```
> # Set the parameters and functions
c :='c':
d :='d':
u :='u':
E4 := (4572 c − 19890) u^7 + (60582 c^2 + 36675 − 7620 d^3 − 153630 d) u^6 + (6096 c^5 + 205290 c^3
      + 220050 c − 44808 d^4 − 415215 d^2) u^5 + (11354 c^6 + 300540 c^4 + 550125 c^2 - 508 d^7
      − 97692 d^5 − 518850 d^3) u^4 + (6858 c^7 + 233370 c^5 + 733500 c^3 − 75915 d^6 − 301950 d^4) u^3
      + (75252 c^6 + 550125 c^4 − 21336 d^7 − 93690 d^5) u^2 + (220050 c^5 - 6858 d^7 − 63405 d^6) u
      + 36675 c^6 − 34290 d^7 :
print(Output);
# find Sturm's sequence``
 for j from 0 by 1 to 179 do
 c := 404/100 + (j+1)/180 · (405/100 − 404/100) :
 d := 404/100 + j/180 · (405/100 - 404/100) :
u :='u':
S := sturmseq(E4, u);
signnum := sturm(S, u, 4, 57/10);
 with(ArrayTools) :
 Slength := Size(S, 2);
X := Array(1 .. Slength);
Y := Array(1 .. Slength);

    for i from 1 to Slength do
  # Find sgn [s'_{E_{4,i}}(0)]
      u := 4;
      X[i] := signum(S[i]);
  # Find sgn [s'_{E_{4,i}}(57/10)]
      u := 57/10 :
      Y[i] := signum(S[i]);
    end do;
 # show the final results
print(['a'[j],'a'[j+1], sgn(s['E'[4,j]](4)), sgn(s['E'[4,j]](5.7))] = [evalf(d, 5), evalf(c, 5), X,
      Y]) ;
end do:
```

Output

$$\left[a_0, a_1, sgn\left(s_{E_{4,0}}(4)\right), sgn\left(s_{E_{4,0}}(5.7)\right)\right] = \left[4.0400, 4.0401, \left[\begin{array}{cccccccc} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{array}\right], \left[\begin{array}{cccccccc} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{array}\right]\right]$$

$$\left[a_1, a_2, sgn\left(s_{E_{4,1}}(4)\right), sgn\left(s_{E_{4,1}}(5.7)\right)\right] = \left[4.0401, 4.0401, \left[\begin{array}{cccccccc} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{array}\right], \left[\begin{array}{cccccccc} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{array}\right]\right]$$

$$\left[a_2, a_3, sgn\left(s_{E_{4,2}}(4)\right), sgn\left(s_{E_{4,2}}(5.7)\right)\right] = \left[4.0401, 4.0402, \left[\begin{array}{cccccccc} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{array}\right], \left[\begin{array}{cccccccc} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{array}\right]\right]$$

$$\left[a_3, a_4, sgn\left(s_{E_{4,3}}(4)\right), sgn\left(s_{E_{4,3}}(5.7)\right)\right] = \left[4.0402, 4.0402, \left[\begin{array}{cccccccc} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{array}\right], \left[\begin{array}{cccccccc} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{array}\right]\right]$$

$$\left[a_4, a_5, sgn\left(s_{E_{4,4}}(4)\right), sgn\left(s_{E_{4,4}}(5.7)\right)\right] = \left[4.0402, 4.0403, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_5, a_6, sgn\left(s_{E_{4,5}}(4)\right), sgn\left(s_{E_{4,5}}(5.7)\right)\right] = \left[4.0403, 4.0403, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_6, a_7, sgn\left(s_{E_{4,6}}(4)\right), sgn\left(s_{E_{4,6}}(5.7)\right)\right] = \left[4.0403, 4.0404, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_7, a_8, sgn\left(s_{E_{4,7}}(4)\right), sgn\left(s_{E_{4,7}}(5.7)\right)\right] = \left[4.0404, 4.0404, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_8, a_9, sgn\left(s_{E_{4,8}}(4)\right), sgn\left(s_{E_{4,8}}(5.7)\right)\right] = \left[4.0404, 4.0405, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_9, a_{10}, sgn\left(s_{E_{4,9}}(4)\right), sgn\left(s_{E_{4,9}}(5.7)\right)\right] = \left[4.0405, 4.0406, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{10}, a_{11}, sgn\left(s_{E_{4,10}}(4)\right), sgn\left(s_{E_{4,10}}(5.7)\right)\right] = \left[4.0406, 4.0406, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{11}, a_{12}, sgn\left(s_{E_{4,11}}(4)\right), sgn\left(s_{E_{4,11}}(5.7)\right)\right] = \left[4.0406, 4.0407, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{12}, a_{13}, sgn\left(s_{E_{4,12}}(4)\right), sgn\left(s_{E_{4,12}}(5.7)\right)\right] = \left[4.0407, 4.0407, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{13}, a_{14}, sgn\left(s_{E_{4,13}}(4)\right), sgn\left(s_{E_{4,13}}(5.7)\right)\right] = \left[4.0407, 4.0408, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{14}, a_{15}, sgn\left(s_{E_{4,14}}(4)\right), sgn\left(s_{E_{4,14}}(5.7)\right)\right] = \left[4.0408, 4.0408, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{15}, a_{16}, sgn\left(s_{E_{4,15}}(4)\right), sgn\left(s_{E_{4,15}}(5.7)\right)\right] = \left[4.0408, 4.0409, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{16}, a_{17}, sgn\left(s_{E_{4,16}}(4)\right), sgn\left(s_{E_{4,16}}(5.7)\right)\right] = \left[4.0409, 4.0409, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{17}, a_{18}, sgn\left(s_{E_{4,17}}(4)\right), sgn\left(s_{E_{4,17}}(5.7)\right)\right] = \left[4.0409, 4.0410, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{18}, a_{19}, sgn\left(s_{E_{4,18}}(4)\right), sgn\left(s_{E_{4,18}}(5.7)\right)\right] = \left[4.0410, 4.0411, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{19}, a_{20}, sgn\left(s_{E_{4,19}}(4)\right), sgn\left(s_{E_{4,19}}(5.7)\right)\right] = \left[4.0411, 4.0411, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{20}, a_{21}, sgn\left(s_{E_{4,20}}(4)\right), sgn\left(s_{E_{4,20}}(5.7)\right)\right] = \left[4.0411, 4.0412, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{21}, a_{22}, sgn\left(s_{E_{4,21}}(4)\right), sgn\left(s_{E_{4,21}}(5.7)\right)\right] = \left[4.0412, 4.0412, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{22}, a_{23}, sgn\left(s_{E_{4,22}}(4)\right), sgn\left(s_{E_{4,22}}(5.7)\right)\right] = \left[4.0412, 4.0413, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{23}, a_{24}, sgn\left(s_{E_{4,23}}(4)\right), sgn\left(s_{E_{4,23}}(5.7)\right)\right] = \left[4.0413, 4.0413, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{24}, a_{25}, sgn\left(s_{E_{4,24}}(4)\right), sgn\left(s_{E_{4,24}}(5.7)\right)\right] = \left[4.0413, 4.0414, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{25}, a_{26}, sgn\left(s_{E_{4,25}}(4)\right), sgn\left(s_{E_{4,25}}(5.7)\right)\right] = \left[4.0414, 4.0414, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{26}, a_{27}, sgn\left(s_{E_{4,26}}(4)\right), sgn\left(s_{E_{4,26}}(5.7)\right)\right] = \left[4.0414, 4.0415, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{27}, a_{28}, sgn\left(s_{E_{4,27}}(4)\right), sgn\left(s_{E_{4,27}}(5.7)\right)\right] = \left[4.0415, 4.0416, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{28}, a_{29}, sgn\left(s_{E_{4,28}}(4)\right), sgn\left(s_{E_{4,28}}(5.7)\right)\right] = \left[4.0416, 4.0416, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{29}, a_{30}, sgn\left(s_{E_{4,29}}(4)\right), sgn\left(s_{E_{4,29}}(5.7)\right)\right] = \left[4.0416, 4.0417, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{30}, a_{31}, sgn\left(s_{E_{4,30}}(4)\right), sgn\left(s_{E_{4,30}}(5.7)\right)\right] = \left[4.0417, 4.0417, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{31}, a_{32}, sgn\left(s_{E_{4,31}}(4)\right), sgn\left(s_{E_{4,31}}(5.7)\right)\right] = \left[4.0417, 4.0418, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{32}, a_{33}, sgn\left(s_{E_{4,32}}(4)\right), sgn\left(s_{E_{4,32}}(5.7)\right)\right] = \left[4.0418, 4.0418, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{33}, a_{34}, sgn\left(s_{E_{4,33}}(4)\right), sgn\left(s_{E_{4,33}}(5.7)\right)\right] = \left[4.0418, 4.0419, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{34}, a_{35}, sgn\left(s_{E_{4,34}}(4)\right), sgn\left(s_{E_{4,34}}(5.7)\right)\right] = \left[4.0419, 4.0419, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{35}, a_{36}, sgn\left(s_{E_{4,35}}(4)\right), sgn\left(s_{E_{4,35}}(5.7)\right)\right] = \left[4.0419, 4.0420, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{36}, a_{37}, sgn\left(s_{E_{4,36}}(4)\right), sgn\left(s_{E_{4,36}}(5.7)\right)\right] = \left[4.0420, 4.0421, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{37}, a_{38}, sgn\left(s_{E_{4,37}}(4)\right), sgn\left(s_{E_{4,37}}(5.7)\right)\right] = \left[4.0421, 4.0421, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{38}, a_{39}, sgn\left(s_{E_{4,38}}(4)\right), sgn\left(s_{E_{4,38}}(5.7)\right)\right] = \left[4.0421, 4.0422, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{39}, a_{40}, sgn\left(s_{E_{4,39}}(4)\right), sgn\left(s_{E_{4,39}}(5.7)\right)\right] = \left[4.0422, 4.0422, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{40}, a_{41}, sgn\left(s_{E_{4,40}}(4)\right), sgn\left(s_{E_{4,40}}(5.7)\right)\right] = \left[4.0422, 4.0423, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{41}, a_{42}, sgn\left(s_{E_{4,41}}(4)\right), sgn\left(s_{E_{4,41}}(5.7)\right)\right] = \left[4.0423, 4.0423, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{42}, a_{43}, sgn\left(s_{E_{4,42}}(4)\right), sgn\left(s_{E_{4,42}}(5.7)\right)\right] = \left[4.0423, 4.0424, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{43}, a_{44}, sgn\left(s_{E_{4,43}}(4)\right), sgn\left(s_{E_{4,43}}(5.7)\right)\right] = \left[4.0424, 4.0424, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{44}, a_{45}, sgn\left(s_{E_{4,44}}(4)\right), sgn\left(s_{E_{4,44}}(5.7)\right)\right] = \left[4.0424, 4.0425, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{45}, a_{46}, sgn\left(s_{E_{4,45}}(4)\right), sgn\left(s_{E_{4,45}}(5.7)\right)\right] = \left[4.0425, 4.0426, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{46}, a_{47}, sgn\left(s_{E_{4,46}}(4)\right), sgn\left(s_{E_{4,46}}(5.7)\right)\right] = \left[4.0426, 4.0426, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{47}, a_{48}, sgn\left(s_{E_{4,47}}(4)\right), sgn\left(s_{E_{4,47}}(5.7)\right)\right] = \left[4.0426, 4.0427, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{48}, a_{49}, sgn\left(s_{E_{4,48}}(4)\right), sgn\left(s_{E_{4,48}}(5.7)\right)\right] = \left[4.0427, 4.0427, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{49}, a_{50}, sgn\left(s_{E_{4,49}}(4)\right), sgn\left(s_{E_{4,49}}(5.7)\right)\right] = \left[4.0427, 4.0428, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{50}, a_{51}, sgn\left(s_{E_{4,50}}(4)\right), sgn\left(s_{E_{4,50}}(5.7)\right)\right] = \left[4.0428, 4.0428, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{51}, a_{52}, sgn\left(s_{E_{4,51}}(4)\right), sgn\left(s_{E_{4,51}}(5.7)\right)\right] = \left[4.0428, 4.0429, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{52}, a_{53}, sgn\left(s_{E_{4,52}}(4)\right), sgn\left(s_{E_{4,52}}(5.7)\right)\right] = \left[4.0429, 4.0429, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{53}, a_{54}, sgn\left(s_{E_{4,53}}(4)\right), sgn\left(s_{E_{4,53}}(5.7)\right)\right] = \left[4.0429, 4.0430, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{54}, a_{55}, sgn\left(s_{E_{4,54}}(4)\right), sgn\left(s_{E_{4,54}}(5.7)\right)\right] = \left[4.0430, 4.0431, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{55}, a_{56}, sgn\left(s_{E_{4,55}}(4)\right), sgn\left(s_{E_{4,55}}(5.7)\right)\right] = \left[4.0431, 4.0431, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{56}, a_{57}, sgn\left(s_{E_{4,56}}(4)\right), sgn\left(s_{E_{4,56}}(5.7)\right)\right] = \left[4.0431, 4.0432, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{57}, a_{58}, sgn\left(s_{E_{4,57}}(4)\right), sgn\left(s_{E_{4,57}}(5.7)\right)\right] = \left[4.0432, 4.0432, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{58}, a_{59}, sgn\left(s_{E_{4,58}}(4)\right), sgn\left(s_{E_{4,58}}(5.7)\right)\right] = \left[4.0432, 4.0433, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{59}, a_{60}, sgn\left(s_{E_{4,59}}(4)\right), sgn\left(s_{E_{4,59}}(5.7)\right)\right] = \left[4.0433, 4.0433, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{60}, a_{61}, sgn\left(s_{E_{4,60}}(4)\right), sgn\left(s_{E_{4,60}}(5.7)\right)\right] = \left[4.0433, 4.0434, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{61}, a_{62}, sgn\left(s_{E_{4,61}}(4)\right), sgn\left(s_{E_{4,61}}(5.7)\right)\right] = \left[4.0434, 4.0434, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{62}, a_{63}, sgn\left(s_{E_{4,62}}(4)\right), sgn\left(s_{E_{4,62}}(5.7)\right)\right] = \left[4.0434, 4.0435, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{63}, a_{64}, sgn\left(s_{E_{4,63}}(4)\right), sgn\left(s_{E_{4,63}}(5.7)\right)\right] = \left[4.0435, 4.0436, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{64}, a_{65}, sgn\left(s_{E_{4,64}}(4)\right), sgn\left(s_{E_{4,64}}(5.7)\right)\right] = \left[4.0436, 4.0436, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{65}, a_{66}, sgn\left(s_{E_{4,65}}(4)\right), sgn\left(s_{E_{4,65}}(5.7)\right)\right] = \left[4.0436, 4.0437, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{66}, a_{67}, sgn\left(s_{E_{4,66}}(4)\right), sgn\left(s_{E_{4,66}}(5.7)\right)\right] = \left[4.0437, 4.0437, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{67}, a_{68}, sgn\left(s_{E_{4,67}}(4)\right), sgn\left(s_{E_{4,67}}(5.7)\right)\right] = \left[4.0437, 4.0438, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{68}, a_{69}, sgn\left(s_{E_{4,68}}(4)\right), sgn\left(s_{E_{4,68}}(5.7)\right)\right] = \left[4.0438, 4.0438, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{69}, a_{70}, sgn\left(s_{E_{4,69}}(4)\right), sgn\left(s_{E_{4,69}}(5.7)\right)\right] = \left[4.0438, 4.0439, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{70}, a_{71}, sgn\left(s_{E_{4,70}}(4)\right), sgn\left(s_{E_{4,70}}(5.7)\right)\right] = \left[4.0439, 4.0439, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{71}, a_{72}, sgn\left(s_{E_{4,71}}(4)\right), sgn\left(s_{E_{4,71}}(5.7)\right)\right] = \left[4.0439, 4.0440, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{72}, a_{73}, sgn\left(s_{E_{4,72}}(4)\right), sgn\left(s_{E_{4,72}}(5.7)\right)\right] = \left[4.0440, 4.0441, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{73}, a_{74}, sgn\left(s_{E_{4,73}}(4)\right), sgn\left(s_{E_{4,73}}(5.7)\right)\right] = \left[4.0441, 4.0441, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{74}, a_{75}, sgn\left(s_{E_{4,74}}(4)\right), sgn\left(s_{E_{4,74}}(5.7)\right)\right] = \left[4.0441, 4.0442, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{75}, a_{76}, sgn\left(s_{E_{4,75}}(4)\right), sgn\left(s_{E_{4,75}}(5.7)\right)\right] = \left[4.0442, 4.0442, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{76}, a_{77}, sgn\left(s_{E_{4,76}}(4)\right), sgn\left(s_{E_{4,76}}(5.7)\right)\right] = \left[4.0442, 4.0443, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{77}, a_{78}, sgn\left(s_{E_{4,77}}(4)\right), sgn\left(s_{E_{4,77}}(5.7)\right)\right] = \left[4.0443, 4.0443, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{78}, a_{79}, sgn\left(s_{E_{4,78}}(4)\right), sgn\left(s_{E_{4,78}}(5.7)\right)\right] = \left[4.0443, 4.0444, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{79}, a_{80}, sgn\left(s_{E_{4,79}}(4)\right), sgn\left(s_{E_{4,79}}(5.7)\right)\right] = \left[4.0444, 4.0444, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{80}, a_{81}, sgn\left(s_{E_{4,80}}(4)\right), sgn\left(s_{E_{4,80}}(5.7)\right)\right] = \left[4.0444, 4.0445, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{81}, a_{82}, sgn\left(s_{E_{4,81}}(4)\right), sgn\left(s_{E_{4,81}}(5.7)\right)\right] = \left[4.0445, 4.0446, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{82}, a_{83}, sgn\left(s_{E_{4,82}}(4)\right), sgn\left(s_{E_{4,82}}(5.7)\right)\right] = \left[4.0446, 4.0446, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{83}, a_{84}, sgn\left(s_{E_{4,83}}(4)\right), sgn\left(s_{E_{4,83}}(5.7)\right)\right] = \left[4.0446, 4.0447, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{84}, a_{85}, sgn\left(s_{E_{4,84}}(4)\right), sgn\left(s_{E_{4,84}}(5.7)\right)\right] = \left[4.0447, 4.0447, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{85}, a_{86}, sgn\left(s_{E_{4,85}}(4)\right), sgn\left(s_{E_{4,85}}(5.7)\right)\right] = \left[4.0447, 4.0448, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{86}, a_{87}, sgn\left(s_{E_{4,86}}(4)\right), sgn\left(s_{E_{4,86}}(5.7)\right)\right] = \left[4.0448, 4.0448, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{87}, a_{88}, sgn\left(s_{E_{4,87}}(4)\right), sgn\left(s_{E_{4,87}}(5.7)\right)\right] = \left[4.0448, 4.0449, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{88}, a_{89}, sgn\left(s_{E_{4,88}}(4)\right), sgn\left(s_{E_{4,88}}(5.7)\right)\right] = \left[4.0449, 4.0449, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{89}, a_{90}, sgn\left(s_{E_{4,89}}(4)\right), sgn\left(s_{E_{4,89}}(5.7)\right)\right] = \left[4.0449, 4.0450, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{90}, a_{91}, sgn\left(s_{E_{4,90}}(4)\right), sgn\left(s_{E_{4,90}}(5.7)\right)\right] = \left[4.0450, 4.0451, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{91}, a_{92}, sgn\left(s_{E_{4,91}}(4)\right), sgn\left(s_{E_{4,91}}(5.7)\right)\right] = \left[4.0451, 4.0451, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{92}, a_{93}, sgn\left(s_{E_{4,92}}(4)\right), sgn\left(s_{E_{4,92}}(5.7)\right)\right] = \left[4.0451, 4.0452, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{93}, a_{94}, sgn\left(s_{E_{4,93}}(4)\right), sgn\left(s_{E_{4,93}}(5.7)\right)\right] = \left[4.0452, 4.0452, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{94}, a_{95}, sgn\left(s_{E_{4,94}}(4)\right), sgn\left(s_{E_{4,94}}(5.7)\right)\right] = \left[4.0452, 4.0453, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{95}, a_{96}, sgn\left(s_{E_{4,95}}(4)\right), sgn\left(s_{E_{4,95}}(5.7)\right)\right] = \left[4.0453, 4.0453, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{96}, a_{97}, sgn\left(s_{E_{4,96}}(4)\right), sgn\left(s_{E_{4,96}}(5.7)\right)\right] = \left[4.0453, 4.0454, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{97}, a_{98}, sgn\left(s_{E_{4,97}}(4)\right), sgn\left(s_{E_{4,97}}(5.7)\right)\right] = \left[4.0454, 4.0454, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{98}, a_{99}, sgn\left(s_{E_{4,98}}(4)\right), sgn\left(s_{E_{4,98}}(5.7)\right)\right] = \left[4.0454, 4.0455, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{99}, a_{100}, sgn\left(s_{E_{4,99}}(4)\right), sgn\left(s_{E_{4,99}}(5.7)\right)\right] = \left[4.0455, 4.0456, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{100}, a_{101}, sgn\left(s_{E_{4,100}}(4)\right), sgn\left(s_{E_{4,100}}(5.7)\right)\right] = \left[4.0456, 4.0456, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{101}, a_{102}, sgn\left(s_{E_{4,101}}(4)\right), sgn\left(s_{E_{4,101}}(5.7)\right)\right] = \left[4.0456, 4.0457, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{102}, a_{103}, sgn\left(s_{E_{4,102}}(4)\right), sgn\left(s_{E_{4,102}}(5.7)\right)\right] = \left[4.0457, 4.0457, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{103}, a_{104}, sgn\left(s_{E_{4,103}}(4)\right), sgn\left(s_{E_{4,103}}(5.7)\right)\right] = \left[4.0457, 4.0458, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{104}, a_{105}, sgn\left(s_{E_{4,104}}(4)\right), sgn\left(s_{E_{4,104}}(5.7)\right)\right] = \left[4.0458, 4.0458, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{105}, a_{106}, sgn\left(s_{E_{4,105}}(4)\right), sgn\left(s_{E_{4,105}}(5.7)\right)\right] = \left[4.0458, 4.0459, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{106}, a_{107}, sgn\left(s_{E_{4,106}}(4)\right), sgn\left(s_{E_{4,106}}(5.7)\right)\right] = \left[4.0459, 4.0459, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{107}, a_{108}, sgn\left(s_{E_{4,107}}(4)\right), sgn\left(s_{E_{4,107}}(5.7)\right)\right] = \left[4.0459, 4.0460, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{108}, a_{109}, sgn\left(s_{E_{4,108}}(4)\right), sgn\left(s_{E_{4,108}}(5.7)\right)\right] = \left[4.0460, 4.0461, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{109}, a_{110}, sgn\left(s_{E_{4,109}}(4)\right), sgn\left(s_{E_{4,109}}(5.7)\right)\right] = \left[4.0461, 4.0461, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{110}, a_{111}, sgn\left(s_{E_{4,110}}(4)\right), sgn\left(s_{E_{4,110}}(5.7)\right)\right] = \left[4.0461, 4.0462, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{111}, a_{112}, sgn\left(s_{E_{4,111}}(4)\right), sgn\left(s_{E_{4,111}}(5.7)\right)\right] = \left[4.0462, 4.0462, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{112}, a_{113}, sgn\left(s_{E_{4,112}}(4)\right), sgn\left(s_{E_{4,112}}(5.7)\right)\right] = \left[4.0462, 4.0463, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{113}, a_{114}, sgn\left(s_{E_{4,113}}(4)\right), sgn\left(s_{E_{4,113}}(5.7)\right)\right] = \left[4.0463, 4.0463, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{114}, a_{115}, sgn\left(s_{E_{4,114}}(4)\right), sgn\left(s_{E_{4,114}}(5.7)\right)\right] = \left[4.0463, 4.0464, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{115}, a_{116}, sgn\left(s_{E_{4,115}}(4)\right), sgn\left(s_{E_{4,115}}(5.7)\right)\right] = \left[4.0464, 4.0464, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{116}, a_{117}, sgn\left(s_{E_{4,116}}(4)\right), sgn\left(s_{E_{4,116}}(5.7)\right)\right] = \left[4.0464, 4.0465, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{117}, a_{118}, sgn\left(s_{E_{4,117}}(4)\right), sgn\left(s_{E_{4,117}}(5.7)\right)\right] = \left[4.0465, 4.0466, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{118}, a_{119}, sgn\left(s_{E_{4,118}}(4)\right), sgn\left(s_{E_{4,118}}(5.7)\right)\right] = \left[4.0466, 4.0466, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{119}, a_{120}, sgn\left(s_{E_{4,119}}(4)\right), sgn\left(s_{E_{4,119}}(5.7)\right)\right] = \left[4.0466, 4.0467, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{120}, a_{121}, sgn\left(s_{E_{4,120}}(4)\right), sgn\left(s_{E_{4,120}}(5.7)\right)\right] = \left[4.0467, 4.0467, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{121}, a_{122}, sgn\left(s_{E_{4,121}}(4)\right), sgn\left(s_{E_{4,121}}(5.7)\right)\right] = \left[4.0467, 4.0468, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{122}, a_{123}, sgn\left(s_{E_{4,122}}(4)\right), sgn\left(s_{E_{4,122}}(5.7)\right)\right] = \left[4.0468, 4.0468, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{123}, a_{124}, sgn\left(s_{E_{4,123}}(4)\right), sgn\left(s_{E_{4,123}}(5.7)\right)\right] = \left[4.0468, 4.0469, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{124}, a_{125}, sgn\left(s_{E_{4,124}}(4)\right), sgn\left(s_{E_{4,124}}(5.7)\right)\right] = \left[4.0469, 4.0469, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{125}, a_{126}, sgn\left(s_{E_{4,125}}(4)\right), sgn\left(s_{E_{4,125}}(5.7)\right)\right] = \left[4.0469, 4.0470, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{126}, a_{127}, sgn\left(s_{E_{4,126}}(4)\right), sgn\left(s_{E_{4,126}}(5.7)\right)\right] = \left[4.0470, 4.0471, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{127}, a_{128}, sgn\left(s_{E_{4,127}}(4)\right), sgn\left(s_{E_{4,127}}(5.7)\right)\right] = \left[4.0471, 4.0471, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{128}, a_{129}, sgn\left(s_{E_{4,128}}(4)\right), sgn\left(s_{E_{4,128}}(5.7)\right)\right] = \left[4.0471, 4.0472, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{129}, a_{130}, sgn\left(s_{E_{4,129}}(4)\right), sgn\left(s_{E_{4,129}}(5.7)\right)\right] = \left[4.0472, 4.0472, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{130}, a_{131}, sgn\left(s_{E_{4,130}}(4)\right), sgn\left(s_{E_{4,130}}(5.7)\right)\right] = \left[4.0472, 4.0473, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{131}, a_{132}, sgn\left(s_{E_{4,131}}(4)\right), sgn\left(s_{E_{4,131}}(5.7)\right)\right] = \left[4.0473, 4.0473, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{132}, a_{133}, sgn\left(s_{E_{4,132}}(4)\right), sgn\left(s_{E_{4,132}}(5.7)\right)\right] = \left[4.0473, 4.0474, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{133}, a_{134}, sgn\left(s_{E_{4,133}}(4)\right), sgn\left(s_{E_{4,133}}(5.7)\right)\right] = \left[4.0474, 4.0474, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{134}, a_{135}, sgn\left(s_{E_{4,134}}(4)\right), sgn\left(s_{E_{4,134}}(5.7)\right)\right] = \left[4.0474, 4.0475, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{135}, a_{136}, sgn\left(s_{E_{4,135}}(4)\right), sgn\left(s_{E_{4,135}}(5.7)\right)\right] = \left[4.0475, 4.0476, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{136}, a_{137}, sgn\left(s_{E_{4,136}}(4)\right), sgn\left(s_{E_{4,136}}(5.7)\right)\right] = \left[4.0476, 4.0476, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{137}, a_{138}, sgn\left(s_{E_{4,137}}(4)\right), sgn\left(s_{E_{4,137}}(5.7)\right)\right] = \left[4.0476, 4.0477, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{138}, a_{139}, sgn\left(s_{E_{4,138}}(4)\right), sgn\left(s_{E_{4,138}}(5.7)\right)\right] = \left[4.0477, 4.0477, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{139}, a_{140}, sgn\left(s_{E_{4,139}}(4)\right), sgn\left(s_{E_{4,139}}(5.7)\right)\right] = \left[4.0477, 4.0478, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{140}, a_{141}, sgn\left(s_{E_{4,140}}(4)\right), sgn\left(s_{E_{4,140}}(5.7)\right)\right] = \left[4.0478, 4.0478, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{141}, a_{142}, sgn\left(s_{E_{4,141}}(4)\right), sgn\left(s_{E_{4,141}}(5.7)\right)\right] = \left[4.0478, 4.0479, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{142}, a_{143}, sgn\left(s_{E_{4,142}}(4)\right), sgn\left(s_{E_{4,142}}(5.7)\right)\right] = \left[4.0479, 4.0479, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{143}, a_{144}, sgn\left(s_{E_{4,143}}(4)\right), sgn\left(s_{E_{4,143}}(5.7)\right)\right] = \left[4.0479, 4.0480, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{144}, a_{145}, sgn\left(s_{E_{4,144}}(4)\right), sgn\left(s_{E_{4,144}}(5.7)\right)\right] = \left[4.0480, 4.0481, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{145}, a_{146}, sgn\left(s_{E_{4,145}}(4)\right), sgn\left(s_{E_{4,145}}(5.7)\right)\right] = \left[4.0481, 4.0481, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{146}, a_{147}, sgn\left(s_{E_{4,146}}(4)\right), sgn\left(s_{E_{4,146}}(5.7)\right)\right] = \left[4.0481, 4.0482, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{147}, a_{148}, sgn\left(s_{E_{4,147}}(4)\right), sgn\left(s_{E_{4,147}}(5.7)\right)\right] = \left[4.0482, 4.0482, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{148}, a_{149}, sgn\left(s_{E_{4,148}}(4)\right), sgn\left(s_{E_{4,148}}(5.7)\right)\right] = \left[4.0482, 4.0483, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{149}, a_{150}, sgn\left(s_{E_{4,149}}(4)\right), sgn\left(s_{E_{4,149}}(5.7)\right)\right] = \left[4.0483, 4.0483, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{150}, a_{151}, sgn\left(s_{E_{4,150}}(4)\right), sgn\left(s_{E_{4,150}}(5.7)\right)\right] = \left[4.0483, 4.0484, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{151}, a_{152}, sgn\left(s_{E_{4,151}}(4)\right), sgn\left(s_{E_{4,151}}(5.7)\right)\right] = \left[4.0484, 4.0484, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{152}, a_{153}, sgn\left(s_{E_{4,152}}(4)\right), sgn\left(s_{E_{4,152}}(5.7)\right)\right] = \left[4.0484, 4.0485, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{153}, a_{154}, sgn\left(s_{E_{4,153}}(4)\right), sgn\left(s_{E_{4,153}}(5.7)\right)\right] = \left[4.0485, 4.0486, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{154}, a_{155}, sgn\left(s_{E_{4,154}}(4)\right), sgn\left(s_{E_{4,154}}(5.7)\right)\right] = \left[4.0486, 4.0486, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{155}, a_{156}, sgn\left(s_{E_{4,155}}(4)\right), sgn\left(s_{E_{4,155}}(5.7)\right)\right] = \left[4.0486, 4.0487, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{156}, a_{157}, sgn\left(s_{E_{4,156}}(4)\right), sgn\left(s_{E_{4,156}}(5.7)\right)\right] = \left[4.0487, 4.0487, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{157}, a_{158}, sgn\left(s_{E_{4,157}}(4)\right), sgn\left(s_{E_{4,157}}(5.7)\right)\right] = \left[4.0487, 4.0488, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{158}, a_{159}, sgn\left(s_{E_{4,158}}(4)\right), sgn\left(s_{E_{4,158}}(5.7)\right)\right] = \left[4.0488, 4.0488, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{159}, a_{160}, sgn\left(s_{E_{4,159}}(4)\right), sgn\left(s_{E_{4,159}}(5.7)\right)\right] = \left[4.0488, 4.0489, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{160}, a_{161}, sgn\left(s_{E_{4,160}}(4)\right), sgn\left(s_{E_{4,160}}(5.7)\right)\right] = \left[4.0489, 4.0489, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{161}, a_{162}, sgn\left(s_{E_{4,161}}(4)\right), sgn\left(s_{E_{4,161}}(5.7)\right)\right] = \left[4.0489, 4.0490, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{162}, a_{163}, sgn\left(s_{E_{4,162}}(4)\right), sgn\left(s_{E_{4,162}}(5.7)\right)\right] = \left[4.0490, 4.0491, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{163}, a_{164}, sgn\left(s_{E_{4,163}}(4)\right), sgn\left(s_{E_{4,163}}(5.7)\right)\right] = \left[4.0491, 4.0491, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}, \begin{bmatrix} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{bmatrix}\right]$$

$$\left[a_{164}, a_{165}, sgn\left(s_{E_{4,164}}(4)\right), sgn\left(s_{E_{4,164}}(5.7)\right)\right] = \left[4.0491, 4.0492, \left[\begin{array}{cccccccc} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{array}\right], \left[\begin{array}{cccccccc} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{array}\right]\right]$$

$$\left[a_{165}, a_{166}, sgn\left(s_{E_{4,165}}(4)\right), sgn\left(s_{E_{4,165}}(5.7)\right)\right] = \left[4.0492, 4.0492, \left[\begin{array}{cccccccc} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{array}\right], \left[\begin{array}{cccccccc} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{array}\right]\right]$$

$$\left[a_{166}, a_{167}, sgn\left(s_{E_{4,166}}(4)\right), sgn\left(s_{E_{4,166}}(5.7)\right)\right] = \left[4.0492, 4.0493, \left[\begin{array}{cccccccc} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{array}\right], \left[\begin{array}{cccccccc} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{array}\right]\right]$$

$$\left[a_{167}, a_{168}, sgn\left(s_{E_{4,167}}(4)\right), sgn\left(s_{E_{4,167}}(5.7)\right)\right] = \left[4.0493, 4.0493, \left[\begin{array}{cccccccc} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{array}\right], \left[\begin{array}{cccccccc} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{array}\right]\right]$$

$$\left[a_{168}, a_{169}, sgn\left(s_{E_{4,168}}(4)\right), sgn\left(s_{E_{4,168}}(5.7)\right)\right] = \left[4.0493, 4.0494, \left[\begin{array}{cccccccc} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{array}\right], \left[\begin{array}{cccccccc} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{array}\right]\right]$$

$$\left[a_{169}, a_{170}, sgn\left(s_{E_{4,169}}(4)\right), sgn\left(s_{E_{4,169}}(5.7)\right)\right] = \left[4.0494, 4.0494, \left[\begin{array}{cccccccc} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{array}\right], \left[\begin{array}{cccccccc} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{array}\right]\right]$$

$$\left[a_{170}, a_{171}, sgn\left(s_{E_{4,170}}(4)\right), sgn\left(s_{E_{4,170}}(5.7)\right)\right] = \left[4.0494, 4.0495, \left[\begin{array}{cccccccc} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{array}\right], \left[\begin{array}{cccccccc} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{array}\right]\right]$$

$$\left[a_{171}, a_{172}, sgn\left(s_{E_{4,171}}(4)\right), sgn\left(s_{E_{4,171}}(5.7)\right)\right] = \left[4.0495, 4.0496, \left[\begin{array}{cccccccc} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{array}\right], \left[\begin{array}{cccccccc} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{array}\right]\right]$$

$$\left[a_{172}, a_{173}, sgn\left(s_{E_{4,172}}(4)\right), sgn\left(s_{E_{4,172}}(5.7)\right)\right] = \left[4.0496, 4.0496, \left[\begin{array}{cccccccc} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{array}\right], \left[\begin{array}{cccccccc} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{array}\right]\right]$$

$$\left[a_{173}, a_{174}, sgn\left(s_{E_{4,173}}(4)\right), sgn\left(s_{E_{4,173}}(5.7)\right)\right] = \left[4.0496, 4.0497, \left[\begin{array}{cccccccc} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{array}\right], \left[\begin{array}{cccccccc} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{array}\right]\right]$$

$$\left[a_{174}, a_{175}, sgn\left(s_{E_{4,174}}(4)\right), sgn\left(s_{E_{4,174}}(5.7)\right)\right] = \left[4.0497, 4.0497, \left[\begin{array}{cccccccc} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{array}\right], \left[\begin{array}{cccccccc} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{array}\right]\right]$$

$$\left[a_{175}, a_{176}, sgn\left(s_{E_{4,175}}(4)\right), sgn\left(s_{E_{4,175}}(5.7)\right)\right] = \left[4.0497, 4.0498, \left[\begin{array}{cccccccc} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{array}\right], \left[\begin{array}{cccccccc} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{array}\right]\right]$$

$$\left[a_{176}, a_{177}, sgn\left(s_{E_{4,176}}(4)\right), sgn\left(s_{E_{4,176}}(5.7)\right)\right] = \left[4.0498, 4.0498, \left[\begin{array}{cccccccc} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{array}\right], \left[\begin{array}{cccccccc} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{array}\right]\right]$$

$$\left[a_{177}, a_{178}, sgn\left(s_{E_{4,177}}(4)\right), sgn\left(s_{E_{4,177}}(5.7)\right)\right] = \left[4.0498, 4.0499, \left[\begin{array}{cccccccc} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{array}\right], \left[\begin{array}{cccccccc} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{array}\right]\right]$$

$$\left[a_{178}, a_{179}, sgn\left(s_{E_{4,178}}(4)\right), sgn\left(s_{E_{4,178}}(5.7)\right)\right] = \left[4.0499, 4.0499, \left[\begin{array}{cccccccc} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{array}\right], \left[\begin{array}{cccccccc} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{array}\right]\right]$$

$$\left[a_{179}, a_{180}, sgn\left(s_{E_{4,179}}(4)\right), sgn\left(s_{E_{4,179}}(5.7)\right)\right] = \left[4.0499, 4.0500, \left[\begin{array}{cccccccc} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{array}\right], \left[\begin{array}{cccccccc} -1 & 1 & 1 & 1 & -1 & -1 & 1 & -1 \end{array}\right]\right] \quad \textbf{(1)}$$

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