begin{bmatrix} -1 & a & -8 & 1 \\ 5 & 9 & 7 & -4 \\ 0 & -6 & -7 & 8 \\ 4 & -2 & 25 & 4 \end{bmatrix}, \qquad b = \begin{bmatrix} 35 \\ -67 \\ 93 \\ -47 \end{bmatrix}, \alpha = -1, \alpha = 0.$$

N 101

$$A = \begin{bmatrix} 1 & -2 & -7 & 4 \\ 4 & -3 & a & -1 \\ -5 & -5 & 5 & -4 \\ -7 & 4 & -5 & 6 \end{bmatrix}, \qquad b = \begin{bmatrix} 77 \\ 16 \\ 8 \\ 31 \end{bmatrix}, \alpha = -1, \alpha = 0.$$

N 102

$$A = \begin{bmatrix} 9 & -7 & 2 & -7 \\ a & 9 & -7 & -2 \\ -2 & 7 & 5 & -5 \\ -18 & -11 & 19 & -1 \end{bmatrix}, \qquad b = \begin{bmatrix} 26 \\ -100 \\ -46 \\ 124 \end{bmatrix}, \alpha = 8, \alpha = 11.$$

N 103

$$A = \begin{bmatrix} 8 & a & 8 & 7 \\ 1 & -7 & 3 & 9 \\ 1 & -1 & 9 & -1 \\ -23 & 2 & -21 & -12 \end{bmatrix}, \qquad b = \begin{bmatrix} 29 \\ 48 \\ 48 \\ -69 \end{bmatrix}, \alpha = -3, \alpha = -1.$$

N 104

$$A = \begin{bmatrix} 8 & a & 8 & 3 \\ 0 & 5 & 3 & -4 \\ 3 & -4 & 2 & 1 \\ -29 & 32 & -30 & -11 \end{bmatrix}, \qquad b = \begin{bmatrix} 97 \\ 33 \\ 21 \\ -327 \end{bmatrix}, \alpha = -9, \alpha = -7.$$

N 105

$$A = \begin{bmatrix} -1 & -9 & 8 & 4 \\ a & 9 & 4 & -7 \\ 4 & 2 & 1 & -5 \\ -13 & -36 & -4 & 25 \end{bmatrix}, \qquad b = \begin{bmatrix} 95 \\ -74 \\ -59 \\ 290 \end{bmatrix}, \alpha = 4, \alpha = 5.$$

N 106

$$A = \begin{bmatrix} 8 & -3 & -7 & -5 \\ -5 & a & 1 & -3 \\ -4 & -1 & 1 & 9 \\ 23 & -21 & -10 & 4 \end{bmatrix}, \qquad b = \begin{bmatrix} 18 \\ -66 \\ 56 \\ 192 \end{bmatrix}, \alpha = 6, \alpha = 7.$$

$$A = \begin{bmatrix} -5 & -9 & a & 2 \\ 7 & 6 & -3 & 1 \\ -2 & -8 & -6 & 6 \\ 13 & 19 & -24 & 0 \end{bmatrix}, \qquad b = \begin{bmatrix} -26 \\ 33 \\ 102 \\ 156 \end{bmatrix}, \alpha = 6, \alpha = 7.$$

$$A = \begin{bmatrix} 3 & 6 & -2 & -5 \\ a & 0 & -1 & -9 \\ -1 & 0 & -3 & -7 \\ -15 & 6 & 1 & 22 \end{bmatrix}, \qquad b = \begin{bmatrix} 54 \\ 83 \\ 19 \\ -159 \end{bmatrix}, \alpha = 6, \alpha = 8.$$

N 109

$$A = \begin{bmatrix} -9 & -8 & -8 & 7 \\ a & -2 & -1 & 0 \\ 2 & -5 & 5 & -9 \\ -3 & -2 & -5 & 7 \end{bmatrix}, \qquad b = \begin{bmatrix} -42 \\ -17 \\ -29 \\ -18 \end{bmatrix}, \alpha = -2, \alpha = 1.$$

N 110

$$A = \begin{bmatrix} -9 & 0 & -7 & -4 \\ 1 & a & 8 & 4 \\ -8 & -1 & -6 & -5 \\ -13 & 36 & -39 & -20 \end{bmatrix}, \qquad b = \begin{bmatrix} -56 \\ 30 \\ -54 \\ -288 \end{bmatrix}, \alpha = -9, \alpha = -5.$$

N 111

$$A = \begin{bmatrix} -1 & 5 & 4 & 9 \\ -4 & -6 & a & -2 \\ 4 & -3 & -2 & -5 \\ 20 & 21 & -22 & 3 \end{bmatrix}, \qquad b = \begin{bmatrix} -87 \\ -60 \\ 78 \\ 294 \end{bmatrix}, \alpha = 5, \alpha = 6.$$

N 112

$$A = \begin{bmatrix} -7 & -3 & -3 & 0 \\ -5 & -8 & a & -4 \\ -8 & 7 & 3 & 7 \\ 3 & 13 & -21 & 8 \end{bmatrix}, \qquad b = \begin{bmatrix} 0 \\ -11 \\ 103 \\ 28 \end{bmatrix}, \alpha = 9, \alpha = 10.$$

N 113

$$A = \begin{bmatrix} 1 & a & 8 & 6 \\ 2 & 1 & 1 & -9 \\ 3 & 2 & 8 & 4 \\ -1 & -2 & -23 & -27 \end{bmatrix}, \qquad b = \begin{bmatrix} 21 \\ 33 \\ 35 \\ 6 \end{bmatrix}, \alpha = 1, \alpha = 3.$$

N 114

$$A = \begin{bmatrix} a & 8 & 5 & 9 \\ -1 & -3 & 8 & 4 \\ -5 & -8 & 3 & -5 \\ -37 & -40 & -17 & -41 \end{bmatrix}, \qquad b = \begin{bmatrix} -51 \\ -18 \\ 31 \\ 243 \end{bmatrix}, \alpha = 8, \alpha = 9.$$

N 115

$$A = \begin{bmatrix} -7 & -8 & -3 & -2 \\ -2 & a & -4 & 0 \\ -5 & 7 & -4 & 1 \\ -1 & 21 & 4 & 1 \end{bmatrix}, \qquad b = \begin{bmatrix} 12 \\ 10 \\ 105 \\ 149 \end{bmatrix}, \alpha = -7, \alpha = -3.$$

$$A = \begin{bmatrix} a & 4 & 4 & -5 \\ -7 & 5 & -2 & -8 \\ 7 & 7 & -8 & 0 \\ -21 & -3 & -10 & 2 \end{bmatrix}, \qquad b = \begin{bmatrix} -44 \\ 73 \\ 9 \\ 155 \end{bmatrix}, \alpha = 7, \alpha = 8.$$

$$A = \begin{bmatrix} a & 5 & -4 & -8 \\ -2 & -1 & 9 & -3 \\ 5 & -7 & -9 & 1 \\ -34 & -21 & 25 & 29 \end{bmatrix}, \qquad b = \begin{bmatrix} 41 \\ 39 \\ 43 \\ -29 \end{bmatrix}, \alpha = 8, \alpha = 11.$$

N 118

$$A = \begin{bmatrix} -6 & 4 & a & -4 \\ 1 & -1 & -4 & 6 \\ 1 & 1 & -6 & -4 \\ 25 & -15 & 30 & 12 \end{bmatrix}, \qquad b = \begin{bmatrix} -16 \\ 11 \\ 35 \\ 63 \end{bmatrix}, \alpha = -9, \alpha = -6.$$

N 119

$$A = \begin{bmatrix} 9 & -3 & -1 & -7 \\ 5 & -9 & a & -4 \\ -1 & 7 & -4 & -6 \\ -6 & 24 & 20 & 5 \end{bmatrix}, \qquad b = \begin{bmatrix} 102 \\ 41 \\ -21 \\ 60 \end{bmatrix}, \alpha = -7, \alpha = -4.$$

N 120

$$A = \begin{bmatrix} 4 & -6 & -7 & 5 \\ a & -7 & -1 & 0 \\ -1 & -3 & 0 & -7 \\ 16 & 8 & -5 & 5 \end{bmatrix}, \qquad b = \begin{bmatrix} -20 \\ -47 \\ -23 \\ 116 \end{bmatrix}, \alpha = -6, \alpha = -3.$$

N 121

$$A = \begin{bmatrix} -4 & 9 & -5 & 2 \\ 8 & 7 & a & -4 \\ -9 & -3 & 3 & 9 \\ -33 & -24 & 21 & 21 \end{bmatrix}, \qquad b = \begin{bmatrix} -35 \\ -6 \\ 12 \\ 84 \end{bmatrix}, \alpha = -6, \alpha = -4.$$

N 122

$$A = \begin{bmatrix} a & 8 & 9 & -3 \\ -3 & 9 & 6 & -6 \\ -7 & -4 & 3 & -6 \\ 21 & -36 & -33 & 6 \end{bmatrix}, \qquad b = \begin{bmatrix} -39 \\ -42 \\ 52 \\ 168 \end{bmatrix}, \alpha = -7, \alpha = -5.$$

N 123

$$A = \begin{bmatrix} -4 & a & -3 & -4 \\ -2 & 2 & -6 & 4 \\ -4 & -5 & 1 & 4 \\ 10 & 11 & 3 & 16 \end{bmatrix}, \qquad b = \begin{bmatrix} -41 \\ -40 \\ -37 \\ 83 \end{bmatrix}, \alpha = -3, \alpha = -1.$$

N 124

$$A = \begin{bmatrix} -3 & 5 & 4 & -6 \\ a & 7 & -1 & -3 \\ 8 & -5 & 7 & -5 \\ -19 & -9 & 6 & 0 \end{bmatrix}, \qquad b = \begin{bmatrix} 54 \\ 141 \\ 101 \\ -192 \end{bmatrix}, \alpha = 8, \alpha = 10.$$

$$A = \begin{bmatrix} -6 & -7 & -2 & -9 \\ -1 & a & -7 & 3 \\ -7 & 3 & 2 & -7 \\ -5 & -13 & 16 & -13 \end{bmatrix}, \qquad b = \begin{bmatrix} -27 \\ 20 \\ -41 \\ -81 \end{bmatrix}, \alpha = 8, \alpha = 9.$$

$$A = \begin{bmatrix} -9 & -1 & -1 & -6 \\ a & 5 & 4 & 4 \\ 1 & -3 & -4 & -8 \\ 12 & -16 & -13 & -18 \end{bmatrix}, \qquad b = \begin{bmatrix} -87 \\ -75 \\ 5 \\ 162 \end{bmatrix}, \alpha = -7, \alpha = -6.$$

N 127

$$A = \begin{bmatrix} -7 & a & -9 & -6 \\ -8 & -9 & -2 & -1 \\ -4 & 4 & 4 & 7 \\ 20 & -9 & 34 & 23 \end{bmatrix}, \qquad b = \begin{bmatrix} -5 \\ 65 \\ -21 \\ -11 \end{bmatrix}, \alpha = 0, \alpha = 4.$$

N 128

$$A = \begin{bmatrix} 9 & 7 & -9 & 8 \\ a & -4 & -6 & 3 \\ -6 & -5 & -8 & -9 \\ 6 & 7 & 10 & -18 \end{bmatrix}, \qquad b = \begin{bmatrix} -24 \\ -6 \\ 39 \\ 117 \end{bmatrix}, \alpha = -4, \alpha = 0.$$

N 129

$$A = \begin{bmatrix} -1 & -9 & 2 & 3 \\ a & -3 & 7 & -6 \\ -5 & 3 & -2 & -1 \\ -11 & -3 & -12 & 15 \end{bmatrix}, \qquad b = \begin{bmatrix} 70 \\ -25 \\ 2 \\ 104 \end{bmatrix}, \alpha = 5, \alpha = 7.$$

N 130

$$A = \begin{bmatrix} a & -8 & 0 & 1 \\ 1 & 1 & 7 & 0 \\ -8 & 8 & -8 & 2 \\ 4 & 24 & -8 & 0 \end{bmatrix}, \qquad b = \begin{bmatrix} -41 \\ -32 \\ -2 \\ 128 \end{bmatrix}, \alpha = -6, \alpha = -3.$$

N 131

$$A = \begin{bmatrix} a & 5 & 2 & 3 \\ 8 & 1 & 4 & 2 \\ 6 & 3 & 7 & 9 \\ -24 & -19 & -4 & -10 \end{bmatrix}, \qquad b = \begin{bmatrix} 105 \\ 78 \\ 100 \\ -246 \end{bmatrix}, \alpha = 8, \alpha = 11.$$

N 132

$$A = \begin{bmatrix} -5 & 4 & -4 & 4 \\ a & 8 & -3 & -2 \\ 6 & 4 & -8 & 3 \\ 1 & -12 & 2 & 8 \end{bmatrix}, \qquad b = \begin{bmatrix} -27 \\ 23 \\ 29 \\ -61 \end{bmatrix}, \alpha = -3, \alpha = -1.$$

N 133

$$A = \begin{bmatrix} 8 & -5 & a & -3 \\ 1 & 6 & 8 & 6 \\ -4 & 4 & -4 & 2 \\ -28 & 19 & 11 & 11 \end{bmatrix}, \qquad b = \begin{bmatrix} 77 \\ -51 \\ -16 \\ -292 \end{bmatrix}, \alpha = -5, \alpha = -2.$$

$$A = \begin{bmatrix} 3 & a & -5 & -8 \\ 1 & 7 & -6 & 6 \\ -2 & 0 & 8 & 3 \\ -5 & 9 & 4 & 22 \end{bmatrix}, \qquad b = \begin{bmatrix} 90 \\ 38 \\ -54 \\ -106 \end{bmatrix}, \alpha = -1, \alpha = 1.$$

$$A = \begin{bmatrix} 1 & 8 & -7 & 5 \\ -5 & a & -7 & 8 \\ 1 & -4 & 1 & -3 \\ 11 & 4 & 7 & -11 \end{bmatrix}, \qquad b = \begin{bmatrix} -88 \\ -26 \\ 16 \\ -44 \end{bmatrix}, \alpha = 2, \alpha = 3.$$

$$A = \begin{bmatrix} 1 & 8 & a & 5 \\ 8 & 3 & 5 & -5 \\ 4 & 0 & -7 & 9 \\ 2 & -16 & 5 & -1 \end{bmatrix}, \qquad b = \begin{bmatrix} 59 \\ -7 \\ 93 \\ -41 \end{bmatrix}, \alpha = -6, \alpha = -2.$$

N 137

$$A = \begin{bmatrix} -4 & -7 & a & -4 \\ -6 & -9 & 4 & -5 \\ -5 & 8 & 5 & 9 \\ 3 & 22 & -11 & 17 \end{bmatrix}, \qquad b = \begin{bmatrix} 43 \\ -14 \\ 93 \\ 49 \end{bmatrix}, \alpha = 8, \alpha = 11.$$

N 138

$$A = \begin{bmatrix} 5 & 9 & 8 & -3 \\ 9 & a & -5 & 0 \\ 1 & -7 & 8 & 9 \\ -17 & 7 & 18 & 9 \end{bmatrix}, \qquad b = \begin{bmatrix} 13 \\ -34 \\ 133 \\ 171 \end{bmatrix}, \alpha = -7, \alpha = -4.$$

N 139

$$A = \begin{bmatrix} 9 & a & -4 & 4 \\ 1 & -9 & -8 & -9 \\ -7 & -8 & 6 & -9 \\ -35 & -33 & 8 & -25 \end{bmatrix}, \qquad b = \begin{bmatrix} -41 \\ 62 \\ 31 \\ 218 \end{bmatrix}, \alpha = 6, \alpha = 8.$$

N 140

$$A = \begin{bmatrix} 1 & -5 & a & 3 \\ -2 & -4 & 6 & 2 \\ 6 & -5 & 0 & -9 \\ -4 & 6 & -8 & -4 \end{bmatrix}, \qquad b = \begin{bmatrix} 69 \\ 62 \\ -78 \\ -22 \end{bmatrix}, \alpha = 7, \alpha = 10.$$

N 141

$$A = \begin{bmatrix} 9 & 0 & a & -5 \\ 8 & -6 & 0 & 1 \\ 3 & 2 & -8 & -5 \\ -24 & 2 & 10 & 10 \end{bmatrix}, \qquad b = \begin{bmatrix} -157 \\ -68 \\ -132 \\ 366 \end{bmatrix}, \alpha = -6, \alpha = -5.$$

N 142

$$A = \begin{bmatrix} 2 & -5 & -7 & -3 \\ 1 & 6 & a & 7 \\ -1 & -6 & -2 & -5 \\ -2 & -29 & -23 & -31 \end{bmatrix}, \qquad b = \begin{bmatrix} -18 \\ 39 \\ -29 \\ -190 \end{bmatrix}, \alpha = 4, \alpha = 8.$$

$$A = \begin{bmatrix} -8 & -5 & 1 & -3 \\ a & 4 & 2 & -5 \\ -8 & -5 & 3 & 0 \\ 20 & -21 & -7 & 17 \end{bmatrix}, \qquad b = \begin{bmatrix} 10 \\ -61 \\ 30 \\ 262 \end{bmatrix}, \alpha = -7, \alpha = -5.$$

$$A = \begin{bmatrix} 4 & a & 8 & -3 \\ -6 & -4 & 4 & -3 \\ 4 & 2 & -2 & 2 \\ -18 & -28 & -20 & 6 \end{bmatrix}, \qquad b = \begin{bmatrix} 173 \\ 25 \\ -16 \\ -446 \end{bmatrix}, \alpha = 8, \alpha = 10.$$

N 145

$$A = \begin{bmatrix} -9 & a & -4 & -5 \\ -6 & 3 & -3 & 0 \\ -2 & 3 & -5 & 6 \\ 16 & -1 & 3 & 16 \end{bmatrix}, \qquad b = \begin{bmatrix} 114 \\ 45 \\ -3 \\ -183 \end{bmatrix}, \alpha = 2, \alpha = 5.$$

N 146

$$A = \begin{bmatrix} -7 & 4 & 7 & 3 \\ 9 & 7 & a & -8 \\ 3 & 5 & 6 & 1 \\ -25 & -10 & 23 & 19 \end{bmatrix}, \qquad b = \begin{bmatrix} 57 \\ -11 \\ 25 \\ 63 \end{bmatrix}, \alpha = -8, \alpha = -4.$$

N 147

$$A = \begin{bmatrix} 2 & -3 & -3 & 6 \\ -4 & a & 6 & 6 \\ 3 & -4 & 1 & 4 \\ 19 & -28 & -23 & -20 \end{bmatrix}, \qquad b = \begin{bmatrix} 63 \\ 54 \\ 15 \\ -57 \end{bmatrix}, \alpha = 6, \alpha = 10.$$

N 148

$$A = \begin{bmatrix} 8 & -8 & 2 & 8 \\ 4 & -7 & a & 0 \\ -7 & -9 & 0 & -8 \\ -4 & 13 & 20 & 8 \end{bmatrix}, \qquad b = \begin{bmatrix} -30 \\ 4 \\ -55 \\ -51 \end{bmatrix}, \alpha = -6, \alpha = -5.$$

N 149

$$A = \begin{bmatrix} 9 & -2 & 3 & -8 \\ a & 4 & -8 & -8 \\ 9 & 3 & -5 & -9 \\ 17 & -18 & 35 & 24 \end{bmatrix}, \qquad b = \begin{bmatrix} 77 \\ -60 \\ -7 \\ 381 \end{bmatrix}, \alpha = -2, \alpha = 2.$$

$$A = \begin{bmatrix} -8 & -5 & 5 & 6 \\ 3 & a & 3 & 6 \\ -1 & 4 & 0 & -5 \\ -13 & 12 & -12 & -29 \end{bmatrix}, \qquad b = \begin{bmatrix} -135 \\ -30 \\ 26 \\ 154 \end{bmatrix}, \alpha = -2, \alpha = 0.$$