

1.  $[1, 1, 1, 1]$  - 无解
2.  $[1, 1, 1, 2]$  - 无解
3.  $[1, 1, 1, 3]$  - 无解
4.  $[1, 1, 1, 4]$  - 无解
5.  $[1, 1, 1, 5]$  - 无解
6.  $[1, 1, 1, 6]$  - 无解
7.  $[1, 1, 1, 7]$  - 无解
8.  $[1, 1, 1, 8]$  - 1个解:
  1.  $8 * (1 + 1 + 1) = 24$
9.  $[1, 1, 1, 9]$  - 无解
10.  $[1, 1, 1, 10]$  - 无解
11.  $[1, 1, 1, 11]$  - 1个解:
  1.  $(1 + 1) * (1 + 11) = 24$
12.  $[1, 1, 1, 12]$  - 4个解:
  1.  $1 * 12 * (1 + 1) = 24$
  2.  $12 * (1 + 1) / 1 = 24$
  3.  $12 * (1 + 1 * 1) = 24$
  4.  $12 * (1 + 1 / 1) = 24$
13.  $[1, 1, 1, 13]$  - 1个解:
  1.  $(1 + 1) * (13 - 1) = 24$
14.  $[1, 1, 2, 2]$  - 无解
15.  $[1, 1, 2, 3]$  - 无解
16.  $[1, 1, 2, 4]$  - 无解
17.  $[1, 1, 2, 5]$  - 无解
18.  $[1, 1, 2, 6]$  - 2个解:
  1.  $2 * 6 * (1 + 1) = 24$
  2.  $6 * (1 + 1 + 2) = 24$
19.  $[1, 1, 2, 7]$  - 1个解:
  1.  $(1 + 2) * (1 + 7) = 24$
20.  $[1, 1, 2, 8]$  - 6个解:

1.  $8 * (2 + 1 * 1) = 24$
2.  $8 * (2 + 1 / 1) = 24$
3.  $1 * 8 * (1 + 2) = 24$
4.  $8 * (1 + 2) / 1 = 24$
5.  $8 * (1 + 1 * 2) = 24$
6.  $8 * (1 + 2 / 1) = 24$
21.  $[1, 1, 2, 9]$  - 1个解:
  1.  $(1 + 2) * (9 - 1) = 24$
22.  $[1, 1, 2, 10]$  - 2个解:
  1.  $(1 + 1) * (2 + 10) = 24$
  2.  $2 * (1 + 1 + 10) = 24$
23.  $[1, 1, 2, 11]$  - 8个解:
  1.  $2 + 11 * (1 + 1) = 24$
  2.  $2 * (11 + 1 * 1) = 24$
  3.  $2 * (11 + 1 / 1) = 24$
  4.  $1 * 2 * (1 + 11) = 24$
  5.  $2 * (1 + 11) / 1 = 24$
  6.  $2 * (1 + 1 * 11) = 24$
  7.  $2 * (1 + 11 / 1) = 24$
  8.  $1 + 1 + 2 * 11 = 24$
24.  $[1, 1, 2, 12]$  - 7个解:
  1.  $2 * 12 / (1 * 1) = 24$
  2.  $12 * (1 + 2 - 1) = 24$
  3.  $12 / (1 - 1 / 2) = 24$
  4.  $2 * (1 + 12 - 1) = 24$
  5.  $1 + 2 * 12 - 1 = 24$
  6.  $1 * 2 * 12 / 1 = 24$
  7.  $1 * 1 * 2 * 12 = 24$
25.  $[1, 1, 2, 13]$  - 8个解:
  1.  $2 * 13 - (1 + 1) = 24$
  2.  $13 * (1 + 1) - 2 = 24$
  3.  $2 * (13 - 1 * 1) = 24$
  4.  $2 * (13 - 1 / 1) = 24$
  5.  $1 * 2 * (13 - 1) = 24$
  6.  $2 * (13 - 1) / 1 = 24$
  7.  $2 * (1 * 13 - 1) = 24$
  8.  $2 * (13 / 1 - 1) = 24$
26.  $[1, 1, 3, 3]$  - 无解
27.  $[1, 1, 3, 4]$  - 1个解:
  1.  $3 * 4 * (1 + 1) = 24$
28.  $[1, 1, 3, 5]$  - 1个解:

1.  $(1 + 3) * (1 + 5) = 24$
29.  $[1, 1, 3, 6]$  - 7个解:
  1.  $6 * (3 + 1 * 1) = 24$
  2.  $6 * (3 + 1 / 1) = 24$
  3.  $1 * 6 * (1 + 3) = 24$
  4.  $6 * (1 + 3) / 1 = 24$
  5.  $6 * (1 + 1 * 3) = 24$
  6.  $6 * (1 + 3 / 1) = 24$
  7.  $3 * (1 + 1 + 6) = 24$
30.  $[1, 1, 3, 7]$  - 7个解:
  1.  $3 * (7 + 1 * 1) = 24$
  2.  $3 * (7 + 1 / 1) = 24$
  3.  $(1 + 3) * (7 - 1) = 24$
  4.  $1 * 3 * (1 + 7) = 24$
  5.  $3 * (1 + 7) / 1 = 24$
  6.  $3 * (1 + 1 * 7) = 24$
  7.  $3 * (1 + 7 / 1) = 24$
31.  $[1, 1, 3, 8]$  - 6个解:
  1.  $3 * 8 / (1 * 1) = 24$
  2.  $8 * (1 + 3 - 1) = 24$
  3.  $3 * (1 + 8 - 1) = 24$
  4.  $1 + 3 * 8 - 1 = 24$
  5.  $1 * 3 * 8 / 1 = 24$
  6.  $1 * 1 * 3 * 8 = 24$
32.  $[1, 1, 3, 9]$  - 7个解:
  1.  $(1 + 1) * (3 + 9) = 24$
  2.  $3 * (9 - 1 * 1) = 24$
  3.  $3 * (9 - 1 / 1) = 24$
  4.  $1 * 3 * (9 - 1) = 24$
  5.  $3 * (9 - 1) / 1 = 24$
  6.  $3 * (1 * 9 - 1) = 24$
  7.  $3 * (9 / 1 - 1) = 24$
33.  $[1, 1, 3, 10]$  - 1个解:
  1.  $3 * (10 - (1 + 1)) = 24$
34.  $[1, 1, 3, 11]$  - 1个解:
  1.  $(3 - 1) * (1 + 11) = 24$
35.  $[1, 1, 3, 12]$  - 6个解:
  1.  $12 * (3 - 1 * 1) = 24$
  2.  $12 * (3 - 1 / 1) = 24$
  3.  $1 * 12 * (3 - 1) = 24$
  4.  $12 * (3 - 1) / 1 = 24$
  5.  $12 * (1 * 3 - 1) = 24$

6.  $12 * (3 / 1 - 1) = 24$
36.  $[1, 1, 3, 13] - 1$  个解:  
1.  $(3 - 1) * (13 - 1) = 24$
37.  $[1, 1, 4, 4] - 1$  个解:  
1.  $4 * (1 + 1 + 4) = 24$
38.  $[1, 1, 4, 5] - 7$  个解:  
1.  $4 * (5 + 1 * 1) = 24$   
2.  $4 * (5 + 1 / 1) = 24$   
3.  $5 * (1 + 4) - 1 = 24$   
4.  $1 * 4 * (1 + 5) = 24$   
5.  $4 * (1 + 5) / 1 = 24$   
6.  $4 * (1 + 1 * 5) = 24$   
7.  $4 * (1 + 5 / 1) = 24$
39.  $[1, 1, 4, 6] - 6$  个解:  
1.  $4 * 6 / (1 * 1) = 24$   
2.  $6 * (1 + 4 - 1) = 24$   
3.  $4 * (1 + 6 - 1) = 24$   
4.  $1 + 4 * 6 - 1 = 24$   
5.  $1 * 4 * 6 / 1 = 24$   
6.  $1 * 1 * 4 * 6 = 24$
40.  $[1, 1, 4, 7] - 7$  个解:  
1.  $4 * (7 - 1 * 1) = 24$   
2.  $4 * (7 - 1 / 1) = 24$   
3.  $(4 - 1) * (1 + 7) = 24$   
4.  $1 * 4 * (7 - 1) = 24$   
5.  $4 * (7 - 1) / 1 = 24$   
6.  $4 * (1 * 7 - 1) = 24$   
7.  $4 * (7 / 1 - 1) = 24$
41.  $[1, 1, 4, 8] - 8$  个解:  
1.  $(1 + 1) * (4 + 8) = 24$   
2.  $4 * (8 - (1 + 1)) = 24$   
3.  $8 * (4 - 1 * 1) = 24$   
4.  $8 * (4 - 1 / 1) = 24$   
5.  $1 * 8 * (4 - 1) = 24$   
6.  $8 * (4 - 1) / 1 = 24$   
7.  $8 * (1 * 4 - 1) = 24$   
8.  $8 * (4 / 1 - 1) = 24$
42.  $[1, 1, 4, 9] - 1$  个解:  
1.  $(4 - 1) * (9 - 1) = 24$
43.  $[1, 1, 4, 10] - 1$  个解:  
1.  $4 + 10 * (1 + 1) = 24$

44.  $[1, 1, 4, 11] -$  无解
45.  $[1, 1, 4, 12] - 2$  个解:  
1.  $4 * 12 / (1 + 1) = 24$   
2.  $12 * (4 - (1 + 1)) = 24$
46.  $[1, 1, 4, 13] -$  无解
47.  $[1, 1, 5, 5] - 8$  个解:  
1.  $5 * 5 - 1 * 1 = 24$   
2.  $5 * 5 - 1 / 1 = 24$   
3.  $(1 + 5) * (5 - 1) = 24$   
4.  $(5 - 1) * (1 + 5) = 24$   
5.  $1 * (5 * 5 - 1) = 24$   
6.  $(5 * 5 - 1) / 1 = 24$   
7.  $1 * 5 * 5 - 1 = 24$   
8.  $5 * 5 / 1 - 1 = 24$
48.  $[1, 1, 5, 6] - 7$  个解:  
1.  $6 * (5 - 1 * 1) = 24$   
2.  $6 * (5 - 1 / 1) = 24$   
3.  $1 * 6 * (5 - 1) = 24$   
4.  $6 * (5 - 1) / 1 = 24$   
5.  $6 * (1 * 5 - 1) = 24$   
6.  $6 * (5 / 1 - 1) = 24$   
7.  $5 * (6 - 1) - 1 = 24$
49.  $[1, 1, 5, 7] - 2$  个解:  
1.  $(1 + 1) * (5 + 7) = 24$   
2.  $(5 - 1) * (7 - 1) = 24$
50.  $[1, 1, 5, 8] - 1$  个解:  
1.  $8 * (5 - (1 + 1)) = 24$
51.  $[1, 1, 5, 9] -$  无解
52.  $[1, 1, 5, 10] -$  无解
53.  $[1, 1, 5, 11] -$  无解
54.  $[1, 1, 5, 12] -$  无解
55.  $[1, 1, 5, 13] -$  无解
56.  $[1, 1, 6, 6] - 2$  个解:  
1.  $(1 + 1) * (6 + 6) = 24$   
2.  $6 * (6 - (1 + 1)) = 24$

57.  $[1, 1, 6, 7] -$  无解
58.  $[1, 1, 6, 8] - 1$  个解:  
1.  $6 * 8 / (1 + 1) = 24$
59.  $[1, 1, 6, 9] - 1$  个解:  
1.  $6 + 9 * (1 + 1) = 24$
60.  $[1, 1, 6, 10] -$  无解
61.  $[1, 1, 6, 11] -$  无解
62.  $[1, 1, 6, 12] - 1$  个解:  
1.  $12 + 6 * (1 + 1) = 24$
63.  $[1, 1, 6, 13] -$  无解
64.  $[1, 1, 7, 7] -$  无解
65.  $[1, 1, 7, 8] -$  无解
66.  $[1, 1, 7, 9] -$  无解
67.  $[1, 1, 7, 10] - 1$  个解:  
1.  $10 + 7 * (1 + 1) = 24$
68.  $[1, 1, 7, 11] -$  无解
69.  $[1, 1, 7, 12] -$  无解
70.  $[1, 1, 7, 13] -$  无解
71.  $[1, 1, 8, 8] - 1$  个解:  
1.  $8 + 8 * (1 + 1) = 24$
72.  $[1, 1, 8, 9] -$  无解
73.  $[1, 1, 8, 10] -$  无解
74.  $[1, 1, 8, 11] -$  无解
75.  $[1, 1, 8, 12] -$  无解
76.  $[1, 1, 8, 13] -$  无解
77.  $[1, 1, 9, 9] -$  无解
78.  $[1, 1, 9, 10] -$  无解

79.  $[1, 1, 9, 11]$  - 无解

80.  $[1, 1, 9, 12]$  - 无解

81.  $[1, 1, 9, 13]$  - 1个解:

1.  $1 + 1 + 9 + 13 = 24$

82.  $[1, 1, 10, 10]$  - 无解

83.  $[1, 1, 10, 11]$  - 无解

84.  $[1, 1, 10, 12]$  - 1个解:

1.  $1 + 1 + 10 + 12 = 24$

85.  $[1, 1, 10, 13]$  - 14个解:

1.  $10 + 13 + 1 * 1 = 24$
2.  $10 + 13 + 1 / 1 = 24$
3.  $13 + 1 * (1 + 10) = 24$
4.  $13 + (1 + 10) / 1 = 24$
5.  $1 + 13 + 1 * 10 = 24$
6.  $1 + 13 + 10 / 1 = 24$
7.  $10 + 1 * (1 + 13) = 24$
8.  $10 + (1 + 13) / 1 = 24$
9.  $1 + 10 + 1 * 13 = 24$
10.  $1 + 10 + 13 / 1 = 24$
11.  $1 * (1 + 10 + 13) = 24$
12.  $(1 + 10 + 13) / 1 = 24$
13.  $1 + 1 * (10 + 13) = 24$
14.  $1 + (10 + 13) / 1 = 24$

86.  $[1, 1, 11, 11]$  - 1个解:

1.  $1 + 1 + 11 + 11 = 24$

87.  $[1, 1, 11, 12]$  - 14个解:

1.  $11 + 12 + 1 * 1 = 24$
2.  $11 + 12 + 1 / 1 = 24$
3.  $12 + 1 * (1 + 11) = 24$
4.  $12 + (1 + 11) / 1 = 24$
5.  $1 + 12 + 1 * 11 = 24$
6.  $1 + 12 + 11 / 1 = 24$
7.  $11 + 1 * (1 + 12) = 24$
8.  $11 + (1 + 12) / 1 = 24$
9.  $1 + 11 + 1 * 12 = 24$
10.  $1 + 11 + 12 / 1 = 24$
11.  $1 * (1 + 11 + 12) = 24$
12.  $(1 + 11 + 12) / 1 = 24$
13.  $1 + 1 * (11 + 12) = 24$
14.  $1 + (11 + 12) / 1 = 24$

88.  $[1, 1, 11, 13]$  - 22个解:

1.  $(11 + 13) / (1 * 1) = 24$
2.  $13 + 11 / (1 * 1) = 24$
3.  $11 + 13 / (1 * 1) = 24$
4.  $1 * 11 + 1 * 13 = 24$
5.  $1 * 11 + 13 / 1 = 24$
6.  $13 + 1 * 11 / 1 = 24$
7.  $1 * (13 + 1 * 11) = 24$
8.  $(13 + 1 * 11) / 1 = 24$
9.  $11 / 1 + 1 * 13 = 24$
10.  $11 / 1 + 13 / 1 = 24$
11.  $1 * (13 + 11 / 1) = 24$
12.  $(13 + 11 / 1) / 1 = 24$
13.  $13 + 1 * 1 * 11 = 24$
14.  $11 + 1 * 13 / 1 = 24$
15.  $1 * (11 + 1 * 13) = 24$
16.  $(11 + 1 * 13) / 1 = 24$
17.  $1 * (11 + 13 / 1) = 24$
18.  $(11 + 13 / 1) / 1 = 24$
19.  $11 + 1 * 1 * 13 = 24$
20.  $1 + 11 + 13 - 1 = 24$
21.  $1 * (11 + 13) / 1 = 24$
22.  $1 * 1 * (11 + 13) = 24$

89.  $[1, 1, 12, 12]$  - 15个解:

1.  $(12 + 12) / (1 * 1) = 24$
2.  $12 + 12 / (1 * 1) = 24$
3.  $1 * 12 + 1 * 12 = 24$
4.  $1 * 12 + 12 / 1 = 24$
5.  $12 + 1 * 12 / 1 = 24$
6.  $1 * (12 + 1 * 12) = 24$
7.  $(12 + 1 * 12) / 1 = 24$
8.  $12 / 1 + 1 * 12 = 24$
9.  $12 / 1 + 12 / 1 = 24$
10.  $1 * (12 + 12 / 1) = 24$
11.  $(12 + 12 / 1) / 1 = 24$
12.  $12 + 1 * 1 * 12 = 24$
13.  $1 + 12 + 12 - 1 = 24$
14.  $1 * (12 + 12) / 1 = 24$
15.  $1 * 1 * (12 + 12) = 24$

90.  $[1, 1, 12, 13]$  - 14个解:

1.  $12 + 13 - 1 * 1 = 24$
2.  $12 + 13 - 1 / 1 = 24$
3.  $13 + 1 * (12 - 1) = 24$
4.  $13 + (12 - 1) / 1 = 24$
5.  $13 + 1 * 12 - 1 = 24$
6.  $13 + 12 / 1 - 1 = 24$
7.  $12 + 1 * (13 - 1) = 24$

8.  $12 + (13 - 1) / 1 = 24$

9.  $12 + 1 * 13 - 1 = 24$

10.  $12 + 13 / 1 - 1 = 24$

11.  $1 * (12 + 13 - 1) = 24$

12.  $(12 + 13 - 1) / 1 = 24$

13.  $1 * (12 + 13) - 1 = 24$

14.  $(12 + 13) / 1 - 1 = 24$

91.  $[1, 1, 13, 13]$  - 1个解:

1.  $13 + 13 - (1 + 1) = 24$

92.  $[1, 2, 2, 2]$  - 无解

93.  $[1, 2, 2, 3]$  - 无解

94.  $[1, 2, 2, 4]$  - 1个解:

1.  $2 * 4 * (1 + 2) = 24$

95.  $[1, 2, 2, 5]$  - 2个解:

1.  $(2 + 2) * (1 + 5) = 24$

2.  $2 * 2 * (1 + 5) = 24$

96.  $[1, 2, 2, 6]$  - 7个解:

1.  $(1 + 2) * (2 + 6) = 24$

2.  $6 * (2 + 1 * 2) = 24$

3.  $6 * (2 + 2 / 1) = 24$

4.  $1 * 6 * (2 + 2) = 24$

5.  $6 * (2 + 2) / 1 = 24$

6.  $1 * 2 * 2 * 6 = 24$

7.  $2 * 2 * 6 / 1 = 24$

97.  $[1, 2, 2, 7]$  - 2个解:

1.  $(2 + 2) * (7 - 1) = 24$

2.  $2 * 2 * (7 - 1) = 24$

98.  $[1, 2, 2, 8]$  - 2个解:

1.  $8 * (2 + 2 - 1) = 24$

2.  $8 * (2 * 2 - 1) = 24$

99.  $[1, 2, 2, 9]$  - 1个解:

1.  $2 * (1 + 2 + 9) = 24$

100.  $[1, 2, 2, 10]$  - 8个解:

1.  $(1 + 2) * (10 - 2) = 24$

2.  $2 * (10 + 1 * 2) = 24$

3.  $2 * (10 + 2 / 1) = 24$

4.  $2 + 2 * (1 + 10) = 24$

5.  $2 * (2 + 1 * 10) = 24$

6.  $2 * (2 + 10 / 1) = 24$

$$7. 1 * 2 * (2 + 10) = 24$$

$$8. 2 * (2 + 10) / 1 = 24$$

101. [1, 2, 2, 11] - 7 个解:

$$1. 1 * 2 + 2 * 11 = 24$$

$$2. 2 / 1 + 2 * 11 = 24$$

$$3. 2 * (2 + 11 - 1) = 24$$

$$4. 2 + 1 * 2 * 11 = 24$$

$$5. 2 + 2 * 11 / 1 = 24$$

$$6. 1 * (2 + 2 * 11) = 24$$

$$7. (2 + 2 * 11) / 1 = 24$$

102. [1, 2, 2, 12] - 5 个解:

$$1. 2 * 12 / (2 - 1) = 24$$

$$2. 2 * 12 * (2 - 1) = 24$$

$$3. 12 * (1 + 2 / 2) = 24$$

$$4. 2 * (1 + 12) - 2 = 24$$

$$5. 2 + 2 * (12 - 1) = 24$$

103. [1, 2, 2, 13] - 7 个解:

$$1. 2 * 13 - 1 * 2 = 24$$

$$2. 2 * 13 - 2 / 1 = 24$$

$$3. 2 * (1 + 13 - 2) = 24$$

$$4. 1 * 2 * 13 - 2 = 24$$

$$5. 2 * 13 / 1 - 2 = 24$$

$$6. 1 * (2 * 13 - 2) = 24$$

$$7. (2 * 13 - 2) / 1 = 24$$

104. [1, 2, 3, 3] - 1 个解:

$$1. 2 * 3 * (1 + 3) = 24$$

105. [1, 2, 3, 4] - 4 个解:

$$1. (1 + 3) * (2 + 4) = 24$$

$$2. 4 * (1 + 2 + 3) = 24$$

$$3. 1 * 2 * 3 * 4 = 24$$

$$4. 2 * 3 * 4 / 1 = 24$$

106. [1, 2, 3, 5] - 4 个解:

$$1. (1 + 2) * (3 + 5) = 24$$

$$2. 5 * (2 + 3) - 1 = 24$$

$$3. 2 * 3 * (5 - 1) = 24$$

$$4. 3 * (1 + 2 + 5) = 24$$

107. [1, 2, 3, 6] - 8 个解:

$$1. 3 * (6 + 1 * 2) = 24$$

$$2. 3 * (6 + 2 / 1) = 24$$

$$3. 2 * 6 * (3 - 1) = 24$$

$$4. 6 * (2 + 3 - 1) = 24$$

$$5. 3 * (2 + 1 * 6) = 24$$

$$6. 3 * (2 + 6 / 1) = 24$$

$$7. 1 * 3 * (2 + 6) = 24$$

$$8. 3 * (2 + 6) / 1 = 24$$

108. [1, 2, 3, 7] - 3 个解:

$$1. 3 + 7 * (1 + 2) = 24$$

$$2. 3 * (2 + 7 - 1) = 24$$

$$3. 1 + 2 + 3 * 7 = 24$$

109. [1, 2, 3, 8] - 5 个解:

$$1. 3 * 8 / (2 - 1) = 24$$

$$2. 3 * 8 * (2 - 1) = 24$$

$$3. (1 + 3) * (8 - 2) = 24$$

$$4. 8 / (1 - 2 / 3) = 24$$

$$5. 2 * (1 + 3 + 8) = 24$$

110. [1, 2, 3, 9] - 9 个解:

$$1. 3 * 9 - (1 + 2) = 24$$

$$2. 9 * (1 + 2) - 3 = 24$$

$$3. 2 * (9 + 1 * 3) = 24$$

$$4. 2 * (9 + 3 / 1) = 24$$

$$5. 3 * (1 + 9 - 2) = 24$$

$$6. 2 * (3 + 1 * 9) = 24$$

$$7. 2 * (3 + 9 / 1) = 24$$

$$8. 1 * 2 * (3 + 9) = 24$$

$$9. 2 * (3 + 9) / 1 = 24$$

111. [1, 2, 3, 10] - 9 个解:

$$1. 3 * (10 - 1 * 2) = 24$$

$$2. 3 * (10 - 2 / 1) = 24$$

$$3. (3 - 1) * (2 + 10) = 24$$

$$4. 3 * (1 * 10 - 2) = 24$$

$$5. 3 * (10 / 1 - 2) = 24$$

$$6. 1 * 3 * (10 - 2) = 24$$

$$7. 3 * (10 - 2) / 1 = 24$$

$$8. 1 + 3 + 2 * 10 = 24$$

$$9. 2 * (3 + 10 - 1) = 24$$

112. [1, 2, 3, 11] - 4 个解:

$$1. (1 + 2) * (11 - 3) = 24$$

$$2. 3 * (11 - (1 + 2)) = 24$$

$$3. 2 + 11 * (3 - 1) = 24$$

$$4. 3 + 2 * 11 - 1 = 24$$

113. [1, 2, 3, 12] - 3 个解:

$$1. 12 * (1 + 3 - 2) = 24$$

$$2. 12 * (1 + 3) / 2 = 24$$

$$3. 12 / (3 / 2 - 1) = 24$$

114. [1, 2, 3, 13] - 2 个解:

$$1. 13 * (3 - 1) - 2 = 24$$

$$2. 1 + 2 * 13 - 3 = 24$$

115. [1, 2, 4, 4] - 8 个解:

$$1. (1 + 2) * (4 + 4) = 24$$

$$2. 4 * (4 + 1 * 2) = 24$$

$$3. 4 * (4 + 2 / 1) = 24$$

$$4. 2 * 4 * (4 - 1) = 24$$

$$5. 4 * (2 + 1 * 4) = 24$$

$$6. 4 * (2 + 4 / 1) = 24$$

$$7. 1 * 4 * (2 + 4) = 24$$

$$8. 4 * (2 + 4) / 1 = 24$$

116. [1, 2, 4, 5] - 2 个解:

$$1. (2 + 4) * (5 - 1) = 24$$

$$2. 4 * (2 + 5 - 1) = 24$$

117. [1, 2, 4, 6] - 3 个解:

$$1. 4 * 6 / (2 - 1) = 24$$

$$2. 4 * 6 * (2 - 1) = 24$$

$$3. (4 - 1) * (2 + 6) = 24$$

118. [1, 2, 4, 7] - 2 个解:

$$1. 4 * (1 + 7 - 2) = 24$$

$$2. 2 * (1 + 4 + 7) = 24$$

119. [1, 2, 4, 8] - 14 个解:

$$1. 4 * (8 - 1 * 2) = 24$$

$$2. 4 * (8 - 2 / 1) = 24$$

$$3. 8 * (1 + 4 - 2) = 24$$

$$4. 2 * (8 + 1 * 4) = 24$$

$$5. 2 * (8 + 4 / 1) = 24$$

$$6. 8 * (1 + 4 / 2) = 24$$

$$7. 4 * (1 * 8 - 2) = 24$$

$$8. 2 * (4 + 1 * 8) = 24$$

$$9. 4 * (8 / 1 - 2) = 24$$

$$10. 2 * (4 + 8 / 1) = 24$$

$$11. 1 * 4 * (8 - 2) = 24$$

$$12. 4 * (8 - 2) / 1 = 24$$

$$13. 1 * 2 * (4 + 8) = 24$$

$$14. 2 * (4 + 8) / 1 = 24$$

120. [1, 2, 4, 9] - 3 个解:

$$1. 4 * (9 - (1 + 2)) = 24$$

$$2. 4 + 2 * (1 + 9) = 24$$

$$3. 2 * (4 + 9 - 1) = 24$$

121. [1, 2, 4, 10] - 8 个解:

1.  $(4 - 1) * (10 - 2) = 24$
2.  $1 * 4 + 2 * 10 = 24$
3.  $4 / 1 + 2 * 10 = 24$
4.  $4 + 1 * 2 * 10 = 24$
5.  $4 + 2 * 10 / 1 = 24$
6.  $1 * (4 + 2 * 10) = 24$
7.  $(4 + 2 * 10) / 1 = 24$
8.  $4 * (1 + 10 / 2) = 24$

122.  $[1, 2, 4, 11] - 3$  个解:

1.  $(4 - 2) * (1 + 11) = 24$
2.  $4 * (1 + 11) / 2 = 24$
3.  $4 + 2 * (11 - 1) = 24$

123.  $[1, 2, 4, 12] - 11$  个解:

1.  $(1 + 2) * (12 - 4) = 24$
2.  $12 + 4 * (1 + 2) = 24$
3.  $4 * 12 / (1 * 2) = 24$
4.  $12 * (4 - 1 * 2) = 24$
5.  $12 * (4 - 2 / 1) = 24$
6.  $12 * (1 * 4 - 2) = 24$
7.  $12 * (4 / 1 - 2) = 24$
8.  $1 * 12 * (4 - 2) = 24$
9.  $12 * (4 - 2) / 1 = 24$
10.  $12 / (1 - 2 / 4) = 24$
11.  $1 * 4 * 12 / 2 = 24$

124.  $[1, 2, 4, 13] - 3$  个解:

1.  $(4 - 2) * (13 - 1) = 24$
2.  $2 * (1 + 13) - 4 = 24$
3.  $4 * (13 - 1) / 2 = 24$

125.  $[1, 2, 5, 5] - 1$  个解:

1.  $1 + 5 * 5 - 2 = 24$

126.  $[1, 2, 5, 6] - 3$  个解:

1.  $(1 + 5) * (6 - 2) = 24$
2.  $6 * (1 + 5 - 2) = 24$
3.  $2 * (1 + 5 + 6) = 24$

127.  $[1, 2, 5, 7] - 8$  个解:

1.  $2 * (7 + 1 * 5) = 24$
2.  $2 * (7 + 5 / 1) = 24$
3.  $(5 - 2) * (1 + 7) = 24$
4.  $2 * (5 + 1 * 7) = 24$
5.  $2 * (5 + 7 / 1) = 24$
6.  $5 * (7 - 2) - 1 = 24$
7.  $1 * 2 * (5 + 7) = 24$
8.  $2 * (5 + 7) / 1 = 24$

128.  $[1, 2, 5, 8] - 9$  个解:

1.  $8 * (5 - 1 * 2) = 24$
2.  $8 * (5 - 2 / 1) = 24$
3.  $8 * (1 + 5) / 2 = 24$
4.  $(5 - 1) * (8 - 2) = 24$
5.  $8 * (1 * 5 - 2) = 24$
6.  $8 * (5 / 1 - 2) = 24$
7.  $1 * 8 * (5 - 2) = 24$
8.  $8 * (5 - 2) / 1 = 24$
9.  $2 * (5 + 8 - 1) = 24$

129.  $[1, 2, 5, 9] - 3$  个解:

1.  $9 + 5 * (1 + 2) = 24$
2.  $(5 - 2) * (9 - 1) = 24$
3.  $1 + 5 + 2 * 9 = 24$

130.  $[1, 2, 5, 10] - 2$  个解:

1.  $5 + 2 * 10 - 1 = 24$
2.  $5 * 10 / 2 - 1 = 24$

131.  $[1, 2, 5, 11] -$  无解

132.  $[1, 2, 5, 12] - 3$  个解:

1.  $12 * (5 - (1 + 2)) = 24$
2.  $12 + 2 * (1 + 5) = 24$
3.  $12 * (5 - 1) / 2 = 24$

133.  $[1, 2, 5, 13] - 2$  个解:

1.  $(1 + 2) * (13 - 5) = 24$
2.  $1 + 13 + 2 * 5 = 24$

134.  $[1, 2, 6, 6] - 12$  个解:

1.  $6 + 6 * (1 + 2) = 24$
2.  $6 * (6 - 1 * 2) = 24$
3.  $6 * (6 - 2 / 1) = 24$
4.  $6 * (1 * 6 - 2) = 24$
5.  $2 * (6 + 1 * 6) = 24$
6.  $6 * (6 / 1 - 2) = 24$
7.  $2 * (6 + 6 / 1) = 24$
8.  $1 * 6 * (6 - 2) = 24$
9.  $6 * (6 - 2) / 1 = 24$
10.  $6 * (1 + 6 / 2) = 24$
11.  $1 * 2 * (6 + 6) = 24$
12.  $2 * (6 + 6) / 1 = 24$

135.  $[1, 2, 6, 7] - 4$  个解:

1.  $6 * (7 - (1 + 2)) = 24$
2.  $(6 - 2) * (7 - 1) = 24$

$$3. 6 * (1 + 7) / 2 = 24$$

$$4. 2 * (6 + 7 - 1) = 24$$

136.  $[1, 2, 6, 8] - 4$  个解:

1.  $8 * (6 - (1 + 2)) = 24$
2.  $6 * 8 / (1 * 2) = 24$
3.  $6 + 2 * (1 + 8) = 24$
4.  $1 * 6 * 8 / 2 = 24$

137.  $[1, 2, 6, 9] - 7$  个解:

1.  $1 * 6 + 2 * 9 = 24$
2.  $6 / 1 + 2 * 9 = 24$
3.  $6 * (9 - 1) / 2 = 24$
4.  $6 + 1 * 2 * 9 = 24$
5.  $6 + 2 * 9 / 1 = 24$
6.  $1 * (6 + 2 * 9) = 24$
7.  $(6 + 2 * 9) / 1 = 24$

138.  $[1, 2, 6, 10] - 4$  个解:

1.  $10 * (1 + 2) - 6 = 24$
2.  $10 + 2 * (1 + 6) = 24$
3.  $6 + 2 * (10 - 1) = 24$
4.  $6 * (10 / 2 - 1) = 24$

139.  $[1, 2, 6, 11] - 1$  个解:

1.  $1 + 11 + 2 * 6 = 24$

140.  $[1, 2, 6, 12] - 8$  个解:

1.  $6 * 12 / (1 + 2) = 24$
2.  $2 * 6 + 1 * 12 = 24$
3.  $2 * 6 + 12 / 1 = 24$
4.  $12 + 1 * 2 * 6 = 24$
5.  $12 + 2 * 6 / 1 = 24$
6.  $1 * (12 + 2 * 6) = 24$
7.  $(12 + 2 * 6) / 1 = 24$
8.  $12 * (6 / 2 - 1) = 24$

141.  $[1, 2, 6, 13] - 1$  个解:

1.  $13 + 2 * 6 - 1 = 24$

142.  $[1, 2, 7, 7] - 1$  个解:

1.  $(7 * 7 - 1) / 2 = 24$

143.  $[1, 2, 7, 8] - 3$  个解:

1.  $8 + 2 * (1 + 7) = 24$
2.  $8 * (7 - 1) / 2 = 24$
3.  $1 + 7 + 2 * 8 = 24$

144.  $[1, 2, 7, 9] - 2$  个解:

1.  $1 + 9 + 2 * 7 = 24$
  2.  $7 + 2 * 9 - 1 = 24$
145.  $[1, 2, 7, 10] - 6$  个解:
1.  $2 * 7 + 1 * 10 = 24$
  2.  $2 * 7 + 10 / 1 = 24$
  3.  $10 + 1 * 2 * 7 = 24$
  4.  $10 + 2 * 7 / 1 = 24$
  5.  $1 * (10 + 2 * 7) = 24$
  6.  $(10 + 2 * 7) / 1 = 24$
146.  $[1, 2, 7, 11] - 1$  个解:
1.  $11 + 2 * 7 - 1 = 24$
147.  $[1, 2, 7, 12] - 1$  个解:
1.  $12 + 2 * (7 - 1) = 24$
148.  $[1, 2, 7, 13] -$  无解
149.  $[1, 2, 8, 8] - 9$  个解:
1.  $1 * 8 + 2 * 8 = 24$
  2.  $8 / 1 + 2 * 8 = 24$
  3.  $2 * 8 + 1 * 8 = 24$
  4.  $2 * 8 + 8 / 1 = 24$
  5.  $8 + 1 * 2 * 8 = 24$
  6.  $8 + 2 * 8 / 1 = 24$
  7.  $1 * (8 + 2 * 8) = 24$
  8.  $(8 + 2 * 8) / 1 = 24$
  9.  $8 * (8 / 2 - 1) = 24$
150.  $[1, 2, 8, 9] - 3$  个解:
1.  $8 * 9 / (1 + 2) = 24$
  2.  $9 + 2 * 8 - 1 = 24$
  3.  $8 + 2 * (9 - 1) = 24$
151.  $[1, 2, 8, 10] - 1$  个解:
1.  $10 + 2 * (8 - 1) = 24$
152.  $[1, 2, 8, 11] -$  无解
153.  $[1, 2, 8, 12] -$  无解
154.  $[1, 2, 8, 13] - 1$  个解:
1.  $1 + 2 + 8 + 13 = 24$
155.  $[1, 2, 9, 9] -$  无解
156.  $[1, 2, 9, 10] -$  无解

157.  $[1, 2, 9, 11] - 1$  个解:
1.  $11 * (1 + 2) - 9 = 24$
158.  $[1, 2, 9, 12] - 1$  个解:
1.  $1 + 2 + 9 + 12 = 24$
159.  $[1, 2, 9, 13] - 14$  个解:
1.  $9 + 13 + 1 * 2 = 24$
  2.  $9 + 13 + 2 / 1 = 24$
  3.  $2 + 13 + 1 * 9 = 24$
  4.  $2 + 13 + 9 / 1 = 24$
  5.  $13 + 1 * (2 + 9) = 24$
  6.  $13 + (2 + 9) / 1 = 24$
  7.  $2 + 9 + 1 * 13 = 24$
  8.  $2 + 9 + 13 / 1 = 24$
  9.  $9 + 1 * (2 + 13) = 24$
  10.  $9 + (2 + 13) / 1 = 24$
  11.  $2 + 1 * (9 + 13) = 24$
  12.  $2 + (9 + 13) / 1 = 24$
  13.  $1 * (2 + 9 + 13) = 24$
  14.  $(2 + 9 + 13) / 1 = 24$
160.  $[1, 2, 10, 10] -$  无解
161.  $[1, 2, 10, 11] - 1$  个解:
1.  $1 + 2 + 10 + 11 = 24$
162.  $[1, 2, 10, 12] - 14$  个解:
1.  $10 + 12 + 1 * 2 = 24$
  2.  $10 + 12 + 2 / 1 = 24$
  3.  $2 + 12 + 1 * 10 = 24$
  4.  $2 + 12 + 10 / 1 = 24$
  5.  $12 + 1 * (2 + 10) = 24$
  6.  $12 + (2 + 10) / 1 = 24$
  7.  $2 + 10 + 1 * 12 = 24$
  8.  $2 + 10 + 12 / 1 = 24$
  9.  $10 + 1 * (2 + 12) = 24$
  10.  $10 + (2 + 12) / 1 = 24$
  11.  $2 + 1 * (10 + 12) = 24$
  12.  $2 + (10 + 12) / 1 = 24$
  13.  $1 * (2 + 10 + 12) = 24$
  14.  $(2 + 10 + 12) / 1 = 24$
163.  $[1, 2, 10, 13] - 1$  个解:
1.  $2 + 10 + 13 - 1 = 24$
164.  $[1, 2, 11, 11] - 10$  个解:
1.  $11 + 11 + 1 * 2 = 24$
  2.  $11 + 11 + 2 / 1 = 24$

3.  $2 + 11 + 1 * 11 = 24$
  4.  $2 + 11 + 11 / 1 = 24$
  5.  $11 + 1 * (2 + 11) = 24$
  6.  $11 + (2 + 11) / 1 = 24$
  7.  $2 + 1 * (11 + 11) = 24$
  8.  $2 + (11 + 11) / 1 = 24$
  9.  $1 * (2 + 11 + 11) = 24$
  10.  $(2 + 11 + 11) / 1 = 24$
165.  $[1, 2, 11, 12] - 2$  个解:
1.  $2 + 11 + 12 - 1 = 24$
  2.  $2 / (1 - 11 / 12) = 24$
166.  $[1, 2, 11, 13] - 6$  个解:
1.  $(2 - 1) * (11 + 13) = 24$
  2.  $(11 + 13) / (2 - 1) = 24$
  3.  $13 + 11 * (2 - 1) = 24$
  4.  $13 + 11 / (2 - 1) = 24$
  5.  $11 + 13 * (2 - 1) = 24$
  6.  $11 + 13 / (2 - 1) = 24$
167.  $[1, 2, 12, 12] - 5$  个解:
1.  $12 * (1 + 2) - 12 = 24$
  2.  $(2 - 1) * (12 + 12) = 24$
  3.  $(12 + 12) / (2 - 1) = 24$
  4.  $12 + 12 * (2 - 1) = 24$
  5.  $12 + 12 / (2 - 1) = 24$
168.  $[1, 2, 12, 13] - 2$  个解:
1.  $1 + 12 + 13 - 2 = 24$
  2.  $2 / (13 / 12 - 1) = 24$
169.  $[1, 2, 13, 13] - 10$  个解:
1.  $13 + 13 - 1 * 2 = 24$
  2.  $13 + 13 - 2 / 1 = 24$
  3.  $13 + 1 * 13 - 2 = 24$
  4.  $13 + 13 / 1 - 2 = 24$
  5.  $13 + 1 * (13 - 2) = 24$
  6.  $13 + (13 - 2) / 1 = 24$
  7.  $1 * (13 + 13) - 2 = 24$
  8.  $(13 + 13) / 1 - 2 = 24$
  9.  $1 * (13 + 13 - 2) = 24$
  10.  $(13 + 13 - 2) / 1 = 24$
170.  $[1, 3, 3, 3] - 3$  个解:
1.  $(1 + 3) * (3 + 3) = 24$
  2.  $(3 + 3) * (1 + 3) = 24$
  3.  $3 * (3 * 3 - 1) = 24$

171.  $[1, 3, 3, 4]$  - 6 个解:

1.  $3 * 4 * (3 - 1) = 24$
2.  $4 * (3 + 1 * 3) = 24$
3.  $4 * (3 + 3 / 1) = 24$
4.  $1 * 4 * (3 + 3) = 24$
5.  $4 * (3 + 3) / 1 = 24$
6.  $3 * (1 + 3 + 4) = 24$

172.  $[1, 3, 3, 5]$  - 7 个解:

1.  $3 * (5 + 1 * 3) = 24$
2.  $3 * (5 + 3 / 1) = 24$
3.  $(3 + 3) * (5 - 1) = 24$
4.  $3 * (3 + 1 * 5) = 24$
5.  $3 * (3 + 5 / 1) = 24$
6.  $1 * 3 * (3 + 5) = 24$
7.  $3 * (3 + 5) / 1 = 24$

173.  $[1, 3, 3, 6]$  - 2 个解:

1.  $3 + 3 * (1 + 6) = 24$
2.  $3 * (3 + 6 - 1) = 24$

174.  $[1, 3, 3, 7]$  - 6 个解:

1.  $1 * 3 + 3 * 7 = 24$
2.  $3 / 1 + 3 * 7 = 24$
3.  $3 + 1 * 3 * 7 = 24$
4.  $3 + 3 * 7 / 1 = 24$
5.  $1 * (3 + 3 * 7) = 24$
6.  $(3 + 3 * 7) / 1 = 24$

175.  $[1, 3, 3, 8]$  - 2 个解:

1.  $3 * (1 + 8) - 3 = 24$
2.  $3 + 3 * (8 - 1) = 24$

176.  $[1, 3, 3, 9]$  - 9 个解:

1.  $(1 + 3) * (9 - 3) = 24$
2.  $(3 - 1) * (3 + 9) = 24$
3.  $3 * 9 - 1 * 3 = 24$
4.  $9 * (3 - 1 / 3) = 24$
5.  $3 * 9 - 3 / 1 = 24$
6.  $1 * 3 * 9 - 3 = 24$
7.  $3 * 9 / 1 - 3 = 24$
8.  $1 * (3 * 9 - 3) = 24$
9.  $(3 * 9 - 3) / 1 = 24$

177.  $[1, 3, 3, 10]$  - 2 个解:

1.  $3 * (1 + 10 - 3) = 24$
2.  $3 * (10 - 1) - 3 = 24$

178.  $[1, 3, 3, 11]$  - 6 个解:

1.  $3 * (11 - 1 * 3) = 24$
2.  $3 * (11 - 3 / 1) = 24$
3.  $3 * (1 * 11 - 3) = 24$
4.  $3 * (11 / 1 - 3) = 24$
5.  $1 * 3 * (11 - 3) = 24$
6.  $3 * (11 - 3) / 1 = 24$

179.  $[1, 3, 3, 12]$  - 3 个解:

1.  $12 + 3 * (1 + 3) = 24$
2.  $3 * (12 - (1 + 3)) = 24$
3.  $12 * (1 + 3 / 3) = 24$

180.  $[1, 3, 3, 13]$  - 无解

181.  $[1, 3, 4, 4]$  - 5 个解:

1.  $3 * (4 + 1 * 4) = 24$
2.  $3 * (4 + 4 / 1) = 24$
3.  $4 * (3 + 4 - 1) = 24$
4.  $1 * 3 * (4 + 4) = 24$
5.  $3 * (4 + 4) / 1 = 24$

182.  $[1, 3, 4, 5]$  - 4 个解:

1.  $4 + 5 * (1 + 3) = 24$
2.  $(4 - 1) * (3 + 5) = 24$
3.  $3 * (4 + 5 - 1) = 24$
4.  $1 + 3 + 4 * 5 = 24$

183.  $[1, 3, 4, 6]$  - 1 个解:

1.  $6 / (1 - 3 / 4) = 24$

184.  $[1, 3, 4, 7]$  - 4 个解:

1.  $4 * 7 - (1 + 3) = 24$
2.  $7 * (1 + 3) - 4 = 24$
3.  $3 + 7 * (4 - 1) = 24$
4.  $4 + 3 * 7 - 1 = 24$

185.  $[1, 3, 4, 8]$  - 4 个解:

1.  $8 + 4 * (1 + 3) = 24$
2.  $(3 - 1) * (4 + 8) = 24$
3.  $8 / (4 / 3 - 1) = 24$
4.  $4 * (1 + 8 - 3) = 24$

186.  $[1, 3, 4, 9]$  - 9 个解:

1.  $4 * (9 - 1 * 3) = 24$
2.  $4 * (9 - 3 / 1) = 24$
3.  $9 + 3 * (1 + 4) = 24$
4.  $9 * (4 - 1) - 3 = 24$
5.  $4 * (1 * 9 - 3) = 24$
6.  $4 * (9 / 1 - 3) = 24$

$$7. 1 * 4 * (9 - 3) = 24$$

$$8. 4 * (9 - 3) / 1 = 24$$

$$9. 1 + 3 * 9 - 4 = 24$$

187.  $[1, 3, 4, 10]$  - 3 个解:

1.  $(1 + 3) * (10 - 4) = 24$
2.  $4 * (10 - (1 + 3)) = 24$
3.  $4 + 10 * (3 - 1) = 24$

188.  $[1, 3, 4, 11]$  - 3 个解:

1.  $(4 - 1) * (11 - 3) = 24$
2.  $1 + 11 + 3 * 4 = 24$
3.  $3 * (1 + 11 - 4) = 24$

189.  $[1, 3, 4, 12]$  - 14 个解:

1.  $4 * 12 / (3 - 1) = 24$
2.  $12 * (1 + 4 - 3) = 24$
3.  $3 * (12 - 1 * 4) = 24$
4.  $3 * (12 - 4 / 1) = 24$
5.  $3 * 4 + 1 * 12 = 24$
6.  $3 * 4 + 12 / 1 = 24$
7.  $12 + 1 * 3 * 4 = 24$
8.  $12 + 3 * 4 / 1 = 24$
9.  $1 * (12 + 3 * 4) = 24$
10.  $(12 + 3 * 4) / 1 = 24$
11.  $3 * (1 * 12 - 4) = 24$
12.  $3 * (12 / 1 - 4) = 24$
13.  $1 * 3 * (12 - 4) = 24$
14.  $3 * (12 - 4) / 1 = 24$

190.  $[1, 3, 4, 13]$  - 2 个解:

1.  $3 * (13 - (1 + 4)) = 24$
2.  $13 + 3 * 4 - 1 = 24$

191.  $[1, 3, 5, 5]$  - 无解

192.  $[1, 3, 5, 6]$  - 2 个解:

1.  $6 + 3 * (1 + 5) = 24$
2.  $1 + 5 + 3 * 6 = 24$

193.  $[1, 3, 5, 7]$  - 2 个解:

1.  $(3 - 1) * (5 + 7) = 24$
2.  $(1 + 5) * (7 - 3) = 24$

194.  $[1, 3, 5, 8]$  - 3 个解:

1.  $8 * (1 + 5 - 3) = 24$
2.  $1 + 8 + 3 * 5 = 24$
3.  $5 * (8 - 3) - 1 = 24$

195.  $[1, 3, 5, 9] - 8$  个解:

1.  $(5 - 1) * (9 - 3) = 24$
2.  $3 * 5 + 1 * 9 = 24$
3.  $3 * 5 + 9 / 1 = 24$
4.  $9 + 1 * 3 * 5 = 24$
5.  $9 + 3 * 5 / 1 = 24$
6.  $1 * (9 + 3 * 5) = 24$
7.  $(9 + 3 * 5) / 1 = 24$
8.  $9 * (1 + 5 / 3) = 24$

196.  $[1, 3, 5, 10] - 2$  个解:

1.  $3 * 10 - (1 + 5) = 24$
2.  $10 + 3 * 5 - 1 = 24$

197.  $[1, 3, 5, 11] - 2$  个解:

1.  $(1 + 3) * (11 - 5) = 24$
2.  $(5 - 3) * (1 + 11) = 24$

198.  $[1, 3, 5, 12] - 9$  个解:

1.  $12 * (5 - 1 * 3) = 24$
2.  $12 * (5 - 3 / 1) = 24$
3.  $12 * (1 + 5) / 3 = 24$
4.  $12 + 3 * (5 - 1) = 24$
5.  $12 * (1 * 5 - 3) = 24$
6.  $12 * (5 / 1 - 3) = 24$
7.  $1 * 12 * (5 - 3) = 24$
8.  $12 * (5 - 3) / 1 = 24$
9.  $3 * (1 + 12 - 5) = 24$

199.  $[1, 3, 5, 13] - 7$  个解:

1.  $3 * (13 - 1 * 5) = 24$
2.  $3 * (13 - 5 / 1) = 24$
3.  $(5 - 3) * (13 - 1) = 24$
4.  $3 * (1 * 13 - 5) = 24$
5.  $3 * (13 / 1 - 5) = 24$
6.  $1 * 3 * (13 - 5) = 24$
7.  $3 * (13 - 5) / 1 = 24$

200.  $[1, 3, 6, 6] - 10$  个解:

1.  $(3 - 1) * (6 + 6) = 24$
2.  $6 * (1 + 6 - 3) = 24$
3.  $1 * 6 + 3 * 6 = 24$
4.  $6 / 1 + 3 * 6 = 24$
5.  $3 * 6 + 1 * 6 = 24$
6.  $3 * 6 + 6 / 1 = 24$
7.  $6 + 1 * 3 * 6 = 24$
8.  $6 + 3 * 6 / 1 = 24$
9.  $1 * (6 + 3 * 6) = 24$
10.  $(6 + 3 * 6) / 1 = 24$

201.  $[1, 3, 6, 7] - 9$  个解:

1.  $6 * (7 - 1 * 3) = 24$
2.  $6 * (7 - 3 / 1) = 24$
3.  $(6 - 3) * (1 + 7) = 24$
4.  $7 + 3 * 6 - 1 = 24$
5.  $6 + 3 * (7 - 1) = 24$
6.  $6 * (1 * 7 - 3) = 24$
7.  $6 * (7 / 1 - 3) = 24$
8.  $1 * 6 * (7 - 3) = 24$
9.  $6 * (7 - 3) / 1 = 24$

202.  $[1, 3, 6, 8] - 9$  个解:

1.  $6 * (8 - (1 + 3)) = 24$
2.  $6 * 8 / (3 - 1) = 24$
3.  $8 * (6 - 1 * 3) = 24$
4.  $8 * (6 - 3 / 1) = 24$
5.  $8 * (1 * 6 - 3) = 24$
6.  $8 * (6 / 1 - 3) = 24$
7.  $1 * 8 * (6 - 3) = 24$
8.  $8 * (6 - 3) / 1 = 24$
9.  $8 * (1 + 6 / 3) = 24$

203.  $[1, 3, 6, 9] - 5$  个解:

1.  $6 + 9 * (3 - 1) = 24$
2.  $9 + 3 * (6 - 1) = 24$
3.  $(6 - 3) * (9 - 1) = 24$
4.  $3 * (1 + 9) - 6 = 24$
5.  $6 * (1 + 9 / 3) = 24$

204.  $[1, 3, 6, 10] - 6$  个解:

1.  $3 * 10 - 1 * 6 = 24$
2.  $3 * 10 - 6 / 1 = 24$
3.  $1 * 3 * 10 - 6 = 24$
4.  $3 * 10 / 1 - 6 = 24$
5.  $1 * (3 * 10 - 6) = 24$
6.  $(3 * 10 - 6) / 1 = 24$

205.  $[1, 3, 6, 11] - 2$  个解:

1.  $6 * (1 + 11) / 3 = 24$
2.  $3 * (11 - 1) - 6 = 24$

206.  $[1, 3, 6, 12] - 6$  个解:

1.  $(1 + 3) * (12 - 6) = 24$
2.  $12 * (6 - (1 + 3)) = 24$
3.  $12 + 6 * (3 - 1) = 24$
4.  $6 * 12 / (1 * 3) = 24$
5.  $12 / (1 - 3 / 6) = 24$
6.  $1 * 6 * 12 / 3 = 24$

207.  $[1, 3, 6, 13] - 2$  个解:

1.  $3 * (1 + 13 - 6) = 24$
2.  $6 * (13 - 1) / 3 = 24$

208.  $[1, 3, 7, 7] - 2$  个解:

1.  $(7 - 1) * (7 - 3) = 24$
2.  $(7 - 3) * (7 - 1) = 24$

209.  $[1, 3, 7, 8] - 2$  个解:

1.  $8 * (7 - (1 + 3)) = 24$
2.  $3 / (1 - 7 / 8) = 24$

210.  $[1, 3, 7, 9] - 1$  个解:

1.  $9 * (1 + 7) / 3 = 24$

211.  $[1, 3, 7, 10] - 2$  个解:

1.  $10 + 7 * (3 - 1) = 24$
2.  $1 + 3 * 10 - 7 = 24$

212.  $[1, 3, 7, 11] -$  无解

213.  $[1, 3, 7, 12] - 1$  个解:

1.  $12 * (7 - 1) / 3 = 24$

214.  $[1, 3, 7, 13] - 2$  个解:

1.  $(1 + 3) * (13 - 7) = 24$
2.  $1 + 3 + 7 + 13 = 24$

215.  $[1, 3, 8, 8] - 3$  个解:

1.  $8 * (1 + 3) - 8 = 24$
2.  $8 + 8 * (3 - 1) = 24$
3.  $8 * (1 + 8) / 3 = 24$

216.  $[1, 3, 8, 9] - 3$  个解:

1.  $8 * 9 / (1 * 3) = 24$
2.  $1 * 8 * 9 / 3 = 24$
3.  $3 / (9 / 8 - 1) = 24$

217.  $[1, 3, 8, 10] - 1$  个解:

1.  $8 * (10 - 1) / 3 = 24$

218.  $[1, 3, 8, 11] - 1$  个解:

1.  $3 * 11 - (1 + 8) = 24$

219.  $[1, 3, 8, 12] - 3$  个解:

1.  $8 * 12 / (1 + 3) = 24$
2.  $8 * (12 / 3 - 1) = 24$
3.  $1 + 3 + 8 + 12 = 24$



220.  $[1, 3, 8, 13] - 14$  个解:

1.  $8 + 13 + 1 * 3 = 24$
2.  $8 + 13 + 3 / 1 = 24$
3.  $3 + 13 + 1 * 8 = 24$
4.  $3 + 13 + 8 / 1 = 24$
5.  $13 + 1 * (3 + 8) = 24$
6.  $13 + (3 + 8) / 1 = 24$
7.  $3 + 8 + 1 * 13 = 24$
8.  $3 + 8 + 13 / 1 = 24$
9.  $8 + 1 * (3 + 13) = 24$
10.  $8 + (3 + 13) / 1 = 24$
11.  $3 + 1 * (8 + 13) = 24$
12.  $3 + (8 + 13) / 1 = 24$
13.  $1 * (3 + 8 + 13) = 24$
14.  $(3 + 8 + 13) / 1 = 24$

221.  $[1, 3, 9, 9] - 1$  个解:

1.  $9 * (9 - 1) / 3 = 24$

222.  $[1, 3, 9, 10] - 1$  个解:

1.  $3 * (1 + 10) - 9 = 24$

223.  $[1, 3, 9, 11] - 8$  个解:

1.  $3 * 11 - 1 * 9 = 24$
2.  $3 * 11 - 9 / 1 = 24$
3.  $1 * 3 * 11 - 9 = 24$
4.  $3 * 11 / 1 - 9 = 24$
5.  $1 * (3 * 11 - 9) = 24$
6.  $(3 * 11 - 9) / 1 = 24$
7.  $9 * (11 / 3 - 1) = 24$
8.  $1 + 3 + 9 + 11 = 24$

224.  $[1, 3, 9, 12] - 17$  个解:

1.  $9 * (1 + 3) - 12 = 24$
2.  $9 + 12 + 1 * 3 = 24$
3.  $9 + 12 + 3 / 1 = 24$
4.  $3 + 12 + 1 * 9 = 24$
5.  $3 + 12 + 9 / 1 = 24$
6.  $12 + 1 * (3 + 9) = 24$
7.  $12 + (3 + 9) / 1 = 24$
8.  $12 * (9 / 3 - 1) = 24$
9.  $3 * (12 - 1) - 9 = 24$
10.  $3 + 9 + 1 * 12 = 24$
11.  $3 + 9 + 12 / 1 = 24$
12.  $9 + 1 * (3 + 12) = 24$
13.  $9 + (3 + 12) / 1 = 24$
14.  $3 + 1 * (9 + 12) = 24$
15.  $3 + (9 + 12) / 1 = 24$

$$16. 1 * (3 + 9 + 12) = 24$$

$$17. (3 + 9 + 12) / 1 = 24$$

225.  $[1, 3, 9, 13] - 1$  个解:

1.  $3 + 9 + 13 - 1 = 24$

226.  $[1, 3, 10, 10] - 1$  个解:

1.  $1 + 3 + 10 + 10 = 24$

227.  $[1, 3, 10, 11] - 15$  个解:

1.  $10 + 11 + 1 * 3 = 24$
2.  $10 + 11 + 3 / 1 = 24$
3.  $3 + 11 + 1 * 10 = 24$
4.  $3 + 11 + 10 / 1 = 24$
5.  $11 + 1 * (3 + 10) = 24$
6.  $11 + (3 + 10) / 1 = 24$
7.  $3 + 10 + 1 * 11 = 24$
8.  $3 + 10 + 11 / 1 = 24$
9.  $10 + 1 * (3 + 11) = 24$
10.  $10 + (3 + 11) / 1 = 24$
11.  $1 + 3 * 11 - 10 = 24$
12.  $3 + 1 * (10 + 11) = 24$
13.  $3 + (10 + 11) / 1 = 24$
14.  $1 * (3 + 10 + 11) = 24$
15.  $(3 + 10 + 11) / 1 = 24$

228.  $[1, 3, 10, 12] - 1$  个解:

1.  $3 + 10 + 12 - 1 = 24$

229.  $[1, 3, 10, 13] -$  无解

230.  $[1, 3, 11, 11] - 1$  个解:

1.  $3 + 11 + 11 - 1 = 24$

231.  $[1, 3, 11, 12] - 2$  个解:

1.  $3 * 12 - (1 + 11) = 24$
2.  $3 * (1 + 11) - 12 = 24$

232.  $[1, 3, 11, 13] -$  无解

233.  $[1, 3, 12, 12] - 6$  个解:

1.  $3 * 12 - 1 * 12 = 24$
2.  $3 * 12 - 12 / 1 = 24$
3.  $1 * 3 * 12 - 12 = 24$
4.  $3 * 12 / 1 - 12 = 24$
5.  $1 * (3 * 12 - 12) = 24$
6.  $(3 * 12 - 12) / 1 = 24$

234.  $[1, 3, 12, 13] - 2$  个解:

$$1. 1 + 3 * 12 - 13 = 24$$

$$2. 3 * (13 - 1) - 12 = 24$$

235.  $[1, 3, 13, 13] - 1$  个解:

1.  $1 + 13 + 13 - 3 = 24$

236.  $[1, 4, 4, 4] - 3$  个解:

1.  $4 + 4 * (1 + 4) = 24$
2.  $(4 - 1) * (4 + 4) = 24$
3.  $(4 + 4) * (4 - 1) = 24$

237.  $[1, 4, 4, 5] - 6$  个解:

1.  $1 * 4 + 4 * 5 = 24$
2.  $4 / 1 + 4 * 5 = 24$
3.  $4 + 1 * 4 * 5 = 24$
4.  $4 + 4 * 5 / 1 = 24$
5.  $1 * (4 + 4 * 5) = 24$
6.  $(4 + 4 * 5) / 1 = 24$

238.  $[1, 4, 4, 6] - 2$  个解:

1.  $4 * (1 + 6) - 4 = 24$
2.  $4 + 4 * (6 - 1) = 24$

239.  $[1, 4, 4, 7] - 7$  个解:

1.  $4 * 7 - 1 * 4 = 24$
2.  $4 * 7 - 4 / 1 = 24$
3.  $1 + 7 + 4 * 4 = 24$
4.  $1 * 4 * 7 - 4 = 24$
5.  $4 * 7 / 1 - 4 = 24$
6.  $1 * (4 * 7 - 4) = 24$
7.  $(4 * 7 - 4) / 1 = 24$

240.  $[1, 4, 4, 8] - 7$  个解:

1.  $4 * 4 + 1 * 8 = 24$
2.  $4 * 4 + 8 / 1 = 24$
3.  $8 + 1 * 4 * 4 = 24$
4.  $8 + 4 * 4 / 1 = 24$
5.  $1 * (8 + 4 * 4) = 24$
6.  $(8 + 4 * 4) / 1 = 24$
7.  $4 * (8 - 1) - 4 = 24$

241.  $[1, 4, 4, 9] - 2$  个解:

1.  $9 + 4 * 4 - 1 = 24$
2.  $4 * (1 + 9 - 4) = 24$

242.  $[1, 4, 4, 10] - 6$  个解:

1.  $4 * (10 - 1 * 4) = 24$
2.  $4 * (10 - 4 / 1) = 24$
3.  $4 * (1 * 10 - 4) = 24$

4.  $4 * (10 / 1 - 4) = 24$   
 5.  $1 * 4 * (10 - 4) = 24$   
 6.  $4 * (10 - 4) / 1 = 24$

243.  $[1, 4, 4, 11] - 1$  个解:  
 1.  $4 * (11 - (1 + 4)) = 24$

244.  $[1, 4, 4, 12] - 3$  个解:  
 1.  $(4 - 1) * (12 - 4) = 24$   
 2.  $12 + 4 * (4 - 1) = 24$   
 3.  $12 * (1 + 4 / 4) = 24$

245.  $[1, 4, 4, 13] -$  无解

246.  $[1, 4, 5, 5] - 2$  个解:  
 1.  $4 + 5 * (5 - 1) = 24$   
 2.  $5 + 4 * 5 - 1 = 24$

247.  $[1, 4, 5, 6] - 2$  个解:  
 1.  $6 / (5 / 4 - 1) = 24$   
 2.  $4 / (1 - 5 / 6) = 24$

248.  $[1, 4, 5, 7] - 2$  个解:  
 1.  $7 * (5 - 1) - 4 = 24$   
 2.  $1 + 4 * 7 - 5 = 24$

249.  $[1, 4, 5, 8] - 2$  个解:  
 1.  $(1 + 5) * (8 - 4) = 24$   
 2.  $8 + 4 * (5 - 1) = 24$

250.  $[1, 4, 5, 9] - 2$  个解:  
 1.  $9 + 5 * (4 - 1) = 24$   
 2.  $5 * (9 - 4) - 1 = 24$

251.  $[1, 4, 5, 10] - 2$  个解:  
 1.  $(5 - 1) * (10 - 4) = 24$   
 2.  $4 * (1 + 10 - 5) = 24$

252.  $[1, 4, 5, 11] - 6$  个解:  
 1.  $4 * (11 - 1 * 5) = 24$   
 2.  $4 * (11 - 5 / 1) = 24$   
 3.  $4 * (1 * 11 - 5) = 24$   
 4.  $4 * (11 / 1 - 5) = 24$   
 5.  $1 * 4 * (11 - 5) = 24$   
 6.  $4 * (11 - 5) / 1 = 24$

253.  $[1, 4, 5, 12] - 2$  个解:  
 1.  $12 * (1 + 5 - 4) = 24$   
 2.  $4 * (12 - (1 + 5)) = 24$

254.  $[1, 4, 5, 13] - 1$  个解:  
 1.  $(4 - 1) * (13 - 5) = 24$

255.  $[1, 4, 6, 6] - 2$  个解:  
 1.  $6 * (1 + 4) - 6 = 24$   
 2.  $6 + 6 * (4 - 1) = 24$

256.  $[1, 4, 6, 7] - 2$  个解:  
 1.  $6 * (1 + 7 - 4) = 24$   
 2.  $4 / (7 / 6 - 1) = 24$

257.  $[1, 4, 6, 8] - 8$  个解:  
 1.  $6 * (8 - 1 * 4) = 24$   
 2.  $6 * (8 - 4 / 1) = 24$   
 3.  $8 * (1 + 6 - 4) = 24$   
 4.  $8 / (1 - 4 / 6) = 24$   
 5.  $6 * (1 * 8 - 4) = 24$   
 6.  $6 * (8 / 1 - 4) = 24$   
 7.  $1 * 6 * (8 - 4) = 24$   
 8.  $6 * (8 - 4) / 1 = 24$

258.  $[1, 4, 6, 9] - 1$  个解:  
 1.  $6 * (9 - (1 + 4)) = 24$

259.  $[1, 4, 6, 10] - 1$  个解:  
 1.  $10 * (4 - 1) - 6 = 24$

260.  $[1, 4, 6, 11] - 2$  个解:  
 1.  $(6 - 4) * (1 + 11) = 24$   
 2.  $4 * (1 + 11 - 6) = 24$

261.  $[1, 4, 6, 12] - 15$  个解:  
 1.  $6 * 12 / (4 - 1) = 24$   
 2.  $12 * (6 - 1 * 4) = 24$   
 3.  $12 * (6 - 4 / 1) = 24$   
 4.  $12 * (1 * 6 - 4) = 24$   
 5.  $4 * (12 - 1 * 6) = 24$   
 6.  $12 * (6 / 1 - 4) = 24$   
 7.  $4 * (12 - 6 / 1) = 24$   
 8.  $1 * 12 * (6 - 4) = 24$   
 9.  $12 * (6 - 4) / 1 = 24$   
 10.  $12 / (6 / 4 - 1) = 24$   
 11.  $4 * (1 * 12 - 6) = 24$   
 12.  $4 * (12 / 1 - 6) = 24$   
 13.  $6 * (1 + 12 / 4) = 24$   
 14.  $1 * 4 * (12 - 6) = 24$   
 15.  $4 * (12 - 6) / 1 = 24$

262.  $[1, 4, 6, 13] - 3$  个解:  
 1.  $4 * (13 - (1 + 6)) = 24$   
 2.  $(6 - 4) * (13 - 1) = 24$   
 3.  $1 + 4 + 6 + 13 = 24$

263.  $[1, 4, 7, 7] - 2$  个解:  
 1.  $(1 + 7) * (7 - 4) = 24$   
 2.  $(7 - 4) * (1 + 7) = 24$

264.  $[1, 4, 7, 8] - 9$  个解:  
 1.  $8 * (7 - 1 * 4) = 24$   
 2.  $8 * (7 - 4 / 1) = 24$   
 3.  $4 * 8 - (1 + 7) = 24$   
 4.  $4 * (1 + 7) - 8 = 24$   
 5.  $(7 - 1) * (8 - 4) = 24$   
 6.  $8 * (1 * 7 - 4) = 24$   
 7.  $8 * (7 / 1 - 4) = 24$   
 8.  $1 * 8 * (7 - 4) = 24$   
 9.  $8 * (7 - 4) / 1 = 24$

265.  $[1, 4, 7, 9] - 1$  个解:  
 1.  $(7 - 4) * (9 - 1) = 24$

266.  $[1, 4, 7, 10] -$  无解

267.  $[1, 4, 7, 11] - 1$  个解:  
 1.  $7 * (1 + 4) - 11 = 24$

268.  $[1, 4, 7, 12] - 4$  个解:  
 1.  $12 * (7 - (1 + 4)) = 24$   
 2.  $12 * (1 + 7) / 4 = 24$   
 3.  $4 * (1 + 12 - 7) = 24$   
 4.  $1 + 4 + 7 + 12 = 24$

269.  $[1, 4, 7, 13] - 20$  个解:  
 1.  $7 + 13 + 1 * 4 = 24$   
 2.  $7 + 13 + 4 / 1 = 24$   
 3.  $4 + 13 + 1 * 7 = 24$   
 4.  $4 * (13 - 1 * 7) = 24$   
 5.  $4 + 13 + 7 / 1 = 24$   
 6.  $4 * (13 - 7 / 1) = 24$   
 7.  $13 + 1 * (4 + 7) = 24$   
 8.  $13 + (4 + 7) / 1 = 24$   
 9.  $4 + 7 + 1 * 13 = 24$   
 10.  $4 * (1 * 13 - 7) = 24$   
 11.  $4 + 7 + 13 / 1 = 24$   
 12.  $4 * (13 / 1 - 7) = 24$   
 13.  $7 + 1 * (4 + 13) = 24$   
 14.  $7 + (4 + 13) / 1 = 24$

15.  $4 + 1 * (7 + 13) = 24$
16.  $4 + (7 + 13) / 1 = 24$
17.  $1 * (4 + 7 + 13) = 24$
18.  $(4 + 7 + 13) / 1 = 24$
19.  $1 * 4 * (13 - 7) = 24$
20.  $4 * (13 - 7) / 1 = 24$

270.  $[1, 4, 8, 8] - 8$  个解:

1.  $8 * (8 - (1 + 4)) = 24$
2.  $4 * 8 - 1 * 8 = 24$
3.  $4 * 8 - 8 / 1 = 24$
4.  $1 * 4 * 8 - 8 = 24$
5.  $4 * 8 / 1 - 8 = 24$
6.  $1 * (4 * 8 - 8) = 24$
7.  $(4 * 8 - 8) / 1 = 24$
8.  $8 * (1 + 8 / 4) = 24$

271.  $[1, 4, 8, 9] - 3$  个解:

1.  $8 * 9 / (4 - 1) = 24$
2.  $1 + 4 * 8 - 9 = 24$
3.  $4 * (9 - 1) - 8 = 24$

272.  $[1, 4, 8, 10] -$  无解

273.  $[1, 4, 8, 11] - 2$  个解:

1.  $8 * (1 + 11) / 4 = 24$
2.  $1 + 4 + 8 + 11 = 24$

274.  $[1, 4, 8, 12] - 18$  个解:

1.  $8 * 12 / (1 * 4) = 24$
2.  $8 + 12 + 1 * 4 = 24$
3.  $8 + 12 + 4 / 1 = 24$
4.  $4 * (1 + 8) - 12 = 24$
5.  $4 + 12 + 1 * 8 = 24$
6.  $4 + 12 + 8 / 1 = 24$
7.  $12 + 1 * (4 + 8) = 24$
8.  $12 + (4 + 8) / 1 = 24$
9.  $12 / (1 - 4 / 8) = 24$
10.  $4 + 8 + 1 * 12 = 24$
11.  $4 + 8 + 12 / 1 = 24$
12.  $8 + 1 * (4 + 12) = 24$
13.  $8 + (4 + 12) / 1 = 24$
14.  $4 + 1 * (8 + 12) = 24$
15.  $4 + (8 + 12) / 1 = 24$
16.  $1 * (4 + 8 + 12) = 24$
17.  $(4 + 8 + 12) / 1 = 24$
18.  $1 * 8 * 12 / 4 = 24$

275.  $[1, 4, 8, 13] - 3$  个解:

1.  $4 * (1 + 13 - 8) = 24$
2.  $8 * (13 - 1) / 4 = 24$
3.  $4 + 8 + 13 - 1 = 24$

276.  $[1, 4, 9, 9] -$  无解

277.  $[1, 4, 9, 10] - 1$  个解:

1.  $1 + 4 + 9 + 10 = 24$

278.  $[1, 4, 9, 11] - 16$  个解:

1.  $11 * (4 - 1) - 9 = 24$
2.  $9 + 11 + 1 * 4 = 24$
3.  $9 + 11 + 4 / 1 = 24$
4.  $4 + 11 + 1 * 9 = 24$
5.  $4 + 11 + 9 / 1 = 24$
6.  $11 + 1 * (4 + 9) = 24$
7.  $11 + (4 + 9) / 1 = 24$
8.  $4 * 9 - (1 + 11) = 24$
9.  $4 + 9 + 1 * 11 = 24$
10.  $4 + 9 + 11 / 1 = 24$
11.  $9 + 1 * (4 + 11) = 24$
12.  $9 + (4 + 11) / 1 = 24$
13.  $4 + 1 * (9 + 11) = 24$
14.  $4 + (9 + 11) / 1 = 24$
15.  $1 * (4 + 9 + 11) = 24$
16.  $(4 + 9 + 11) / 1 = 24$

279.  $[1, 4, 9, 12] - 8$  个解:

1.  $12 * (9 - 1) / 4 = 24$
2.  $4 * 9 - 1 * 12 = 24$
3.  $4 * 9 - 12 / 1 = 24$
4.  $1 * 4 * 9 - 12 = 24$
5.  $4 * 9 / 1 - 12 = 24$
6.  $1 * (4 * 9 - 12) = 24$
7.  $(4 * 9 - 12) / 1 = 24$
8.  $4 + 9 + 12 - 1 = 24$

280.  $[1, 4, 9, 13] - 1$  个解:

1.  $1 + 4 * 9 - 13 = 24$

281.  $[1, 4, 10, 10] - 11$  个解:

1.  $10 + 10 + 1 * 4 = 24$
2.  $10 + 10 + 4 / 1 = 24$
3.  $4 + 10 + 1 * 10 = 24$
4.  $4 + 10 + 10 / 1 = 24$
5.  $10 + 1 * (4 + 10) = 24$
6.  $10 + (4 + 10) / 1 = 24$
7.  $4 + 1 * (10 + 10) = 24$
8.  $4 + (10 + 10) / 1 = 24$

9.  $1 * (4 + 10 + 10) = 24$
10.  $(4 + 10 + 10) / 1 = 24$
11.  $10 * 10 / 4 - 1 = 24$

282.  $[1, 4, 10, 11] - 1$  个解:

1.  $4 + 10 + 11 - 1 = 24$

283.  $[1, 4, 10, 12] - 3$  个解:

1.  $10 * 12 / (1 + 4) = 24$
2.  $4 * (10 - 1) - 12 = 24$
3.  $4 / (1 - 10 / 12) = 24$

284.  $[1, 4, 10, 13] -$  无解

285.  $[1, 4, 11, 11] -$  无解

286.  $[1, 4, 11, 12] -$  无解

287.  $[1, 4, 11, 13] -$  无解

288.  $[1, 4, 12, 12] - 2$  个解:

1.  $12 * (4 - 1) - 12 = 24$
2.  $12 * (12 / 4 - 1) = 24$

289.  $[1, 4, 12, 13] -$  无解

290.  $[1, 4, 13, 13] -$  无解

291.  $[1, 5, 5, 5] - 1$  个解:

1.  $5 * (5 - 1 / 5) = 24$

292.  $[1, 5, 5, 6] - 2$  个解:

1.  $5 * 6 - (1 + 5) = 24$
2.  $5 * (1 + 5) - 6 = 24$

293.  $[1, 5, 5, 7] -$  无解

294.  $[1, 5, 5, 8] -$  无解

295.  $[1, 5, 5, 9] - 1$  个解:

1.  $(1 + 5) * (9 - 5) = 24$

296.  $[1, 5, 5, 10] - 1$  个解:

1.  $5 * (10 - 5) - 1 = 24$

297.  $[1, 5, 5, 11] - 1$  个解:

1.  $(5 - 1) * (11 - 5) = 24$

298.  $[1, 5, 5, 12] - 1$  个解:

1.  $12 * (1 + 5 / 5) = 24$
299.  $[1, 5, 5, 13] - 1$  个解:
- $1 + 5 + 5 + 13 = 24$
300.  $[1, 5, 6, 6] - 6$  个解:
- $5 * 6 - 1 * 6 = 24$
  - $5 * 6 - 6 / 1 = 24$
  - $1 * 5 * 6 - 6 = 24$
  - $5 * 6 / 1 - 6 = 24$
  - $1 * (5 * 6 - 6) = 24$
  - $(5 * 6 - 6) / 1 = 24$
301.  $[1, 5, 6, 7] - 2$  个解:
- $1 + 5 * 6 - 7 = 24$
  - $5 * (7 - 1) - 6 = 24$
302.  $[1, 5, 6, 8] - 1$  个解:
- $6 * (1 + 8 - 5) = 24$
303.  $[1, 5, 6, 9] - 6$  个解:
- $6 * (9 - 1 * 5) = 24$
  - $6 * (9 - 5 / 1) = 24$
  - $6 * (1 * 9 - 5) = 24$
  - $6 * (9 / 1 - 5) = 24$
  - $1 * 6 * (9 - 5) = 24$
  - $6 * (9 - 5) / 1 = 24$
304.  $[1, 5, 6, 10] - 2$  个解:
- $(1 + 5) * (10 - 6) = 24$
  - $6 * (10 - (1 + 5)) = 24$
305.  $[1, 5, 6, 11] - 2$  个解:
- $5 * (1 + 6) - 11 = 24$
  - $5 * (11 - 6) - 1 = 24$
306.  $[1, 5, 6, 12] - 4$  个解:
- $6 * (1 + 5) - 12 = 24$
  - $(5 - 1) * (12 - 6) = 24$
  - $12 * (1 + 6 - 5) = 24$
  - $1 + 5 + 6 + 12 = 24$
307.  $[1, 5, 6, 13] - 14$  个解:
- $6 + 13 + 1 * 5 = 24$
  - $6 + 13 + 5 / 1 = 24$
  - $5 + 13 + 1 * 6 = 24$
  - $5 + 13 + 6 / 1 = 24$
  - $13 + 1 * (5 + 6) = 24$
  - $13 + (5 + 6) / 1 = 24$

7.  $5 + 6 + 1 * 13 = 24$
8.  $5 + 6 + 13 / 1 = 24$
9.  $6 + 1 * (5 + 13) = 24$
10.  $6 + (5 + 13) / 1 = 24$
11.  $5 + 1 * (6 + 13) = 24$
12.  $5 + (6 + 13) / 1 = 24$
13.  $1 * (5 + 6 + 13) = 24$
14.  $(5 + 6 + 13) / 1 = 24$
308.  $[1, 5, 7, 7] -$  无解
309.  $[1, 5, 7, 8] - 2$  个解:
- $(1 + 7) * (8 - 5) = 24$
  - $8 * (1 + 7 - 5) = 24$
310.  $[1, 5, 7, 9] - 1$  个解:
- $(7 - 1) * (9 - 5) = 24$
311.  $[1, 5, 7, 10] - 2$  个解:
- $5 * 7 - (1 + 10) = 24$
  - $10 * (1 + 7 / 5) = 24$
312.  $[1, 5, 7, 11] - 9$  个解:
- $(1 + 5) * (11 - 7) = 24$
  - $(7 - 5) * (1 + 11) = 24$
  - $5 * 7 - 1 * 11 = 24$
  - $5 * 7 - 11 / 1 = 24$
  - $1 * 5 * 7 - 11 = 24$
  - $5 * 7 / 1 - 11 = 24$
  - $1 * (5 * 7 - 11) = 24$
  - $(5 * 7 - 11) / 1 = 24$
  - $1 + 5 + 7 + 11 = 24$
313.  $[1, 5, 7, 12] - 22$  个解:
- $12 * (7 - 1 * 5) = 24$
  - $7 + 12 + 1 * 5 = 24$
  - $12 * (7 - 5 / 1) = 24$
  - $7 + 12 + 5 / 1 = 24$
  - $12 * (1 * 7 - 5) = 24$
  - $5 + 12 + 1 * 7 = 24$
  - $12 * (7 / 1 - 5) = 24$
  - $5 + 12 + 7 / 1 = 24$
  - $12 + 1 * (5 + 7) = 24$
  - $12 + (5 + 7) / 1 = 24$
  - $1 * 12 * (7 - 5) = 24$
  - $12 * (7 - 5) / 1 = 24$
  - $1 + 5 * 7 - 12 = 24$
  - $5 + 7 + 1 * 12 = 24$
  - $5 + 7 + 12 / 1 = 24$

16.  $7 + 1 * (5 + 12) = 24$
17.  $7 + (5 + 12) / 1 = 24$
18.  $5 + 1 * (7 + 12) = 24$
19.  $5 + (7 + 12) / 1 = 24$
20.  $1 * (5 + 7 + 12) = 24$
21.  $(5 + 7 + 12) / 1 = 24$
22.  $5 * (12 - 7) - 1 = 24$
314.  $[1, 5, 7, 13] - 3$  个解:
- $(5 - 1) * (13 - 7) = 24$
  - $(7 - 5) * (13 - 1) = 24$
  - $5 + 7 + 13 - 1 = 24$
315.  $[1, 5, 8, 8] - 7$  个解:
- $8 * (5 - 1) - 8 = 24$
  - $8 * (8 - 1 * 5) = 24$
  - $8 * (8 - 5 / 1) = 24$
  - $8 * (1 * 8 - 5) = 24$
  - $8 * (8 / 1 - 5) = 24$
  - $1 * 8 * (8 - 5) = 24$
  - $8 * (8 - 5) / 1 = 24$
316.  $[1, 5, 8, 9] - 3$  个解:
- $8 * (9 - (1 + 5)) = 24$
  - $(8 - 5) * (9 - 1) = 24$
  - $9 / (1 - 5 / 8) = 24$
317.  $[1, 5, 8, 10] - 2$  个解:
- $8 * (1 + 10 / 5) = 24$
  - $1 + 5 + 8 + 10 = 24$
318.  $[1, 5, 8, 11] - 15$  个解:
- $8 + 11 + 1 * 5 = 24$
  - $8 + 11 + 5 / 1 = 24$
  - $5 * (8 - 1) - 11 = 24$
  - $5 + 11 + 1 * 8 = 24$
  - $5 + 11 + 8 / 1 = 24$
  - $11 + 1 * (5 + 8) = 24$
  - $11 + (5 + 8) / 1 = 24$
  - $5 + 8 + 1 * 11 = 24$
  - $5 + 8 + 11 / 1 = 24$
  - $8 + 1 * (5 + 11) = 24$
  - $8 + (5 + 11) / 1 = 24$
  - $5 + 1 * (8 + 11) = 24$
  - $5 + (8 + 11) / 1 = 24$
  - $1 * (5 + 8 + 11) = 24$
  - $(5 + 8 + 11) / 1 = 24$
319.  $[1, 5, 8, 12] - 4$  个解:

1.  $(1 + 5) * (12 - 8) = 24$
2.  $12 * (8 - (1 + 5)) = 24$
3.  $8 * 12 / (5 - 1) = 24$
4.  $5 + 8 + 12 - 1 = 24$

320.  $[1, 5, 8, 13] - 1$  个解:

1.  $5 * (13 - 8) - 1 = 24$

321.  $[1, 5, 9, 9] - 1$  个解:

1.  $1 + 5 + 9 + 9 = 24$

322.  $[1, 5, 9, 10] - 14$  个解:

1.  $9 + 10 + 1 * 5 = 24$
2.  $9 + 10 + 5 / 1 = 24$
3.  $5 + 10 + 1 * 9 = 24$
4.  $5 + 10 + 9 / 1 = 24$
5.  $10 + 1 * (5 + 9) = 24$
6.  $10 + (5 + 9) / 1 = 24$
7.  $5 + 9 + 1 * 10 = 24$
8.  $5 + 9 + 10 / 1 = 24$
9.  $9 + 1 * (5 + 10) = 24$
10.  $9 + (5 + 10) / 1 = 24$
11.  $5 + 1 * (9 + 10) = 24$
12.  $5 + (9 + 10) / 1 = 24$
13.  $1 * (5 + 9 + 10) = 24$
14.  $(5 + 9 + 10) / 1 = 24$

323.  $[1, 5, 9, 11] - 1$  个解:

1.  $5 + 9 + 11 - 1 = 24$

324.  $[1, 5, 9, 12] - 2$  个解:

1.  $9 * (5 - 1) - 12 = 24$
2.  $12 * (1 + 9) / 5 = 24$

325.  $[1, 5, 9, 13] - 1$  个解:

1.  $(1 + 5) * (13 - 9) = 24$

326.  $[1, 5, 10, 10] - 1$  个解:

1.  $5 + 10 + 10 - 1 = 24$

327.  $[1, 5, 10, 11] - 1$  个解:

1.  $10 * (1 + 11) / 5 = 24$

328.  $[1, 5, 10, 12] - 3$  个解:

1.  $10 * 12 / (1 * 5) = 24$
2.  $12 / (1 - 5 / 10) = 24$
3.  $1 * 10 * 12 / 5 = 24$

329.  $[1, 5, 10, 13] - 1$  个解:

1.  $10 * (13 - 1) / 5 = 24$

330.  $[1, 5, 11, 11] - 1$  个解:

1.  $(11 * 11 - 1) / 5 = 24$

331.  $[1, 5, 11, 12] - 1$  个解:

1.  $12 * (11 - 1) / 5 = 24$

332.  $[1, 5, 11, 13] -$  无解

333.  $[1, 5, 12, 12] - 1$  个解:

1.  $12 * 12 / (1 + 5) = 24$

334.  $[1, 5, 12, 13] -$  无解

335.  $[1, 5, 13, 13] -$  无解

336.  $[1, 6, 6, 6] - 1$  个解:

1.  $6 * (6 - 1) - 6 = 24$

337.  $[1, 6, 6, 7] -$  无解

338.  $[1, 6, 6, 8] - 1$  个解:

1.  $6 / (1 - 6 / 8) = 24$

339.  $[1, 6, 6, 9] - 1$  个解:

1.  $6 * (1 + 9 - 6) = 24$

340.  $[1, 6, 6, 10] - 6$  个解:

1.  $6 * (10 - 1 * 6) = 24$
2.  $6 * (10 - 6 / 1) = 24$
3.  $6 * (1 * 10 - 6) = 24$
4.  $6 * (10 / 1 - 6) = 24$
5.  $1 * 6 * (10 - 6) = 24$
6.  $6 * (10 - 6) / 1 = 24$

341.  $[1, 6, 6, 11] - 3$  个解:

1.  $6 * (11 - (1 + 6)) = 24$
2.  $6 * 6 - (1 + 11) = 24$
3.  $1 + 6 + 6 + 11 = 24$

342.  $[1, 6, 6, 12] - 17$  个解:

1.  $6 + 12 + 1 * 6 = 24$
2.  $6 + 12 + 6 / 1 = 24$
3.  $12 + 1 * (6 + 6) = 24$
4.  $12 + (6 + 6) / 1 = 24$
5.  $6 * 6 - 1 * 12 = 24$
6.  $6 * 6 - 12 / 1 = 24$
7.  $1 * 6 * 6 - 12 = 24$

8.  $6 * 6 / 1 - 12 = 24$

9.  $1 * (6 * 6 - 12) = 24$

10.  $(6 * 6 - 12) / 1 = 24$

11.  $12 * (1 + 6 / 6) = 24$

12.  $6 + 6 + 1 * 12 = 24$

13.  $6 + 6 + 12 / 1 = 24$

14.  $6 + 1 * (6 + 12) = 24$

15.  $6 + (6 + 12) / 1 = 24$

16.  $1 * (6 + 6 + 12) = 24$

17.  $(6 + 6 + 12) / 1 = 24$

343.  $[1, 6, 6, 13] - 2$  个解:

1.  $1 + 6 * 6 - 13 = 24$
2.  $6 + 6 + 13 - 1 = 24$

344.  $[1, 6, 7, 7] -$  无解

345.  $[1, 6, 7, 8] -$  无解

346.  $[1, 6, 7, 9] - 1$  个解:

1.  $(1 + 7) * (9 - 6) = 24$

347.  $[1, 6, 7, 10] - 3$  个解:

1.  $(7 - 1) * (10 - 6) = 24$
2.  $6 * (1 + 10 - 7) = 24$
3.  $1 + 6 + 7 + 10 = 24$

348.  $[1, 6, 7, 11] - 21$  个解:

1.  $7 * (6 - 1) - 11 = 24$
2.  $7 + 11 + 1 * 6 = 24$
3.  $7 + 11 + 6 / 1 = 24$
4.  $6 + 11 + 1 * 7 = 24$
5.  $6 * (11 - 1 * 7) = 24$
6.  $6 + 11 + 7 / 1 = 24$
7.  $6 * (11 - 7 / 1) = 24$
8.  $11 + 1 * (6 + 7) = 24$
9.  $11 + (6 + 7) / 1 = 24$
10.  $6 + 7 + 1 * 11 = 24$
11.  $6 * (1 * 11 - 7) = 24$
12.  $6 + 7 + 11 / 1 = 24$
13.  $6 * (11 / 1 - 7) = 24$
14.  $7 + 1 * (6 + 11) = 24$
15.  $7 + (6 + 11) / 1 = 24$
16.  $6 + 1 * (7 + 11) = 24$
17.  $6 + (7 + 11) / 1 = 24$
18.  $1 * (6 + 7 + 11) = 24$
19.  $(6 + 7 + 11) / 1 = 24$
20.  $1 * 6 * (11 - 7) = 24$
21.  $6 * (11 - 7) / 1 = 24$

349.  $[1, 6, 7, 12]$  - 4个解:
- $12 * (1 + 7 - 6) = 24$
  - $6 * (12 - (1 + 7)) = 24$
  - $6 * (7 - 1) - 12 = 24$
  - $6 + 7 + 12 - 1 = 24$
350.  $[1, 6, 7, 13]$  - 无解
351.  $[1, 6, 8, 8]$  - 2个解:
- $8 * (1 + 8 - 6) = 24$
  - $8 / (8 / 6 - 1) = 24$
352.  $[1, 6, 8, 9]$  - 8个解:
- $8 * (9 - 1 * 6) = 24$
  - $8 * (9 - 6 / 1) = 24$
  - $8 * (1 * 9 - 6) = 24$
  - $8 * (9 / 1 - 6) = 24$
  - $1 * 8 * (9 - 6) = 24$
  - $8 * (9 - 6) / 1 = 24$
  - $8 / (1 - 6 / 9) = 24$
  - $1 + 6 + 8 + 9 = 24$
353.  $[1, 6, 8, 10]$  - 16个解:
- $8 * (10 - (1 + 6)) = 24$
  - $8 + 10 + 1 * 6 = 24$
  - $8 + 10 + 6 / 1 = 24$
  - $6 + 10 + 1 * 8 = 24$
  - $6 + 10 + 8 / 1 = 24$
  - $10 + 1 * (6 + 8) = 24$
  - $10 + (6 + 8) / 1 = 24$
  - $6 + 8 + 1 * 10 = 24$
  - $6 + 8 + 10 / 1 = 24$
  - $8 + 1 * (6 + 10) = 24$
  - $8 + (6 + 10) / 1 = 24$
  - $6 + 1 * (8 + 10) = 24$
  - $6 + (8 + 10) / 1 = 24$
  - $1 * (6 + 8 + 10) = 24$
  - $(6 + 8 + 10) / 1 = 24$
  - $6 / (10 / 8 - 1) = 24$
354.  $[1, 6, 8, 11]$  - 3个解:
- $(8 - 6) * (1 + 11) = 24$
  - $6 * (1 + 11 - 8) = 24$
  - $6 + 8 + 11 - 1 = 24$
355.  $[1, 6, 8, 12]$  - 13个解:
- $12 * (8 - 1 * 6) = 24$
  - $12 * (8 - 6 / 1) = 24$

- $12 * (1 * 8 - 6) = 24$
  - $6 * (12 - 1 * 8) = 24$
  - $12 * (8 / 1 - 6) = 24$
  - $6 * (12 - 8 / 1) = 24$
  - $1 * 12 * (8 - 6) = 24$
  - $12 * (8 - 6) / 1 = 24$
  - $6 * (1 * 12 - 8) = 24$
  - $6 * (12 / 1 - 8) = 24$
  - $8 * (1 + 12 / 6) = 24$
  - $1 * 6 * (12 - 8) = 24$
  - $6 * (12 - 8) / 1 = 24$
356.  $[1, 6, 8, 13]$  - 2个解:
- $6 * (13 - (1 + 8)) = 24$
  - $(8 - 6) * (13 - 1) = 24$
357.  $[1, 6, 9, 9]$  - 12个解:
- $9 + 9 + 1 * 6 = 24$
  - $9 + 9 + 6 / 1 = 24$
  - $(9 - 1) * (9 - 6) = 24$
  - $6 + 9 + 1 * 9 = 24$
  - $6 + 9 + 9 / 1 = 24$
  - $9 + 1 * (6 + 9) = 24$
  - $9 + (6 + 9) / 1 = 24$
  - $(9 - 6) * (9 - 1) = 24$
  - $6 + 1 * (9 + 9) = 24$
  - $6 + (9 + 9) / 1 = 24$
  - $1 * (6 + 9 + 9) = 24$
  - $(6 + 9 + 9) / 1 = 24$
358.  $[1, 6, 9, 10]$  - 2个解:
- $9 * (1 + 10 / 6) = 24$
  - $6 + 9 + 10 - 1 = 24$
359.  $[1, 6, 9, 11]$  - 无解
360.  $[1, 6, 9, 12]$  - 4个解:
- $12 * (9 - (1 + 6)) = 24$
  - $12 / (9 / 6 - 1) = 24$
  - $6 * (1 + 12 - 9) = 24$
  - $6 / (1 - 9 / 12) = 24$
361.  $[1, 6, 9, 13]$  - 6个解:
- $6 * (13 - 1 * 9) = 24$
  - $6 * (13 - 9 / 1) = 24$
  - $6 * (1 * 13 - 9) = 24$
  - $6 * (13 / 1 - 9) = 24$
  - $1 * 6 * (13 - 9) = 24$
  - $6 * (13 - 9) / 1 = 24$

362.  $[1, 6, 10, 10]$  - 无解
363.  $[1, 6, 10, 11]$  - 无解
364.  $[1, 6, 10, 12]$  - 1个解:
- $10 * 12 / (6 - 1) = 24$
365.  $[1, 6, 10, 13]$  - 1个解:
- $6 * (1 + 13 - 10) = 24$
366.  $[1, 6, 11, 11]$  - 无解
367.  $[1, 6, 11, 12]$  - 1个解:
- $12 * (1 + 11) / 6 = 24$
368.  $[1, 6, 11, 13]$  - 1个解:
- $(1 + 11 * 13) / 6 = 24$
369.  $[1, 6, 12, 12]$  - 3个解:
- $12 * 12 / (1 * 6) = 24$
  - $12 / (1 - 6 / 12) = 24$
  - $1 * 12 * 12 / 6 = 24$
370.  $[1, 6, 12, 13]$  - 1个解:
- $12 * (13 - 1) / 6 = 24$
371.  $[1, 6, 13, 13]$  - 无解
372.  $[1, 7, 7, 7]$  - 无解
373.  $[1, 7, 7, 8]$  - 无解
374.  $[1, 7, 7, 9]$  - 1个解:
- $1 + 7 + 7 + 9 = 24$
375.  $[1, 7, 7, 10]$  - 11个解:
- $(1 + 7) * (10 - 7) = 24$
  - $7 + 10 + 1 * 7 = 24$
  - $7 + 10 + 7 / 1 = 24$
  - $10 + 1 * (7 + 7) = 24$
  - $10 + (7 + 7) / 1 = 24$
  - $7 + 7 + 1 * 10 = 24$
  - $7 + 7 + 10 / 1 = 24$
  - $7 + 1 * (7 + 10) = 24$
  - $7 + (7 + 10) / 1 = 24$
  - $1 * (7 + 7 + 10) = 24$
  - $(7 + 7 + 10) / 1 = 24$

376.  $[1, 7, 7, 11] - 2$  个解:  
 1.  $(7 - 1) * (11 - 7) = 24$   
 2.  $7 + 7 + 11 - 1 = 24$
377.  $[1, 7, 7, 12] - 1$  个解:  
 1.  $12 * (1 + 7 / 7) = 24$
378.  $[1, 7, 7, 13] -$  无解
379.  $[1, 7, 8, 8] - 1$  个解:  
 1.  $1 + 7 + 8 + 8 = 24$
380.  $[1, 7, 8, 9] - 15$  个解:  
 1.  $8 + 9 + 1 * 7 = 24$   
 2.  $8 + 9 + 7 / 1 = 24$   
 3.  $7 + 9 + 1 * 8 = 24$   
 4.  $7 + 9 + 8 / 1 = 24$   
 5.  $9 + 1 * (7 + 8) = 24$   
 6.  $9 + (7 + 8) / 1 = 24$   
 7.  $8 * (1 + 9 - 7) = 24$   
 8.  $7 + 8 + 1 * 9 = 24$   
 9.  $7 + 8 + 9 / 1 = 24$   
 10.  $8 + 1 * (7 + 9) = 24$   
 11.  $8 + (7 + 9) / 1 = 24$   
 12.  $7 + 1 * (8 + 9) = 24$   
 13.  $7 + (8 + 9) / 1 = 24$   
 14.  $1 * (7 + 8 + 9) = 24$   
 15.  $(7 + 8 + 9) / 1 = 24$
381.  $[1, 7, 8, 10] - 7$  个解:  
 1.  $8 * (10 - 1 * 7) = 24$   
 2.  $8 * (10 - 7 / 1) = 24$   
 3.  $8 * (1 * 10 - 7) = 24$   
 4.  $8 * (10 / 1 - 7) = 24$   
 5.  $1 * 8 * (10 - 7) = 24$   
 6.  $8 * (10 - 7) / 1 = 24$   
 7.  $7 + 8 + 10 - 1 = 24$
382.  $[1, 7, 8, 11] - 2$  个解:  
 1.  $(1 + 7) * (11 - 8) = 24$   
 2.  $8 * (11 - (1 + 7)) = 24$
383.  $[1, 7, 8, 12] - 2$  个解:  
 1.  $(7 - 1) * (12 - 8) = 24$   
 2.  $12 * (1 + 8 - 7) = 24$
384.  $[1, 7, 8, 13] -$  无解
385.  $[1, 7, 9, 9] - 1$  个解:

1.  $7 + 9 + 9 - 1 = 24$
386.  $[1, 7, 9, 10] - 1$  个解:  
 1.  $(9 - 1) * (10 - 7) = 24$
387.  $[1, 7, 9, 11] - 1$  个解:  
 1.  $(9 - 7) * (1 + 11) = 24$
388.  $[1, 7, 9, 12] - 7$  个解:  
 1.  $(1 + 7) * (12 - 9) = 24$   
 2.  $12 * (9 - 1 * 7) = 24$   
 3.  $12 * (9 - 7 / 1) = 24$   
 4.  $12 * (1 * 9 - 7) = 24$   
 5.  $12 * (9 / 1 - 7) = 24$   
 6.  $1 * 12 * (9 - 7) = 24$   
 7.  $12 * (9 - 7) / 1 = 24$
389.  $[1, 7, 9, 13] - 2$  个解:  
 1.  $(7 - 1) * (13 - 9) = 24$   
 2.  $(9 - 7) * (13 - 1) = 24$
390.  $[1, 7, 10, 10] -$  无解
391.  $[1, 7, 10, 11] -$  无解
392.  $[1, 7, 10, 12] - 2$  个解:  
 1.  $12 * (10 - (1 + 7)) = 24$   
 2.  $10 / (1 - 7 / 12) = 24$
393.  $[1, 7, 10, 13] - 1$  个解:  
 1.  $(1 + 7) * (13 - 10) = 24$
394.  $[1, 7, 11, 11] -$  无解
395.  $[1, 7, 11, 12] -$  无解
396.  $[1, 7, 11, 13] -$  无解
397.  $[1, 7, 12, 12] - 1$  个解:  
 1.  $12 * 12 / (7 - 1) = 24$
398.  $[1, 7, 12, 13] - 1$  个解:  
 1.  $12 * (1 + 13) / 7 = 24$
399.  $[1, 7, 13, 13] - 1$  个解:  
 1.  $(13 * 13 - 1) / 7 = 24$
400.  $[1, 8, 8, 8] - 6$  个解:  
 1.  $8 + 8 + 1 * 8 = 24$

2.  $8 + 8 + 8 / 1 = 24$   
 3.  $8 + 1 * (8 + 8) = 24$   
 4.  $8 + (8 + 8) / 1 = 24$   
 5.  $1 * (8 + 8 + 8) = 24$   
 6.  $(8 + 8 + 8) / 1 = 24$
401.  $[1, 8, 8, 9] - 1$  个解:  
 1.  $8 + 8 + 9 - 1 = 24$
402.  $[1, 8, 8, 10] - 1$  个解:  
 1.  $8 * (1 + 10 - 8) = 24$
403.  $[1, 8, 8, 11] - 6$  个解:  
 1.  $8 * (11 - 1 * 8) = 24$   
 2.  $8 * (11 - 8 / 1) = 24$   
 3.  $8 * (1 * 11 - 8) = 24$   
 4.  $8 * (11 / 1 - 8) = 24$   
 5.  $1 * 8 * (11 - 8) = 24$   
 6.  $8 * (11 - 8) / 1 = 24$
404.  $[1, 8, 8, 12] - 3$  个解:  
 1.  $8 * (12 - (1 + 8)) = 24$   
 2.  $12 * (1 + 8 / 8) = 24$   
 3.  $8 / (1 - 8 / 12) = 24$
405.  $[1, 8, 8, 13] -$  无解
406.  $[1, 8, 9, 9] -$  无解
407.  $[1, 8, 9, 10] -$  无解
408.  $[1, 8, 9, 11] - 3$  个解:  
 1.  $(9 - 1) * (11 - 8) = 24$   
 2.  $8 * (1 + 11 - 9) = 24$   
 3.  $9 / (11 / 8 - 1) = 24$
409.  $[1, 8, 9, 12] - 8$  个解:  
 1.  $12 * (1 + 9 - 8) = 24$   
 2.  $8 * (12 - 1 * 9) = 24$   
 3.  $8 * (12 - 9 / 1) = 24$   
 4.  $8 * (1 * 12 - 9) = 24$   
 5.  $8 * (12 / 1 - 9) = 24$   
 6.  $1 * 8 * (12 - 9) = 24$   
 7.  $8 * (12 - 9) / 1 = 24$   
 8.  $8 / (12 / 9 - 1) = 24$
410.  $[1, 8, 9, 13] - 1$  个解:  
 1.  $8 * (13 - (1 + 9)) = 24$

411.  $[1, 8, 10, 10]$  - 无解

412.  $[1, 8, 10, 11]$  - 1 个解:

1.  $(10 - 8) * (1 + 11) = 24$

413.  $[1, 8, 10, 12]$  - 7 个解:

1.  $12 * (10 - 1 * 8) = 24$

2.  $12 * (10 - 8 / 1) = 24$

3.  $12 * (1 * 10 - 8) = 24$

4.  $12 * (10 / 1 - 8) = 24$

5.  $1 * 12 * (10 - 8) = 24$

6.  $12 * (10 - 8) / 1 = 24$

7.  $8 * (1 + 12 - 10) = 24$

414.  $[1, 8, 10, 13]$  - 7 个解:

1.  $8 * (13 - 1 * 10) = 24$

2.  $8 * (13 - 10 / 1) = 24$

3.  $(10 - 8) * (13 - 1) = 24$

4.  $8 * (1 * 13 - 10) = 24$

5.  $8 * (13 / 1 - 10) = 24$

6.  $1 * 8 * (13 - 10) = 24$

7.  $8 * (13 - 10) / 1 = 24$

415.  $[1, 8, 11, 11]$  - 无解

416.  $[1, 8, 11, 12]$  - 1 个解:

1.  $12 * (11 - (1 + 8)) = 24$

417.  $[1, 8, 11, 13]$  - 1 个解:

1.  $8 * (1 + 13 - 11) = 24$

418.  $[1, 8, 12, 12]$  - 1 个解:

1.  $12 / (12 / 8 - 1) = 24$

419.  $[1, 8, 12, 13]$  - 无解

420.  $[1, 8, 13, 13]$  - 无解

421.  $[1, 9, 9, 9]$  - 无解

422.  $[1, 9, 9, 10]$  - 无解

423.  $[1, 9, 9, 11]$  - 无解

424.  $[1, 9, 9, 12]$  - 2 个解:

1.  $(9 - 1) * (12 - 9) = 24$

2.  $12 * (1 + 9 / 9) = 24$

425.  $[1, 9, 9, 13]$  - 无解

426.  $[1, 9, 10, 10]$  - 无解

427.  $[1, 9, 10, 11]$  - 无解

428.  $[1, 9, 10, 12]$  - 1 个解:

1.  $12 * (1 + 10 - 9) = 24$

429.  $[1, 9, 10, 13]$  - 1 个解:

1.  $(9 - 1) * (13 - 10) = 24$

430.  $[1, 9, 11, 11]$  - 2 个解:

1.  $(1 + 11) * (11 - 9) = 24$

2.  $(11 - 9) * (1 + 11) = 24$

431.  $[1, 9, 11, 12]$  - 6 个解:

1.  $12 * (11 - 1 * 9) = 24$

2.  $12 * (11 - 9 / 1) = 24$

3.  $12 * (1 * 11 - 9) = 24$

4.  $12 * (11 / 1 - 9) = 24$

5.  $1 * 12 * (11 - 9) = 24$

6.  $12 * (11 - 9) / 1 = 24$

432.  $[1, 9, 11, 13]$  - 1 个解:

1.  $(11 - 9) * (13 - 1) = 24$

433.  $[1, 9, 12, 12]$  - 1 个解:

1.  $12 * (12 - (1 + 9)) = 24$

434.  $[1, 9, 12, 13]$  - 无解

435.  $[1, 9, 13, 13]$  - 无解

436.  $[1, 10, 10, 10]$  - 无解

437.  $[1, 10, 10, 11]$  - 无解

438.  $[1, 10, 10, 12]$  - 1 个解:

1.  $12 * (1 + 10 / 10) = 24$

439.  $[1, 10, 10, 13]$  - 无解

440.  $[1, 10, 11, 11]$  - 无解

441.  $[1, 10, 11, 12]$  - 2 个解:

1.  $(1 + 11) * (12 - 10) = 24$

2.  $12 * (1 + 11 - 10) = 24$

442.  $[1, 10, 11, 13]$  - 无解

443.  $[1, 10, 12, 12]$  - 6 个解:

1.  $12 * (12 - 1 * 10) = 24$

2.  $12 * (12 - 10 / 1) = 24$

3.  $12 * (1 * 12 - 10) = 24$

4.  $12 * (12 / 1 - 10) = 24$

5.  $1 * 12 * (12 - 10) = 24$

6.  $12 * (12 - 10) / 1 = 24$

444.  $[1, 10, 12, 13]$  - 2 个解:

1.  $12 * (13 - (1 + 10)) = 24$

2.  $(12 - 10) * (13 - 1) = 24$

445.  $[1, 10, 13, 13]$  - 无解

446.  $[1, 11, 11, 11]$  - 无解

447.  $[1, 11, 11, 12]$  - 1 个解:

1.  $12 * (1 + 11 / 11) = 24$

448.  $[1, 11, 11, 13]$  - 2 个解:

1.  $(1 + 11) * (13 - 11) = 24$

2.  $11 * (1 + 13 / 11) = 24$

449.  $[1, 11, 12, 12]$  - 1 个解:

1.  $12 * (1 + 12 - 11) = 24$

450.  $[1, 11, 12, 13]$  - 6 个解:

1.  $12 * (13 - 1 * 11) = 24$

2.  $12 * (13 - 11 / 1) = 24$

3.  $12 * (1 * 13 - 11) = 24$

4.  $12 * (13 / 1 - 11) = 24$

5.  $1 * 12 * (13 - 11) = 24$

6.  $12 * (13 - 11) / 1 = 24$

451.  $[1, 11, 13, 13]$  - 3 个解:

1.  $(13 - 1) * (13 - 11) = 24$

2.  $(13 - 11) * (13 - 1) = 24$

3.  $13 * (1 + 11 / 13) = 24$

452.  $[1, 12, 12, 12]$  - 1 个解:

1.  $12 * (1 + 12 / 12) = 24$

453.  $[1, 12, 12, 13]$  - 1 个解:

1.  $12 * (1 + 13 - 12) = 24$

454.  $[1, 12, 13, 13]$  - 1 个解:

1.  $12 * (1 + 13 / 13) = 24$



455.  $[1, 13, 13, 13]$  - 无解

456.  $[2, 2, 2, 2]$  - 无解

457.  $[2, 2, 2, 3]$  - 2个解:

1.  $2 * 3 * (2 + 2) = 24$
2.  $2 * 2 * 2 * 3 = 24$

458.  $[2, 2, 2, 4]$  - 4个解:

1.  $(2 + 2) * (2 + 4) = 24$
2.  $4 * (2 + 2 * 2) = 24$
3.  $4 * (2 + 2 + 2) = 24$
4.  $2 * 2 * (2 + 4) = 24$

459.  $[2, 2, 2, 5]$  - 1个解:

1.  $2 * (2 + 2 * 5) = 24$

460.  $[2, 2, 2, 6]$  - 无解

461.  $[2, 2, 2, 7]$  - 1个解:

1.  $2 * (2 * 7 - 2) = 24$

462.  $[2, 2, 2, 8]$  - 5个解:

1.  $(2 + 2) * (8 - 2) = 24$
2.  $2 * (8 + 2 * 2) = 24$
3.  $8 * (2 + 2 / 2) = 24$
4.  $2 * 2 * (8 - 2) = 24$
5.  $2 * (2 + 2 + 8) = 24$

463.  $[2, 2, 2, 9]$  - 1个解:

1.  $2 + 2 * (2 + 9) = 24$

464.  $[2, 2, 2, 10]$  - 2个解:

1.  $2 * 2 + 2 * 10 = 24$
2.  $2 + 2 + 2 * 10 = 24$

465.  $[2, 2, 2, 11]$  - 2个解:

1.  $2 * (11 + 2 / 2) = 24$
2.  $2 * (2 + 11) - 2 = 24$

466.  $[2, 2, 2, 12]$  - 6个解:

1.  $12 * (2 + 2 - 2) = 24$
2.  $12 * (2 + 2) / 2 = 24$
3.  $12 * (2 * 2 - 2) = 24$
4.  $2 * (2 + 12 - 2) = 24$
5.  $2 + 2 * 12 - 2 = 24$
6.  $2 * 2 * 12 / 2 = 24$

467.  $[2, 2, 2, 13]$  - 2个解:

$$1. 2 * (13 - 2 / 2) = 24$$

$$2. 2 + 2 * (13 - 2) = 24$$

468.  $[2, 2, 3, 3]$  - 3个解:

1.  $(2 + 2) * (3 + 3) = 24$
2.  $3 * (2 + 2 * 3) = 24$
3.  $2 * 2 * (3 + 3) = 24$

469.  $[2, 2, 3, 4]$  - 2个解:

1.  $3 * (4 + 2 * 2) = 24$
2.  $3 * (2 + 2 + 4) = 24$

470.  $[2, 2, 3, 5]$  - 1个解:

1.  $3 * (2 * 5 - 2) = 24$

471.  $[2, 2, 3, 6]$  - 4个解:

1.  $6 * (3 + 2 / 2) = 24$
2.  $6 * (2 * 3 - 2) = 24$
3.  $2 * (6 + 2 * 3) = 24$
4.  $2 * 3 * (6 - 2) = 24$

472.  $[2, 2, 3, 7]$  - 2个解:

1.  $3 * (7 + 2 / 2) = 24$
2.  $2 * (2 + 3 + 7) = 24$

473.  $[2, 2, 3, 8]$  - 5个解:

1.  $8 * (2 + 3 - 2) = 24$
2.  $3 * (2 + 8 - 2) = 24$
3.  $2 + 2 * (3 + 8) = 24$
4.  $2 + 3 * 8 - 2 = 24$
5.  $2 * 3 * 8 / 2 = 24$

474.  $[2, 2, 3, 9]$  - 5个解:

1.  $(2 + 2) * (9 - 3) = 24$
2.  $3 * (9 - 2 / 2) = 24$
3.  $2 * 3 + 2 * 9 = 24$
4.  $9 * (2 + 2 / 3) = 24$
5.  $2 * 2 * (9 - 3) = 24$

475.  $[2, 2, 3, 10]$  - 1个解:

1.  $2 * (3 + 10) - 2 = 24$

476.  $[2, 2, 3, 11]$  - 1个解:

1.  $2 * (3 + 11 - 2) = 24$

477.  $[2, 2, 3, 12]$  - 9个解:

1.  $12 + 3 * (2 + 2) = 24$
2.  $3 * (12 - (2 + 2)) = 24$
3.  $3 * (12 - 2 * 2) = 24$

$$4. 12 * (3 - 2 / 2) = 24$$

$$5. 2 * 12 / (3 - 2) = 24$$

$$6. 2 * 12 * (3 - 2) = 24$$

$$7. 12 / (2 - 3 / 2) = 24$$

$$8. 12 + 2 * 2 * 3 = 24$$

$$9. 3 * (2 + 12 / 2) = 24$$

478.  $[2, 2, 3, 13]$  - 1个解:

1.  $2 * (2 + 13 - 3) = 24$

479.  $[2, 2, 4, 4]$  - 2个解:

1.  $4 * (2 * 4 - 2) = 24$
2.  $2 * (4 + 2 * 4) = 24$

480.  $[2, 2, 4, 5]$  - 6个解:

1.  $4 + 5 * (2 + 2) = 24$
2.  $2 * 2 + 4 * 5 = 24$
3.  $4 * (5 + 2 / 2) = 24$
4.  $2 * 4 * (5 - 2) = 24$
5.  $4 + 2 * 2 * 5 = 24$
6.  $2 + 2 + 4 * 5 = 24$

481.  $[2, 2, 4, 6]$  - 8个解:

1.  $(2 + 4) * (6 - 2) = 24$
2.  $6 * (2 + 4 - 2) = 24$
3.  $2 * 6 * (4 - 2) = 24$
4.  $6 * (2 + 4 / 2) = 24$
5.  $4 * (2 + 6 - 2) = 24$
6.  $2 * (2 + 4 + 6) = 24$
7.  $2 + 4 * 6 - 2 = 24$
8.  $2 * 4 * 6 / 2 = 24$

482.  $[2, 2, 4, 7]$  - 6个解:

1.  $4 * 7 - (2 + 2) = 24$
2.  $7 * (2 + 2) - 4 = 24$
3.  $4 * 7 - 2 * 2 = 24$
4.  $4 * (7 - 2 / 2) = 24$
5.  $2 * 2 * 7 - 4 = 24$
6.  $2 + 2 * (4 + 7) = 24$

483.  $[2, 2, 4, 8]$  - 8个解:

1.  $8 + 4 * (2 + 2) = 24$
2.  $8 * (4 - 2 / 2) = 24$
3.  $8 * (2 + 4) / 2 = 24$
4.  $2 * 4 + 2 * 8 = 24$
5.  $8 + 2 * 2 * 4 = 24$
6.  $4 + 2 * (2 + 8) = 24$
7.  $2 * (2 * 8 - 4) = 24$
8.  $4 * (2 + 8 / 2) = 24$

484.  $[2, 2, 4, 9] - 2$  个解:

1.  $2 + 4 + 2 * 9 = 24$
2.  $2 * (4 + 9) - 2 = 24$

485.  $[2, 2, 4, 10] - 8$  个解:

1.  $(2 + 2) * (10 - 4) = 24$
2.  $4 * (10 - (2 + 2)) = 24$
3.  $4 * (10 - 2 * 2) = 24$
4.  $(4 - 2) * (2 + 10) = 24$
5.  $2 * (10 + 4 / 2) = 24$
6.  $4 * (2 + 10) / 2 = 24$
7.  $2 * (4 + 10 - 2) = 24$
8.  $2 * 2 * (10 - 4) = 24$

486.  $[2, 2, 4, 11] - 4$  个解:

1.  $2 + 11 * (4 - 2) = 24$
2.  $4 / 2 + 2 * 11 = 24$
3.  $4 + 2 * 11 - 2 = 24$
4.  $2 + 4 * 11 / 2 = 24$

487.  $[2, 2, 4, 12] - 3$  个解:

1.  $12 + 2 * (2 + 4) = 24$
2.  $2 * (2 + 12) - 4 = 24$
3.  $4 + 2 * (12 - 2) = 24$

488.  $[2, 2, 4, 13] - 4$  个解:

1.  $13 * (4 - 2) - 2 = 24$
2.  $2 * 13 - 4 / 2 = 24$
3.  $2 + 2 * 13 - 4 = 24$
4.  $4 * 13 / 2 - 2 = 24$

489.  $[2, 2, 5, 5] - 2$  个解:

1.  $5 * 5 - 2 / 2 = 24$
2.  $2 * (2 + 5 + 5) = 24$

490.  $[2, 2, 5, 6] - 3$  个解:

1.  $6 * (5 - 2 / 2) = 24$
2.  $(5 - 2) * (2 + 6) = 24$
3.  $2 + 2 * (5 + 6) = 24$

491.  $[2, 2, 5, 7] - 1$  个解:

1.  $2 * 5 + 2 * 7 = 24$

492.  $[2, 2, 5, 8] - 1$  个解:

1.  $2 * (5 + 8) - 2 = 24$

493.  $[2, 2, 5, 9] - 1$  个解:

1.  $2 * (5 + 9 - 2) = 24$

494.  $[2, 2, 5, 10] - 4$  个解:

1.  $10 + 2 * (2 + 5) = 24$
2.  $(5 - 2) * (10 - 2) = 24$
3.  $10 * (2 + 2 / 5) = 24$
4.  $(5 * 10 - 2) / 2 = 24$

495.  $[2, 2, 5, 11] - 2$  个解:

1.  $(2 + 2) * (11 - 5) = 24$
2.  $2 * 2 * (11 - 5) = 24$

496.  $[2, 2, 5, 12] - 2$  个解:

1.  $2 + 12 + 2 * 5 = 24$
2.  $12 / (5 / 2 - 2) = 24$

497.  $[2, 2, 5, 13] -$  无解

498.  $[2, 2, 6, 6] - 2$  个解:

1.  $6 * (2 + 6) / 2 = 24$
2.  $2 * 6 + 2 * 6 = 24$

499.  $[2, 2, 6, 7] - 2$  个解:

1.  $6 + 2 * (2 + 7) = 24$
2.  $2 * (6 + 7) - 2 = 24$

500.  $[2, 2, 6, 8] - 6$  个解:

1.  $6 * (8 - (2 + 2)) = 24$
2.  $6 * (8 - 2 * 2) = 24$
3.  $8 + 2 * (2 + 6) = 24$
4.  $(6 - 2) * (8 - 2) = 24$
5.  $2 + 6 + 2 * 8 = 24$
6.  $2 * (6 + 8 - 2) = 24$

501.  $[2, 2, 6, 9] - 2$  个解:

1.  $2 * (9 + 6 / 2) = 24$
2.  $2 * (2 * 9 - 6) = 24$

502.  $[2, 2, 6, 10] - 3$  个解:

1.  $2 + 10 + 2 * 6 = 24$
2.  $6 * (10 - 2) / 2 = 24$
3.  $6 + 2 * 10 - 2 = 24$

503.  $[2, 2, 6, 11] - 1$  个解:

1.  $6 + 2 * (11 - 2) = 24$

504.  $[2, 2, 6, 12] - 7$  个解:

1.  $(2 + 2) * (12 - 6) = 24$
2.  $12 * (6 - (2 + 2)) = 24$
3.  $12 * (6 - 2 * 2) = 24$

$$4. 12 * (6 - 2) / 2 = 24$$

$$5. 6 * (12 / 2 - 2) = 24$$

$$6. 2 * (6 + 12 / 2) = 24$$

$$7. 2 * 2 * (12 - 6) = 24$$

505.  $[2, 2, 6, 13] - 1$  个解:

1.  $2 * (2 + 13) - 6 = 24$

506.  $[2, 2, 7, 7] - 1$  个解:

1.  $2 * (7 + 7 - 2) = 24$

507.  $[2, 2, 7, 8] - 3$  个解:

1.  $8 * (7 - (2 + 2)) = 24$
2.  $8 * (7 - 2 * 2) = 24$
3.  $2 + 8 + 2 * 7 = 24$

508.  $[2, 2, 7, 9] -$  无解

509.  $[2, 2, 7, 10] - 1$  个解:

1.  $2 * (7 + 10 / 2) = 24$

510.  $[2, 2, 7, 11] -$  无解

511.  $[2, 2, 7, 12] - 1$  个解:

1.  $12 + 2 * 7 - 2 = 24$

512.  $[2, 2, 7, 13] - 4$  个解:

1.  $(2 + 2) * (13 - 7) = 24$
2.  $7 + 13 + 2 * 2 = 24$
3.  $2 + 2 + 7 + 13 = 24$
4.  $2 * 2 * (13 - 7) = 24$

513.  $[2, 2, 8, 8] - 4$  个解:

1.  $8 * (2 + 2) - 8 = 24$
2.  $8 * (8 - 2) / 2 = 24$
3.  $2 * (8 + 8 / 2) = 24$
4.  $2 * 2 * 8 - 8 = 24$

514.  $[2, 2, 8, 9] - 1$  个解:

1.  $8 + 2 * 9 - 2 = 24$

515.  $[2, 2, 8, 10] - 5$  个解:

1.  $10 + 2 * 8 - 2 = 24$
2.  $8 / 2 + 2 * 10 = 24$
3.  $8 + 2 * (10 - 2) = 24$
4.  $2 * (2 * 10 - 8) = 24$
5.  $8 * (10 / 2 - 2) = 24$

516.  $[2, 2, 8, 11] -$  无解

517.  $[2, 2, 8, 12]$  - 6 个解:

1.  $8 * 12 / (2 + 2) = 24$
2.  $8 * 12 / (2 * 2) = 24$
3.  $8 + 12 + 2 * 2 = 24$
4.  $12 + 2 * (8 - 2) = 24$
5.  $12 * (8 / 2 - 2) = 24$
6.  $2 + 2 + 8 + 12 = 24$

518.  $[2, 2, 8, 13]$  - 无解

519.  $[2, 2, 9, 9]$  - 无解

520.  $[2, 2, 9, 10]$  - 1 个解:

1.  $10 + 2 * (9 - 2) = 24$

521.  $[2, 2, 9, 11]$  - 2 个解:

1.  $9 + 11 + 2 * 2 = 24$
2.  $2 + 2 + 9 + 11 = 24$

522.  $[2, 2, 9, 12]$  - 3 个解:

1.  $9 * (2 + 2) - 12 = 24$
2.  $2 * 9 + 12 / 2 = 24$
3.  $2 * 2 * 9 - 12 = 24$

523.  $[2, 2, 9, 13]$  - 无解

524.  $[2, 2, 10, 10]$  - 2 个解:

1.  $10 + 10 + 2 * 2 = 24$
2.  $2 + 2 + 10 + 10 = 24$

525.  $[2, 2, 10, 11]$  - 1 个解:

1.  $2 * (2 * 11 - 10) = 24$

526.  $[2, 2, 10, 12]$  - 无解

527.  $[2, 2, 10, 13]$  - 1 个解:

1.  $10 + 13 + 2 / 2 = 24$

528.  $[2, 2, 11, 11]$  - 1 个解:

1.  $11 * (2 + 2 / 11) = 24$

529.  $[2, 2, 11, 12]$  - 1 个解:

1.  $11 + 12 + 2 / 2 = 24$

530.  $[2, 2, 11, 13]$  - 4 个解:

1.  $13 + 2 * 11 / 2 = 24$
2.  $11 + 2 * 13 / 2 = 24$
3.  $2 + 11 + 13 - 2 = 24$

$$4. 2 * (11 + 13) / 2 = 24$$

531.  $[2, 2, 12, 12]$  - 4 个解:

1.  $12 + 2 * 12 / 2 = 24$
2.  $2 * (2 * 12 - 12) = 24$
3.  $2 + 12 + 12 - 2 = 24$
4.  $2 * (12 + 12) / 2 = 24$

532.  $[2, 2, 12, 13]$  - 1 个解:

1.  $12 + 13 - 2 / 2 = 24$

533.  $[2, 2, 13, 13]$  - 1 个解:

1.  $13 * (2 - 2 / 13) = 24$

534.  $[2, 3, 3, 3]$  - 2 个解:

1.  $3 * (2 + 3 + 3) = 24$
2.  $2 * (3 + 3 * 3) = 24$

535.  $[2, 3, 3, 4]$  - 无解

536.  $[2, 3, 3, 5]$  - 2 个解:

1.  $3 + 3 * (2 + 5) = 24$
2.  $2 * (3 * 5 - 3) = 24$

537.  $[2, 3, 3, 6]$  - 5 个解:

1.  $2 * 3 + 3 * 6 = 24$
2.  $(3 + 3) * (6 - 2) = 24$
3.  $6 * (3 + 3 - 2) = 24$
4.  $6 + 2 * 3 * 3 = 24$
5.  $2 * (3 + 3 + 6) = 24$

538.  $[2, 3, 3, 7]$  - 3 个解:

1.  $3 * (2 + 7) - 3 = 24$
2.  $3 * (3 + 7 - 2) = 24$
3.  $2 * 3 * (7 - 3) = 24$

539.  $[2, 3, 3, 8]$  - 5 个解:

1.  $3 * 8 / (3 - 2) = 24$
2.  $3 * 8 * (3 - 2) = 24$
3.  $8 * (2 * 3 - 3) = 24$
4.  $8 * (3 + 3) / 2 = 24$
5.  $8 * (2 + 3 / 3) = 24$

540.  $[2, 3, 3, 9]$  - 4 个解:

1.  $9 + 3 * (2 + 3) = 24$
2.  $3 * (2 + 9 - 3) = 24$
3.  $3 + 3 * (9 - 2) = 24$
4.  $3 + 3 + 2 * 9 = 24$

541.  $[2, 3, 3, 10]$  - 2 个解:

1.  $3 * 10 - 2 * 3 = 24$
2.  $3 * (3 + 10 / 2) = 24$

542.  $[2, 3, 3, 11]$  - 2 个解:

1.  $2 * (11 + 3 / 3) = 24$
2.  $3 * (11 - 2) - 3 = 24$

543.  $[2, 3, 3, 12]$  - 5 个解:

1.  $12 * (2 + 3 - 3) = 24$
2.  $12 + 2 * (3 + 3) = 24$
3.  $3 + 2 * 12 - 3 = 24$
4.  $2 * (3 + 12 - 3) = 24$
5.  $2 * 3 * 12 / 3 = 24$

544.  $[2, 3, 3, 13]$  - 4 个解:

1.  $3 * (13 - (2 + 3)) = 24$
2.  $2 + 13 + 3 * 3 = 24$
3.  $2 * (13 - 3 / 3) = 24$
4.  $3 * (3 + 13) / 2 = 24$

545.  $[2, 3, 4, 4]$  - 3 个解:

1.  $4 + 4 * (2 + 3) = 24$
2.  $3 * 4 * (4 - 2) = 24$
3.  $3 * 4 * 4 / 2 = 24$

546.  $[2, 3, 4, 5]$  - 2 个解:

1.  $4 * (3 + 5 - 2) = 24$
2.  $2 * (3 + 4 + 5) = 24$

547.  $[2, 3, 4, 6]$  - 10 个解:

1.  $4 * 6 / (3 - 2) = 24$
2.  $4 * 6 * (3 - 2) = 24$
3.  $6 + 3 * (2 + 4) = 24$
4.  $3 * (6 + 4 / 2) = 24$
5.  $3 * 4 + 2 * 6 = 24$
6.  $3 * (2 * 6 - 4) = 24$
7.  $4 * (3 + 6 / 2) = 24$
8.  $2 * 4 * (6 - 3) = 24$
9.  $2 + 4 + 3 * 6 = 24$
10.  $3 * (4 + 6 - 2) = 24$

548.  $[2, 3, 4, 7]$  - 3 个解:

1.  $(2 + 4) * (7 - 3) = 24$
2.  $4 * (2 + 7 - 3) = 24$
3.  $4 + 2 * (3 + 7) = 24$

549.  $[2, 3, 4, 8]$  - 3 个解:

1.  $8 * (2 + 4 - 3) = 24$

$$2. 3 * (4 + 8 / 2) = 24$$

$$3. 2 * 3 * (8 - 4) = 24$$

550.  $[2, 3, 4, 9] - 3$  个解:

$$1. (4 - 2) * (3 + 9) = 24$$

$$2. 4 * (3 + 9) / 2 = 24$$

$$3. 2 * 4 * 9 / 3 = 24$$

551.  $[2, 3, 4, 10] - 5$  个解:

$$1. 3 * 10 - (2 + 4) = 24$$

$$2. 3 * (10 - 4 / 2) = 24$$

$$3. 10 + 2 * (3 + 4) = 24$$

$$4. 2 + 10 + 3 * 4 = 24$$

$$5. 3 * (2 + 10 - 4) = 24$$

552.  $[2, 3, 4, 11] - 3$  个解:

$$1. 4 * (11 - (2 + 3)) = 24$$

$$2. 2 * (3 + 11) - 4 = 24$$

$$3. 2 * (4 + 11 - 3) = 24$$

553.  $[2, 3, 4, 12] - 7$  个解:

$$1. 12 * (2 * 3 - 4) = 24$$

$$2. 4 * (12 - 2 * 3) = 24$$

$$3. 12 * (2 + 4) / 3 = 24$$

$$4. 2 * 12 / (4 - 3) = 24$$

$$5. 2 * 12 * (4 - 3) = 24$$

$$6. 4 * (2 + 12 / 3) = 24$$

$$7. 3 * (4 + 12) / 2 = 24$$

554.  $[2, 3, 4, 13] - 3$  个解:

$$1. 3 + 13 + 2 * 4 = 24$$

$$2. 2 * (3 + 13 - 4) = 24$$

$$3. 4 + 2 * (13 - 3) = 24$$

555.  $[2, 3, 5, 5] - 4$  个解:

$$1. (5 - 2) * (3 + 5) = 24$$

$$2. (3 + 5) * (5 - 2) = 24$$

$$3. 3 * (5 + 5 - 2) = 24$$

$$4. 2 + 5 * 5 - 3 = 24$$

556.  $[2, 3, 5, 6] - 6$  个解:

$$1. 5 * 6 - 2 * 3 = 24$$

$$2. 6 * (2 + 5 - 3) = 24$$

$$3. 6 * (3 + 5) / 2 = 24$$

$$4. 2 * 6 * (5 - 3) = 24$$

$$5. 2 * 3 * 5 - 6 = 24$$

$$6. 3 * (5 + 6 / 2) = 24$$

557.  $[2, 3, 5, 7] - 3$  个解:

$$1. 3 + 7 * (5 - 2) = 24$$

$$2. 2 + 7 + 3 * 5 = 24$$

$$3. 5 + 3 * 7 - 2 = 24$$

558.  $[2, 3, 5, 8] - 3$  个解:

$$1. 8 + 2 * (3 + 5) = 24$$

$$2. 8 / (2 - 5 / 3) = 24$$

$$3. 3 + 5 + 2 * 8 = 24$$

559.  $[2, 3, 5, 9] - 4$  个解:

$$1. 9 * (5 - 2) - 3 = 24$$

$$2. 2 + 3 * 9 - 5 = 24$$

$$3. 2 * 3 * (9 - 5) = 24$$

$$4. (3 + 5 * 9) / 2 = 24$$

560.  $[2, 3, 5, 10] - 2$  个解:

$$1. (5 - 3) * (2 + 10) = 24$$

$$2. 2 * (5 + 10 - 3) = 24$$

561.  $[2, 3, 5, 11] - 7$  个解:

$$1. (5 - 2) * (11 - 3) = 24$$

$$2. 3 + 11 + 2 * 5 = 24$$

$$3. 2 + 11 * (5 - 3) = 24$$

$$4. 11 + 3 * 5 - 2 = 24$$

$$5. 3 * (2 + 11 - 5) = 24$$

$$6. 5 + 2 * 11 - 3 = 24$$

$$7. 3 * (5 + 11) / 2 = 24$$

562.  $[2, 3, 5, 12] - 1$  个解:

$$1. 12 / (3 - 5 / 2) = 24$$

563.  $[2, 3, 5, 13] - 3$  个解:

$$1. 5 + 13 + 2 * 3 = 24$$

$$2. 13 * (5 - 3) - 2 = 24$$

$$3. 3 + 2 * 13 - 5 = 24$$

564.  $[2, 3, 6, 6] - 7$  个解:

$$1. 6 * (2 + 3) - 6 = 24$$

$$2. (2 + 6) * (6 - 3) = 24$$

$$3. 6 + 2 * (3 + 6) = 24$$

$$4. (6 - 3) * (2 + 6) = 24$$

$$5. 2 * (3 * 6 - 6) = 24$$

$$6. 6 * (2 + 6 / 3) = 24$$

$$7. 2 * 6 * 6 / 3 = 24$$

565.  $[2, 3, 6, 7] - 3$  个解:

$$1. 6 / 2 + 3 * 7 = 24$$

$$2. 3 * (2 * 7 - 6) = 24$$

$$3. 3 + 6 * 7 / 2 = 24$$

566.  $[2, 3, 6, 8] - 3$  个解:

$$1. 8 + 3 * 6 - 2 = 24$$

$$2. 3 * (2 + 8) - 6 = 24$$

$$3. 6 + 3 * (8 - 2) = 24$$

567.  $[2, 3, 6, 9] - 8$  个解:

$$1. 6 * (9 - (2 + 3)) = 24$$

$$2. 9 * (2 + 6) / 3 = 24$$

$$3. (6 - 2) * (9 - 3) = 24$$

$$4. 3 + 9 + 2 * 6 = 24$$

$$5. 9 * (3 - 2 / 6) = 24$$

$$6. 3 * 9 - 6 / 2 = 24$$

$$7. 2 * (6 + 9 - 3) = 24$$

$$8. 6 * 9 / 2 - 3 = 24$$

568.  $[2, 3, 6, 10] - 6$  个解:

$$1. 6 * (10 - 2 * 3) = 24$$

$$2. (6 - 3) * (10 - 2) = 24$$

$$3. 2 * (10 + 6 / 3) = 24$$

$$4. 6 * (2 + 10) / 3 = 24$$

$$5. 3 * (6 + 10) / 2 = 24$$

$$6. 2 * 3 * (10 - 6) = 24$$

569.  $[2, 3, 6, 11] - 4$  个解:

$$1. 3 * (11 - 6 / 2) = 24$$

$$2. 6 / 3 + 2 * 11 = 24$$

$$3. 6 * (11 - 3) / 2 = 24$$

$$4. 2 + 6 * 11 / 3 = 24$$

570.  $[2, 3, 6, 12] - 10$  个解:

$$1. 6 + 12 + 2 * 3 = 24$$

$$2. 12 + 3 * (6 - 2) = 24$$

$$3. 3 * 12 - 2 * 6 = 24$$

$$4. 3 * 6 + 12 / 2 = 24$$

$$5. 2 * 3 * 6 - 12 = 24$$

$$6. 3 * (2 + 12 - 6) = 24$$

$$7. 3 * (12 - 2) - 6 = 24$$

$$8. 2 * (3 + 12) - 6 = 24$$

$$9. 6 + 2 * (12 - 3) = 24$$

$$10. 6 + 3 * 12 / 2 = 24$$

571.  $[2, 3, 6, 13] - 3$  个解:

$$1. 2 * 13 - 6 / 3 = 24$$

$$2. 2 + 3 + 6 + 13 = 24$$

$$3. 6 * 13 / 3 - 2 = 24$$

572.  $[2, 3, 7, 7] - 1$  个解:

$$1. 3 + 7 + 2 * 7 = 24$$

573.  $[2, 3, 7, 8] - 4$  个解:

1.  $8 * (2 + 7) / 3 = 24$
2.  $(7 - 3) * (8 - 2) = 24$
3.  $8 / (7 / 3 - 2) = 24$
4.  $2 * (7 + 8 - 3) = 24$

574.  $[2, 3, 7, 9] - 3$  个解:

1.  $9 + 3 * (7 - 2) = 24$
2.  $2 * (3 * 7 - 9) = 24$
3.  $3 * (7 + 9) / 2 = 24$

575.  $[2, 3, 7, 10] - 2$  个解:

1.  $7 + 2 * 10 - 3 = 24$
2.  $(2 + 7 * 10) / 3 = 24$

576.  $[2, 3, 7, 11] - 4$  个解:

1.  $7 * (2 + 3) - 11 = 24$
2.  $7 + 11 + 2 * 3 = 24$
3.  $3 * 11 - (2 + 7) = 24$
4.  $2 * 3 * (11 - 7) = 24$

577.  $[2, 3, 7, 12] - 4$  个解:

1.  $12 * (7 - (2 + 3)) = 24$
2.  $12 / (7 / 2 - 3) = 24$
3.  $12 * (7 - 3) / 2 = 24$
4.  $2 + 3 + 7 + 12 = 24$

578.  $[2, 3, 7, 13] - 2$  个解:

1.  $13 + 2 * 7 - 3 = 24$
2.  $3 * (2 + 13 - 7) = 24$

579.  $[2, 3, 8, 8] - 3$  个解:

1.  $8 * (8 - (2 + 3)) = 24$
2.  $3 * (2 * 8 - 8) = 24$
3.  $3 * (8 + 8) / 2 = 24$

580.  $[2, 3, 8, 9] - 2$  个解:

1.  $8 * (9 - 2 * 3) = 24$
2.  $8 * (9 - 3) / 2 = 24$

581.  $[2, 3, 8, 10] - 2$  个解:

1.  $8 + 10 + 2 * 3 = 24$
2.  $2 + 3 * 10 - 8 = 24$

582.  $[2, 3, 8, 11] - 4$  个解:

1.  $11 + 2 * 8 - 3 = 24$
2.  $8 * (11 - 2) / 3 = 24$
3.  $8 + 2 * (11 - 3) = 24$

$$4. 2 + 3 + 8 + 11 = 24$$

583.  $[2, 3, 8, 12] - 8$  个解:

1.  $12 * (8 - 2 * 3) = 24$
2.  $12 * (8 - 2) / 3 = 24$
3.  $3 * (12 - 8 / 2) = 24$
4.  $12 + 3 * 8 / 2 = 24$
5.  $2 * (3 * 8 - 12) = 24$
6.  $8 * (12 / 2 - 3) = 24$
7.  $2 * (8 + 12 / 3) = 24$
8.  $2 * 3 * (12 - 8) = 24$

584.  $[2, 3, 8, 13] - 1$  个解:

1.  $2 * (3 + 13) - 8 = 24$

585.  $[2, 3, 9, 9] - 4$  个解:

1.  $9 + 9 + 2 * 3 = 24$
2.  $3 * (2 + 9) - 9 = 24$
3.  $9 + 2 * 9 - 3 = 24$
4.  $2 * (9 + 9 / 3) = 24$

586.  $[2, 3, 9, 10] - 4$  个解:

1.  $3 * (2 * 9 - 10) = 24$
2.  $9 * (10 - 2) / 3 = 24$
3.  $9 + 3 * 10 / 2 = 24$
4.  $2 + 3 + 9 + 10 = 24$

587.  $[2, 3, 9, 11] -$  无解

588.  $[2, 3, 9, 12] - 1$  个解:

1.  $12 + 2 * (9 - 3) = 24$

589.  $[2, 3, 9, 13] - 3$  个解:

1.  $3 * (13 - 2) - 9 = 24$
2.  $(9 + 3 * 13) / 2 = 24$
3.  $2 * 3 * (13 - 9) = 24$

590.  $[2, 3, 10, 10] - 1$  个解:

1.  $10 + 2 * (10 - 3) = 24$

591.  $[2, 3, 10, 11] -$  无解

592.  $[2, 3, 10, 12] - 7$  个解:

1.  $10 * 12 / (2 + 3) = 24$
2.  $3 * 12 - (2 + 10) = 24$
3.  $3 * (2 + 10) - 12 = 24$
4.  $2 * 10 + 12 / 3 = 24$
5.  $3 * (2 * 10 - 12) = 24$
6.  $12 * (10 / 2 - 3) = 24$

$$7. 3 * 10 - 12 / 2 = 24$$

593.  $[2, 3, 10, 13] - 2$  个解:

1.  $3 * (13 - 10 / 2) = 24$
2.  $3 + 10 + 13 - 2 = 24$

594.  $[2, 3, 11, 11] - 1$  个解:

1.  $2 + 3 * 11 - 11 = 24$

595.  $[2, 3, 11, 12] - 1$  个解:

1.  $3 + 11 + 12 - 2 = 24$

596.  $[2, 3, 11, 13] - 6$  个解:

1.  $(3 - 2) * (11 + 13) = 24$
2.  $(11 + 13) / (3 - 2) = 24$
3.  $13 + 11 * (3 - 2) = 24$
4.  $13 + 11 / (3 - 2) = 24$
5.  $11 + 13 * (3 - 2) = 24$
6.  $11 + 13 / (3 - 2) = 24$

597.  $[2, 3, 12, 12] - 7$  个解:

1.  $(3 - 2) * (12 + 12) = 24$
2.  $(12 + 12) / (3 - 2) = 24$
3.  $12 + 12 * (3 - 2) = 24$
4.  $12 + 12 / (3 - 2) = 24$
5.  $12 * 12 / (2 * 3) = 24$
6.  $(12 + 3 * 12) / 2 = 24$
7.  $12 * (12 / 3 - 2) = 24$

598.  $[2, 3, 12, 13] - 1$  个解:

1.  $2 + 12 + 13 - 3 = 24$

599.  $[2, 3, 13, 13] - 1$  个解:

1.  $3 * 13 - (2 + 13) = 24$

600.  $[2, 4, 4, 4] - 6$  个解:

1.  $2 * 4 + 4 * 4 = 24$
2.  $4 * (4 + 4 / 2) = 24$
3.  $4 * (4 + 4 - 2) = 24$
4.  $4 * 4 + 2 * 4 = 24$
5.  $2 * (4 * 4 - 4) = 24$
6.  $2 * (4 + 4 + 4) = 24$

601.  $[2, 4, 4, 5] - 3$  个解:

1.  $(4 + 4) * (5 - 2) = 24$
2.  $4 * (2 + 5) - 4 = 24$
3.  $4 * (2 * 5 - 4) = 24$

602.  $[2, 4, 4, 6] - 4$  个解:

1.  $6 * (2 * 4 - 4) = 24$
2.  $6 * (4 + 4) / 2 = 24$
3.  $2 + 6 + 4 * 4 = 24$
4.  $4 + 2 * (4 + 6) = 24$

603.  $[2, 4, 4, 7] - 2$  个解:

1.  $4 + 4 * (7 - 2) = 24$
2.  $2 * 4 * (7 - 4) = 24$

604.  $[2, 4, 4, 8] - 10$  个解:

1.  $(2 + 4) * (8 - 4) = 24$
2.  $(4 - 2) * (4 + 8) = 24$
3.  $4 * 8 - 2 * 4 = 24$
4.  $4 * (8 - 4 / 2) = 24$
5.  $8 + 2 * (4 + 4) = 24$
6.  $2 * 4 * 4 - 8 = 24$
7.  $8 * (2 + 4 / 4) = 24$
8.  $4 * (2 + 8 - 4) = 24$
9.  $4 + 4 + 2 * 8 = 24$
10.  $4 * (4 + 8) / 2 = 24$

605.  $[2, 4, 4, 9] - 1$  个解:

1.  $4 * (9 - 2) - 4 = 24$

606.  $[2, 4, 4, 10] - 4$  个解:

1.  $4 + 10 * (4 - 2) = 24$
2.  $10 + 4 * 4 - 2 = 24$
3.  $2 * (4 + 10) - 4 = 24$
4.  $4 + 4 * 10 / 2 = 24$

607.  $[2, 4, 4, 11] - 2$  个解:

1.  $2 * (11 + 4 / 4) = 24$
2.  $(4 + 4 * 11) / 2 = 24$

608.  $[2, 4, 4, 12] - 8$  个解:

1.  $12 * (2 + 4 - 4) = 24$
2.  $4 * (12 - (2 + 4)) = 24$
3.  $4 * 12 / (4 - 2) = 24$
4.  $4 + 12 + 2 * 4 = 24$
5.  $12 * (4 - 4 / 2) = 24$
6.  $4 + 2 * 12 - 4 = 24$
7.  $2 * (4 + 12 - 4) = 24$
8.  $2 * 4 * 12 / 4 = 24$

609.  $[2, 4, 4, 13] - 2$  个解:

1.  $2 * (13 - 4 / 4) = 24$
2.  $(4 * 13 - 4) / 2 = 24$

610.  $[2, 4, 5, 5] - 1$  个解:

$$1. 4 + 2 * (5 + 5) = 24$$

611.  $[2, 4, 5, 6] - 5$  个解:

1.  $5 * 6 - (2 + 4) = 24$
2.  $5 * (2 + 4) - 6 = 24$
3.  $6 + 2 * (4 + 5) = 24$
4.  $6 + 4 * 5 - 2 = 24$
5.  $4 + 5 * (6 - 2) = 24$

612.  $[2, 4, 5, 7] - 2$  个解:

1.  $(4 - 2) * (5 + 7) = 24$
2.  $4 * (5 + 7) / 2 = 24$

613.  $[2, 4, 5, 8] - 7$  个解:

1.  $8 * (2 * 4 - 5) = 24$
2.  $8 * (5 - 4 / 2) = 24$
3.  $8 * (2 + 5 - 4) = 24$
4.  $4 * 5 + 8 / 2 = 24$
5.  $2 * (4 * 5 - 8) = 24$
6.  $2 * 4 * (8 - 5) = 24$
7.  $4 + 5 * 8 / 2 = 24$

614.  $[2, 4, 5, 9] - 3$  个解:

1.  $(2 + 4) * (9 - 5) = 24$
2.  $4 * (2 + 9 - 5) = 24$
3.  $2 * (5 + 9) - 4 = 24$

615.  $[2, 4, 5, 10] - 1$  个解:

1.  $4 + 10 + 2 * 5 = 24$

616.  $[2, 4, 5, 11] - 2$  个解:

1.  $5 + 11 + 2 * 4 = 24$
2.  $2 * (5 + 11 - 4) = 24$

617.  $[2, 4, 5, 12] - 4$  个解:

1.  $(5 - 2) * (12 - 4) = 24$
2.  $12 + 4 * (5 - 2) = 24$
3.  $2 * 12 / (5 - 4) = 24$
4.  $2 * 12 * (5 - 4) = 24$

618.  $[2, 4, 5, 13] - 3$  个解:

1.  $4 * (13 - (2 + 5)) = 24$
2.  $2 * (4 + 13 - 5) = 24$
3.  $2 + 4 + 5 + 13 = 24$

619.  $[2, 4, 6, 6] - 6$  个解:

1.  $(4 - 2) * (6 + 6) = 24$
2.  $6 * (6 - 4 / 2) = 24$
3.  $6 * (2 + 6 - 4) = 24$

$$4. 4 * (2 * 6 - 6) = 24$$

$$5. 2 * 6 * (6 - 4) = 24$$

$$6. 4 * (6 + 6) / 2 = 24$$

620.  $[2, 4, 6, 7] - 5$  个解:

1.  $(2 + 6) * (7 - 4) = 24$
2.  $7 * (6 - 2) - 4 = 24$
3.  $4 + 6 + 2 * 7 = 24$
4.  $2 + 4 * 7 - 6 = 24$
5.  $6 / (2 - 7 / 4) = 24$

621.  $[2, 4, 6, 8] - 8$  个解:

1.  $6 * 8 / (4 - 2) = 24$
2.  $4 * 8 - (2 + 6) = 24$
3.  $4 * (2 + 6) - 8 = 24$
4.  $8 + 4 * (6 - 2) = 24$
5.  $4 + 8 + 2 * 6 = 24$
6.  $6 * (2 + 8 / 4) = 24$
7.  $2 * (6 + 8) - 4 = 24$
8.  $2 * 6 * 8 / 4 = 24$

622.  $[2, 4, 6, 9] - 7$  个解:

1.  $6 + 9 * (4 - 2) = 24$
2.  $4 * 9 - 2 * 6 = 24$
3.  $4 * (9 - 6 / 2) = 24$
4.  $9 * (2 + 4 / 6) = 24$
5.  $6 + 4 * 9 / 2 = 24$
6.  $6 / (9 / 4 - 2) = 24$
7.  $2 * 4 * (9 - 6) = 24$

623.  $[2, 4, 6, 10] - 7$  个解:

1.  $(2 + 4) * (10 - 6) = 24$
2.  $6 * (10 - (2 + 4)) = 24$
3.  $6 + 10 + 2 * 4 = 24$
4.  $(6 - 2) * (10 - 4) = 24$
5.  $(6 - 4) * (2 + 10) = 24$
6.  $4 * (2 + 10 - 6) = 24$
7.  $2 * (6 + 10 - 4) = 24$

624.  $[2, 4, 6, 11] - 4$  个解:

1.  $2 + 11 * (6 - 4) = 24$
2.  $6 + 2 * 11 - 4 = 24$
3.  $2 * (4 + 11) - 6 = 24$
4.  $4 / (2 - 11 / 6) = 24$

625.  $[2, 4, 6, 12] - 10$  个解:

1.  $6 * (2 + 4) - 12 = 24$
2.  $12 + 6 * (4 - 2) = 24$
3.  $12 * (2 * 4 - 6) = 24$

4.  $6 * (12 - 2 * 4) = 24$   
 5.  $12 * (2 + 6) / 4 = 24$   
 6.  $12 + 4 * 6 / 2 = 24$   
 7.  $2 * (4 * 6 - 12) = 24$   
 8.  $12 / (2 - 6 / 4) = 24$   
 9.  $6 * (12 - 4) / 2 = 24$   
 10.  $2 + 4 + 6 + 12 = 24$
626.  $[2, 4, 6, 13] - 4$  个解:  
 1.  $13 * (6 - 4) - 2 = 24$   
 2.  $4 + 2 * 13 - 6 = 24$   
 3.  $6 + 2 * (13 - 4) = 24$   
 4.  $4 / (13 / 6 - 2) = 24$
627.  $[2, 4, 7, 7] - 1$  个解:  
 1.  $2 * (7 + 7) - 4 = 24$
628.  $[2, 4, 7, 8] - 3$  个解:  
 1.  $4 * (2 * 7 - 8) = 24$   
 2.  $4 * 7 - 8 / 2 = 24$   
 3.  $7 * 8 / 2 - 4 = 24$
629.  $[2, 4, 7, 9] - 2$  个解:  
 1.  $7 + 9 + 2 * 4 = 24$   
 2.  $2 * (7 + 9 - 4) = 24$
630.  $[2, 4, 7, 10] - 4$  个解:  
 1.  $10 + 7 * (4 - 2) = 24$   
 2.  $(7 - 4) * (10 - 2) = 24$   
 3.  $10 + 4 * 7 / 2 = 24$   
 4.  $2 * 4 * (10 - 7) = 24$
631.  $[2, 4, 7, 11] - 3$  个解:  
 1.  $(2 + 4) * (11 - 7) = 24$   
 2.  $4 * (2 + 11 - 7) = 24$   
 3.  $2 + 4 + 7 + 11 = 24$
632.  $[2, 4, 7, 12] - 2$  个解:  
 1.  $4 * (2 + 7) - 12 = 24$   
 2.  $12 / (4 - 7 / 2) = 24$
633.  $[2, 4, 7, 13] -$  无解
634.  $[2, 4, 8, 8] - 6$  个解:  
 1.  $8 + 8 * (4 - 2) = 24$   
 2.  $8 + 8 + 2 * 4 = 24$   
 3.  $(8 - 2) * (8 - 4) = 24$   
 4.  $(8 - 4) * (8 - 2) = 24$   
 5.  $8 + 4 * 8 / 2 = 24$

6.  $2 * (8 + 8 - 4) = 24$
635.  $[2, 4, 8, 9] - 1$  个解:  
 1.  $8 * (9 - (2 + 4)) = 24$
636.  $[2, 4, 8, 10] - 11$  个解:  
 1.  $4 * 10 - 2 * 8 = 24$   
 2.  $4 * (2 * 8 - 10) = 24$   
 3.  $4 * (10 - 8 / 2) = 24$   
 4.  $2 + 4 * 8 - 10 = 24$   
 5.  $2 * (10 + 8 / 4) = 24$   
 6.  $8 * (2 + 10) / 4 = 24$   
 7.  $4 * (10 - 2) - 8 = 24$   
 8.  $8 + 2 * 10 - 4 = 24$   
 9.  $8 * (10 - 4) / 2 = 24$   
 10.  $(8 + 4 * 10) / 2 = 24$   
 11.  $2 + 4 + 8 + 10 = 24$
637.  $[2, 4, 8, 11] - 4$  个解:  
 1.  $8 * (11 - 2 * 4) = 24$   
 2.  $8 / 4 + 2 * 11 = 24$   
 3.  $2 * 4 * (11 - 8) = 24$   
 4.  $2 + 8 * 11 / 4 = 24$
638.  $[2, 4, 8, 12] - 7$  个解:  
 1.  $(2 + 4) * (12 - 8) = 24$   
 2.  $12 * (8 - (2 + 4)) = 24$   
 3.  $12 + 2 * 8 - 4 = 24$   
 4.  $12 * (8 - 4) / 2 = 24$   
 5.  $4 * (2 + 12 - 8) = 24$   
 6.  $2 * (4 + 12) - 8 = 24$   
 7.  $8 + 2 * (12 - 4) = 24$
639.  $[2, 4, 8, 13] - 2$  个解:  
 1.  $2 * 13 - 8 / 4 = 24$   
 2.  $8 * 13 / 4 - 2 = 24$
640.  $[2, 4, 9, 9] - 1$  个解:  
 1.  $2 + 4 + 9 + 9 = 24$
641.  $[2, 4, 9, 10] - 2$  个解:  
 1.  $10 + 2 * 9 - 4 = 24$   
 2.  $4 * 9 - (2 + 10) = 24$
642.  $[2, 4, 9, 11] -$  无解
643.  $[2, 4, 9, 12] - 5$  个解:  
 1.  $4 * (2 * 9 - 12) = 24$   
 2.  $12 / (9 / 2 - 4) = 24$

3.  $(12 + 4 * 9) / 2 = 24$   
 4.  $2 * (9 + 12 / 4) = 24$   
 5.  $2 * 4 * (12 - 9) = 24$
644.  $[2, 4, 9, 13] - 4$  个解:  
 1.  $(2 + 4) * (13 - 9) = 24$   
 2.  $9 + 13 + 4 / 2 = 24$   
 3.  $4 * (2 + 13 - 9) = 24$   
 4.  $4 + 9 + 13 - 2 = 24$
645.  $[2, 4, 10, 10] - 1$  个解:  
 1.  $10 * (2 + 4 / 10) = 24$
646.  $[2, 4, 10, 11] - 3$  个解:  
 1.  $4 * 11 - 2 * 10 = 24$   
 2.  $4 * (11 - 10 / 2) = 24$   
 3.  $10 + 2 * (11 - 4) = 24$
647.  $[2, 4, 10, 12] - 6$  个解:  
 1.  $12 * (10 - 2 * 4) = 24$   
 2.  $10 + 12 + 4 / 2 = 24$   
 3.  $12 * (10 - 2) / 4 = 24$   
 4.  $12 + 2 * (10 - 4) = 24$   
 5.  $12 / (10 / 4 - 2) = 24$   
 6.  $4 + 10 + 12 - 2 = 24$
648.  $[2, 4, 10, 13] - 2$  个解:  
 1.  $2 * (4 + 13) - 10 = 24$   
 2.  $2 * 4 * (13 - 10) = 24$
649.  $[2, 4, 11, 11] - 2$  个解:  
 1.  $11 + 11 + 4 / 2 = 24$   
 2.  $4 + 11 + 11 - 2 = 24$
650.  $[2, 4, 11, 12] - 1$  个解:  
 1.  $4 * (11 - 2) - 12 = 24$
651.  $[2, 4, 11, 13] -$  无解
652.  $[2, 4, 12, 12] - 4$  个解:  
 1.  $12 * 12 / (2 + 4) = 24$   
 2.  $4 * 12 - 2 * 12 = 24$   
 3.  $12 * (12 / 2 - 4) = 24$   
 4.  $4 * (12 - 12 / 2) = 24$
653.  $[2, 4, 12, 13] -$  无解
654.  $[2, 4, 13, 13] - 2$  个解:  
 1.  $13 + 13 - 4 / 2 = 24$

$$2. 2 + 13 + 13 - 4 = 24$$

655.  $[2, 5, 5, 5] - \text{无解}$

656.  $[2, 5, 5, 6] - \text{无解}$

657.  $[2, 5, 5, 7] - 1 \text{ 个解:}$

1.  $5 + 5 + 2 * 7 = 24$

658.  $[2, 5, 5, 8] - 1 \text{ 个解:}$

1.  $8 * (2 + 5 / 5) = 24$

659.  $[2, 5, 5, 9] - 2 \text{ 个解:}$

1.  $9 + 5 * (5 - 2) = 24$
2.  $5 + 9 + 2 * 5 = 24$

660.  $[2, 5, 5, 10] - 1 \text{ 个解:}$

1.  $5 * (5 - 2 / 10) = 24$

661.  $[2, 5, 5, 11] - 2 \text{ 个解:}$

1.  $5 * (2 + 5) - 11 = 24$
2.  $2 * (11 + 5 / 5) = 24$

662.  $[2, 5, 5, 12] - 5 \text{ 个解:}$

1.  $12 * (2 + 5 - 5) = 24$
2.  $5 + 2 * 12 - 5 = 24$
3.  $2 * (5 + 12 - 5) = 24$
4.  $2 * 5 * 12 / 5 = 24$
5.  $2 + 5 + 5 + 12 = 24$

663.  $[2, 5, 5, 13] - 3 \text{ 个解:}$

1.  $(5 - 2) * (13 - 5) = 24$
2.  $2 * (5 * 5 - 13) = 24$
3.  $2 * (13 - 5 / 5) = 24$

664.  $[2, 5, 6, 6] - 2 \text{ 个解:}$

1.  $6 + 6 * (5 - 2) = 24$
2.  $6 * (2 * 5 - 6) = 24$

665.  $[2, 5, 6, 7] - 3 \text{ 个解:}$

1.  $5 + 7 + 2 * 6 = 24$
2.  $6 * (2 + 7 - 5) = 24$
3.  $2 * 6 * (7 - 5) = 24$

666.  $[2, 5, 6, 8] - 5 \text{ 个解:}$

1.  $6 + 8 + 2 * 5 = 24$
2.  $(2 + 6) * (8 - 5) = 24$
3.  $8 * (2 + 6 - 5) = 24$
4.  $2 + 5 * 6 - 8 = 24$

$$5. 5 * (8 - 2) - 6 = 24$$

667.  $[2, 5, 6, 9] - 1 \text{ 个解:}$

1.  $9 + 5 * 6 / 2 = 24$

668.  $[2, 5, 6, 10] - 4 \text{ 个解:}$

1.  $10 * (5 - 2) - 6 = 24$
2.  $2 * (5 + 10) - 6 = 24$
3.  $6 * (2 + 10 / 5) = 24$
4.  $2 * 6 * 10 / 5 = 24$

669.  $[2, 5, 6, 11] - 4 \text{ 个解:}$

1.  $6 * (11 - (2 + 5)) = 24$
2.  $(6 - 2) * (11 - 5) = 24$
3.  $2 + 5 + 6 + 11 = 24$
4.  $2 * (6 + 11 - 5) = 24$

670.  $[2, 5, 6, 12] - 6 \text{ 个解:}$

1.  $6 * 12 / (5 - 2) = 24$
2.  $12 * (5 - 6 / 2) = 24$
3.  $2 * 12 / (6 - 5) = 24$
4.  $2 * 12 * (6 - 5) = 24$
5.  $5 * 6 - 12 / 2 = 24$
6.  $5 * 12 / 2 - 6 = 24$

671.  $[2, 5, 6, 13] - 2 \text{ 个解:}$

1.  $2 * (5 + 13 - 6) = 24$
2.  $6 * (13 - 5) / 2 = 24$

672.  $[2, 5, 7, 7] - 1 \text{ 个解:}$

1.  $7 + 7 + 2 * 5 = 24$

673.  $[2, 5, 7, 8] - 1 \text{ 个解:}$

1.  $8 * (2 * 5 - 7) = 24$

674.  $[2, 5, 7, 9] - 1 \text{ 个解:}$

1.  $5 * 7 - (2 + 9) = 24$

675.  $[2, 5, 7, 10] - 3 \text{ 个解:}$

1.  $(7 - 5) * (2 + 10) = 24$
2.  $2 + 5 + 7 + 10 = 24$
3.  $2 * (7 + 10 - 5) = 24$

676.  $[2, 5, 7, 11] - 3 \text{ 个解:}$

1.  $2 + 11 * (7 - 5) = 24$
2.  $7 + 2 * 11 - 5 = 24$
3.  $(5 * 11 - 7) / 2 = 24$

677.  $[2, 5, 7, 12] - \text{无解}$

678.  $[2, 5, 7, 13] - 4 \text{ 个解:}$

1.  $13 * (7 - 5) - 2 = 24$
2.  $2 + 5 * 7 - 13 = 24$
3.  $(13 + 5 * 7) / 2 = 24$
4.  $5 + 2 * 13 - 7 = 24$

679.  $[2, 5, 8, 8] - 2 \text{ 个解:}$

1.  $5 * 8 - 2 * 8 = 24$
2.  $(8 + 5 * 8) / 2 = 24$

680.  $[2, 5, 8, 9] - 4 \text{ 个解:}$

1.  $8 * 9 / (5 - 2) = 24$
2.  $(8 - 2) * (9 - 5) = 24$
3.  $2 + 5 + 8 + 9 = 24$
4.  $2 * (8 + 9 - 5) = 24$

681.  $[2, 5, 8, 10] - 2 \text{ 个解:}$

1.  $8 * (10 - (2 + 5)) = 24$
2.  $(8 - 5) * (10 - 2) = 24$

682.  $[2, 5, 8, 11] - 2 \text{ 个解:}$

1.  $2 * (5 + 11) - 8 = 24$
2.  $8 * (11 - 5) / 2 = 24$

683.  $[2, 5, 8, 12] - 2 \text{ 个解:}$

1.  $12 * (2 * 5 - 8) = 24$
2.  $12 * (2 + 8) / 5 = 24$

684.  $[2, 5, 8, 13] - 5 \text{ 个解:}$

1.  $8 * (13 - 2 * 5) = 24$
2.  $13 + 2 * 8 - 5 = 24$
3.  $8 * (2 + 13) / 5 = 24$
4.  $8 + 2 * (13 - 5) = 24$
5.  $5 + 8 + 13 - 2 = 24$

685.  $[2, 5, 9, 9] - \text{无解}$

686.  $[2, 5, 9, 10] - 1 \text{ 个解:}$

1.  $9 + 2 * 10 - 5 = 24$

687.  $[2, 5, 9, 11] - 3 \text{ 个解:}$

1.  $11 * (5 - 2) - 9 = 24$
2.  $5 * (9 - 2) - 11 = 24$
3.  $11 + 2 * 9 - 5 = 24$

688.  $[2, 5, 9, 12] - 4 \text{ 个解:}$

1.  $12 * (9 - (2 + 5)) = 24$
2.  $12 / (5 - 9 / 2) = 24$



$$3. 12 * (9 - 5) / 2 = 24$$

$$4. 5 + 9 + 12 - 2 = 24$$

689. [2, 5, 9, 13] - 无解

690. [2, 5, 10, 10] - 2 个解:

$$1. 10 * (2 + 10) / 5 = 24$$

$$2. 2 * (10 + 10 / 5) = 24$$

691. [2, 5, 10, 11] - 3 个解:

$$1. 10 / 5 + 2 * 11 = 24$$

$$2. 5 + 10 + 11 - 2 = 24$$

$$3. 2 + 10 * 11 / 5 = 24$$

692. [2, 5, 10, 12] - 2 个解:

$$1. 2 * (5 + 12) - 10 = 24$$

$$2. 10 + 2 * (12 - 5) = 24$$

693. [2, 5, 10, 13] - 3 个解:

$$1. 5 * 10 - 2 * 13 = 24$$

$$2. 2 * 13 - 10 / 5 = 24$$

$$3. 10 * 13 / 5 - 2 = 24$$

694. [2, 5, 11, 11] - 无解

695. [2, 5, 11, 12] - 2 个解:

$$1. 12 / (11 / 2 - 5) = 24$$

$$2. 12 + 2 * (11 - 5) = 24$$

696. [2, 5, 11, 13] - 无解

697. [2, 5, 12, 12] - 4 个解:

$$1. 12 * (5 - 2) - 12 = 24$$

$$2. 12 * (12 - 2 * 5) = 24$$

$$3. 12 * (12 - 2) / 5 = 24$$

$$4. (5 * 12 - 12) / 2 = 24$$

698. [2, 5, 12, 13] - 2 个解:

$$1. 5 + 13 + 12 / 2 = 24$$

$$2. 2 * (5 + 13) - 12 = 24$$

699. [2, 5, 13, 13] - 无解

700. [2, 6, 6, 6] - 3 个解:

$$1. 6 * 6 - 2 * 6 = 24$$

$$2. 6 + 6 + 2 * 6 = 24$$

$$3. 6 + 6 * 6 / 2 = 24$$

701. [2, 6, 6, 7] - 3 个解:

$$1. 6 * (7 - 6 / 2) = 24$$

$$2. 6 * (7 - 2) - 6 = 24$$

$$3. (6 + 6 * 7) / 2 = 24$$

702. [2, 6, 6, 8] - 5 个解:

$$1. 6 * (2 * 6 - 8) = 24$$

$$2. 8 * (6 - 6 / 2) = 24$$

$$3. 8 * (2 + 6 / 6) = 24$$

$$4. 6 * (2 + 8 - 6) = 24$$

$$5. 2 * 6 * (8 - 6) = 24$$

703. [2, 6, 6, 9] - 3 个解:

$$1. (2 + 6) * (9 - 6) = 24$$

$$2. 2 * (6 + 9) - 6 = 24$$

$$3. (6 * 9 - 6) / 2 = 24$$

704. [2, 6, 6, 10] - 3 个解:

$$1. 6 * 6 - (2 + 10) = 24$$

$$2. 6 * 10 / 2 - 6 = 24$$

$$3. 2 + 6 + 6 + 10 = 24$$

705. [2, 6, 6, 11] - 1 个解:

$$1. 2 * (11 + 6 / 6) = 24$$

706. [2, 6, 6, 12] - 8 个解:

$$1. 12 * (2 + 6 - 6) = 24$$

$$2. 6 * (12 - (2 + 6)) = 24$$

$$3. (6 - 2) * (12 - 6) = 24$$

$$4. (12 + 6 * 6) / 2 = 24$$

$$5. 6 + 2 * 12 - 6 = 24$$

$$6. 2 * (6 + 12 - 6) = 24$$

$$7. 2 * 6 * 12 / 6 = 24$$

$$8. 6 * (2 + 12 / 6) = 24$$

707. [2, 6, 6, 13] - 1 个解:

$$1. 2 * (13 - 6 / 6) = 24$$

708. [2, 6, 7, 7] - 无解

709. [2, 6, 7, 8] - 2 个解:

$$1. 8 * (2 + 7 - 6) = 24$$

$$2. 2 * (7 + 8) - 6 = 24$$

710. [2, 6, 7, 9] - 4 个解:

$$1. 6 * 7 - 2 * 9 = 24$$

$$2. 6 * (2 + 9 - 7) = 24$$

$$3. 2 + 6 + 7 + 9 = 24$$

$$4. 2 * 6 * (9 - 7) = 24$$

711. [2, 6, 7, 10] - 2 个解:

$$1. (2 + 6) * (10 - 7) = 24$$

$$2. 6 * (2 * 7 - 10) = 24$$

712. [2, 6, 7, 11] - 1 个解:

$$1. 2 * (7 + 11 - 6) = 24$$

713. [2, 6, 7, 12] - 2 个解:

$$1. 2 * 12 / (7 - 6) = 24$$

$$2. 2 * 12 * (7 - 6) = 24$$

714. [2, 6, 7, 13] - 4 个解:

$$1. (6 - 2) * (13 - 7) = 24$$

$$2. 6 * (13 - (2 + 7)) = 24$$

$$3. 2 * (6 + 13 - 7) = 24$$

$$4. 6 + 7 + 13 - 2 = 24$$

715. [2, 6, 8, 8] - 3 个解:

$$1. 8 * (6 - 2) - 8 = 24$$

$$2. 6 * (8 - 8 / 2) = 24$$

$$3. 2 + 6 + 8 + 8 = 24$$

716. [2, 6, 8, 9] - 2 个解:

$$1. 8 * (2 * 6 - 9) = 24$$

$$2. 2 * 8 * 9 / 6 = 24$$

717. [2, 6, 8, 10] - 7 个解:

$$1. (8 - 2) * (10 - 6) = 24$$

$$2. (8 - 6) * (2 + 10) = 24$$

$$3. 6 * (2 + 10 - 8) = 24$$

$$4. 2 * (6 + 10) - 8 = 24$$

$$5. 8 / (2 - 10 / 6) = 24$$

$$6. 2 * (8 + 10 - 6) = 24$$

$$7. 2 * 6 * (10 - 8) = 24$$

718. [2, 6, 8, 11] - 4 个解:

$$1. (2 + 6) * (11 - 8) = 24$$

$$2. 8 * (11 - (2 + 6)) = 24$$

$$3. 2 + 11 * (8 - 6) = 24$$

$$4. 8 + 2 * 11 - 6 = 24$$

719. [2, 6, 8, 12] - 7 个解:

$$1. 8 * 12 / (6 - 2) = 24$$

$$2. 6 * (8 - 2) - 12 = 24$$

$$3. 6 * (2 * 8 - 12) = 24$$

$$4. 12 * (6 - 8 / 2) = 24$$

$$5. 6 * 8 - 2 * 12 = 24$$

$$6. 8 * (12 - 6) / 2 = 24$$

$$7. 6 + 8 + 12 - 2 = 24$$

720.  $[2, 6, 8, 13] - 3$  个解:

1.  $8 + 13 + 6 / 2 = 24$
2.  $13 * (8 - 6) - 2 = 24$
3.  $6 + 2 * 13 - 8 = 24$

721.  $[2, 6, 9, 9] - 2$  个解:

1.  $9 * (2 + 6 / 9) = 24$
2.  $2 * (9 + 9 - 6) = 24$

722.  $[2, 6, 9, 10] - 2$  个解:

1.  $(9 - 6) * (10 - 2) = 24$
2.  $6 * (9 - 10 / 2) = 24$

723.  $[2, 6, 9, 11] - 4$  个解:

1.  $6 * (2 + 11 - 9) = 24$
2.  $6 * 11 / 2 - 9 = 24$
3.  $6 + 9 + 11 - 2 = 24$
4.  $2 * 6 * (11 - 9) = 24$

724.  $[2, 6, 9, 12] - 5$  个解:

1.  $(2 + 6) * (12 - 9) = 24$
2.  $9 * (6 - 2) - 12 = 24$
3.  $9 + 12 + 6 / 2 = 24$
4.  $12 + 2 * 9 - 6 = 24$
5.  $12 / (2 - 9 / 6) = 24$

725.  $[2, 6, 9, 13] -$  无解

726.  $[2, 6, 10, 10] - 2$  个解:

1.  $10 + 2 * 10 - 6 = 24$
2.  $6 + 10 + 10 - 2 = 24$

727.  $[2, 6, 10, 11] - 2$  个解:

1.  $10 + 11 + 6 / 2 = 24$
2.  $2 * (6 + 11) - 10 = 24$

728.  $[2, 6, 10, 12] - 9$  个解:

1.  $12 * (10 - (2 + 6)) = 24$
2.  $12 * (2 * 6 - 10) = 24$
3.  $12 * (2 + 10) / 6 = 24$
4.  $12 * (10 - 6) / 2 = 24$
5.  $(6 * 10 - 12) / 2 = 24$
6.  $6 * (2 + 12 - 10) = 24$
7.  $6 * (10 - 12 / 2) = 24$
8.  $2 * (10 + 12 / 6) = 24$
9.  $2 * 6 * (12 - 10) = 24$

729.  $[2, 6, 10, 13] - 3$  个解:

1.  $(2 + 6) * (13 - 10) = 24$

2.  $6 + 13 + 10 / 2 = 24$

3.  $10 + 2 * (13 - 6) = 24$

730.  $[2, 6, 11, 11] -$  无解

731.  $[2, 6, 11, 12] - 3$  个解:

1.  $2 * 11 + 12 / 6 = 24$
2.  $12 / (6 - 11 / 2) = 24$
3.  $2 + 11 * 12 / 6 = 24$

732.  $[2, 6, 11, 13] - 2$  个解:

1.  $6 * (2 + 13 - 11) = 24$
2.  $2 * 6 * (13 - 11) = 24$

733.  $[2, 6, 12, 12] - 4$  个解:

1.  $6 + 12 + 12 / 2 = 24$
2.  $2 * (6 + 12) - 12 = 24$
3.  $12 + 2 * (12 - 6) = 24$
4.  $6 * 12 / 2 - 12 = 24$

734.  $[2, 6, 12, 13] - 3$  个解:

1.  $2 * 13 - 12 / 6 = 24$
2.  $12 / (13 / 2 - 6) = 24$
3.  $12 * 13 / 6 - 2 = 24$

735.  $[2, 6, 13, 13] -$  无解

736.  $[2, 7, 7, 7] -$  无解

737.  $[2, 7, 7, 8] - 2$  个解:

1.  $8 * (2 + 7 / 7) = 24$
2.  $2 + 7 + 7 + 8 = 24$

738.  $[2, 7, 7, 9] -$  无解

739.  $[2, 7, 7, 10] - 1$  个解:

1.  $7 * (2 + 10 / 7) = 24$

740.  $[2, 7, 7, 11] - 2$  个解:

1.  $7 * (7 - 2) - 11 = 24$
2.  $2 * (11 + 7 / 7) = 24$

741.  $[2, 7, 7, 12] - 5$  个解:

1.  $12 * (2 + 7 - 7) = 24$
2.  $7 + 2 * 12 - 7 = 24$
3.  $2 * (7 + 12 - 7) = 24$
4.  $2 * 7 * 12 / 7 = 24$
5.  $7 + 7 + 12 - 2 = 24$

742.  $[2, 7, 7, 13] - 1$  个解:

1.  $2 * (13 - 7 / 7) = 24$

743.  $[2, 7, 8, 8] - 3$  个解:

1.  $8 * (2 + 8 - 7) = 24$
2.  $8 * (7 - 8 / 2) = 24$
3.  $(7 * 8 - 8) / 2 = 24$

744.  $[2, 7, 8, 9] - 1$  个解:

1.  $2 * (7 + 9) - 8 = 24$

745.  $[2, 7, 8, 10] -$  无解

746.  $[2, 7, 8, 11] - 4$  个解:

1.  $8 * (2 * 7 - 11) = 24$
2.  $(8 - 2) * (11 - 7) = 24$
3.  $7 + 8 + 11 - 2 = 24$
4.  $2 * (8 + 11 - 7) = 24$

747.  $[2, 7, 8, 12] - 3$  个解:

1.  $8 * (12 - (2 + 7)) = 24$
2.  $2 * 12 / (8 - 7) = 24$
3.  $2 * 12 * (8 - 7) = 24$

748.  $[2, 7, 8, 13] - 3$  个解:

1.  $7 + 13 + 8 / 2 = 24$
2.  $2 * (7 + 13 - 8) = 24$
3.  $8 * (13 - 7) / 2 = 24$

749.  $[2, 7, 9, 9] -$  无解

750.  $[2, 7, 9, 10] - 3$  个解:

1.  $(9 - 7) * (2 + 10) = 24$
2.  $7 + 9 + 10 - 2 = 24$
3.  $2 * (9 + 10 - 7) = 24$

751.  $[2, 7, 9, 11] - 2$  个解:

1.  $2 + 11 * (9 - 7) = 24$
2.  $9 + 2 * 11 - 7 = 24$

752.  $[2, 7, 9, 12] -$  无解

753.  $[2, 7, 9, 13] - 3$  个解:

1.  $13 + 2 * 9 - 7 = 24$
2.  $13 * (9 - 7) - 2 = 24$
3.  $7 + 2 * 13 - 9 = 24$

754.  $[2, 7, 10, 10] - 3$  个解:

1.  $(10 - 2) * (10 - 7) = 24$
  2.  $2 * (7 + 10) - 10 = 24$
  3.  $(10 - 7) * (10 - 2) = 24$
755.  $[2, 7, 10, 11] - 2$  个解:
1.  $11 + 2 * 10 - 7 = 24$
  2.  $7 * 10 / 2 - 11 = 24$
756.  $[2, 7, 10, 12] - 3$  个解:
1.  $10 * 12 / (7 - 2) = 24$
  2.  $12 * (7 - 10 / 2) = 24$
  3.  $7 + 12 + 10 / 2 = 24$
757.  $[2, 7, 10, 13] -$  无解
758.  $[2, 7, 11, 11] -$  无解
759.  $[2, 7, 11, 12] - 4$  个解:
1.  $12 * (11 - (2 + 7)) = 24$
  2.  $2 * (7 + 11) - 12 = 24$
  3.  $12 * (11 - 7) / 2 = 24$
  4.  $7 + 11 + 12 / 2 = 24$
760.  $[2, 7, 11, 13] -$  无解
761.  $[2, 7, 12, 12] - 2$  个解:
1.  $12 * (2 * 7 - 12) = 24$
  2.  $12 * (2 + 12) / 7 = 24$
762.  $[2, 7, 12, 13] - 2$  个解:
1.  $12 / (7 - 13 / 2) = 24$
  2.  $12 + 2 * (13 - 7) = 24$
763.  $[2, 7, 13, 13] -$  无解
764.  $[2, 8, 8, 8] - 3$  个解:
1.  $2 * (8 + 8) - 8 = 24$
  2.  $8 * 8 / 2 - 8 = 24$
  3.  $8 * (2 + 8 / 8) = 24$
765.  $[2, 8, 8, 9] - 1$  个解:
1.  $8 * (2 + 9 - 8) = 24$
766.  $[2, 8, 8, 10] - 2$  个解:
1.  $8 * (8 - 10 / 2) = 24$
  2.  $8 + 8 + 10 - 2 = 24$
767.  $[2, 8, 8, 11] - 1$  个解:
1.  $2 * (11 + 8 / 8) = 24$

768.  $[2, 8, 8, 12] - 6$  个解:
1.  $12 * (2 + 8 - 8) = 24$
  2.  $(8 - 2) * (12 - 8) = 24$
  3.  $8 + 12 + 8 / 2 = 24$
  4.  $8 + 2 * 12 - 8 = 24$
  5.  $2 * (8 + 12 - 8) = 24$
  6.  $2 * 8 * 12 / 8 = 24$
769.  $[2, 8, 8, 13] - 3$  个解:
1.  $8 * (13 - (2 + 8)) = 24$
  2.  $8 * (2 * 8 - 13) = 24$
  3.  $2 * (13 - 8 / 8) = 24$
770.  $[2, 8, 9, 9] - 2$  个解:
1.  $8 + 9 + 9 - 2 = 24$
  2.  $8 * (2 + 9 / 9) = 24$
771.  $[2, 8, 9, 10] - 2$  个解:
1.  $2 * (8 + 9) - 10 = 24$
  2.  $8 * (2 + 10 - 9) = 24$
772.  $[2, 8, 9, 11] - 2$  个解:
1.  $9 + 11 + 8 / 2 = 24$
  2.  $2 * (9 + 11 - 8) = 24$
773.  $[2, 8, 9, 12] - 5$  个解:
1.  $2 * 12 / (9 - 8) = 24$
  2.  $2 * 12 * (9 - 8) = 24$
  3.  $8 * 9 / 2 - 12 = 24$
  4.  $8 * (9 - 12 / 2) = 24$
  5.  $9 * (2 + 8 / 12) = 24$
774.  $[2, 8, 9, 13] - 3$  个解:
1.  $(8 - 2) * (13 - 9) = 24$
  2.  $2 * (8 + 13 - 9) = 24$
  3.  $9 / (2 - 13 / 8) = 24$
775.  $[2, 8, 10, 10] - 5$  个解:
1.  $10 + 10 + 8 / 2 = 24$
  2.  $(2 + 10) * (10 - 8) = 24$
  3.  $(10 - 8) * (2 + 10) = 24$
  4.  $2 * (10 + 10 - 8) = 24$
  5.  $8 * (2 + 10 / 10) = 24$
776.  $[2, 8, 10, 11] - 5$  个解:
1.  $(10 - 2) * (11 - 8) = 24$
  2.  $8 + 11 + 10 / 2 = 24$
  3.  $2 + 11 * (10 - 8) = 24$

4.  $8 * (2 + 11 - 10) = 24$
  5.  $10 + 2 * 11 - 8 = 24$
777.  $[2, 8, 10, 12] - 3$  个解:
1.  $12 + 2 * 10 - 8 = 24$
  2.  $2 * (8 + 10) - 12 = 24$
  3.  $8 + 10 + 12 / 2 = 24$
778.  $[2, 8, 10, 13] - 2$  个解:
1.  $13 * (10 - 8) - 2 = 24$
  2.  $8 + 2 * 13 - 10 = 24$
779.  $[2, 8, 11, 11] - 1$  个解:
1.  $8 * (2 + 11 / 11) = 24$
780.  $[2, 8, 11, 12] - 1$  个解:
1.  $8 * (2 + 12 - 11) = 24$
781.  $[2, 8, 11, 13] -$  无解
782.  $[2, 8, 12, 12] - 6$  个解:
1.  $12 * (12 - (2 + 8)) = 24$
  2.  $12 * 12 / (8 - 2) = 24$
  3.  $12 * (8 - 12 / 2) = 24$
  4.  $12 * (12 - 8) / 2 = 24$
  5.  $12 / (2 - 12 / 8) = 24$
  6.  $8 * (2 + 12 / 12) = 24$
783.  $[2, 8, 12, 13] - 1$  个解:
1.  $8 * (2 + 13 - 12) = 24$
784.  $[2, 8, 13, 13] - 1$  个解:
1.  $8 * (2 + 13 / 13) = 24$
785.  $[2, 9, 9, 9] -$  无解
786.  $[2, 9, 9, 10] -$  无解
787.  $[2, 9, 9, 11] - 1$  个解:
1.  $2 * (11 + 9 / 9) = 24$
788.  $[2, 9, 9, 12] - 6$  个解:
1.  $12 * (2 + 9 - 9) = 24$
  2.  $2 * (9 + 9) - 12 = 24$
  3.  $9 + 2 * 12 - 9 = 24$
  4.  $9 + 9 + 12 / 2 = 24$
  5.  $2 * (9 + 12 - 9) = 24$
  6.  $2 * 9 * 12 / 9 = 24$

789. [2, 9, 9, 13] - 1 个解:

1.  $2 * (13 - 9 / 9) = 24$

790. [2, 9, 10, 10] - 1 个解:

1.  $9 + 10 + 10 / 2 = 24$

791. [2, 9, 10, 11] - 2 个解:

1.  $(2 + 10) * (11 - 9) = 24$

2.  $2 * (10 + 11 - 9) = 24$

792. [2, 9, 10, 12] - 3 个解:

1.  $(10 - 2) * (12 - 9) = 24$

2.  $2 * 12 / (10 - 9) = 24$

3.  $2 * 12 * (10 - 9) = 24$

793. [2, 9, 10, 13] - 2 个解:

1.  $13 + 2 * 10 - 9 = 24$

2.  $2 * (9 + 13 - 10) = 24$

794. [2, 9, 11, 11] - 2 个解:

1.  $11 + 2 * 11 - 9 = 24$

2.  $2 + 11 * (11 - 9) = 24$

795. [2, 9, 11, 12] - 无解

796. [2, 9, 11, 13] - 2 个解:

1.  $13 * (11 - 9) - 2 = 24$

2.  $9 + 2 * 13 - 11 = 24$

797. [2, 9, 12, 12] - 无解

798. [2, 9, 12, 13] - 2 个解:

1.  $12 * (13 - (2 + 9)) = 24$

2.  $12 * (13 - 9) / 2 = 24$

799. [2, 9, 13, 13] - 1 个解:

1.  $13 + (9 + 13) / 2 = 24$

800. [2, 10, 10, 10] - 无解

801. [2, 10, 10, 11] - 1 个解:

1.  $2 * (11 + 10 / 10) = 24$

802. [2, 10, 10, 12] - 5 个解:

1.  $(2 + 10) * (12 - 10) = 24$

2.  $12 * (2 + 10 - 10) = 24$

3.  $10 + 2 * 12 - 10 = 24$

4.  $2 * (10 + 12 - 10) = 24$

5.  $2 * 10 * 12 / 10 = 24$

803. [2, 10, 10, 13] - 2 个解:

1.  $(10 - 2) * (13 - 10) = 24$

2.  $2 * (13 - 10 / 10) = 24$

804. [2, 10, 11, 11] - 1 个解:

1.  $2 * (11 + 11 - 10) = 24$

805. [2, 10, 11, 12] - 4 个解:

1.  $12 + 2 * 11 - 10 = 24$

2.  $2 * 12 / (11 - 10) = 24$

3.  $2 * 12 * (11 - 10) = 24$

4.  $2 + 11 * (12 - 10) = 24$

806. [2, 10, 11, 13] - 2 个解:

1.  $(2 + 10) * (13 - 11) = 24$

2.  $2 * (10 + 13 - 11) = 24$

807. [2, 10, 12, 12] - 无解

808. [2, 10, 12, 13] - 3 个解:

1.  $13 + (10 + 12) / 2 = 24$

2.  $13 * (12 - 10) - 2 = 24$

3.  $10 + 2 * 13 - 12 = 24$

809. [2, 10, 13, 13] - 无解

810. [2, 11, 11, 11] - 1 个解:

1.  $2 * (11 + 11 / 11) = 24$

811. [2, 11, 11, 12] - 4 个解:

1.  $12 * (2 + 11 - 11) = 24$

2.  $11 + 2 * 12 - 11 = 24$

3.  $2 * (11 + 12 - 11) = 24$

4.  $2 * 11 * 12 / 11 = 24$

812. [2, 11, 11, 13] - 4 个解:

1.  $13 + 2 * 11 - 11 = 24$

2.  $13 + (11 + 11) / 2 = 24$

3.  $2 * (13 - 11 / 11) = 24$

4.  $2 + 11 * (13 - 11) = 24$

813. [2, 11, 12, 12] - 3 个解:

1.  $2 * 12 / (12 - 11) = 24$

2.  $2 * 12 * (12 - 11) = 24$

3.  $2 * (11 + 12 / 12) = 24$

814. [2, 11, 12, 13] - 2 个解:

1.  $12 + (11 + 13) / 2 = 24$

2.  $2 * (11 + 13 - 12) = 24$

815. [2, 11, 13, 13] - 4 个解:

1.  $11 + 2 * 13 - 13 = 24$

2.  $13 * (13 - 11) - 2 = 24$

3.  $11 + (13 + 13) / 2 = 24$

4.  $2 * (11 + 13 / 13) = 24$

816. [2, 12, 12, 12] - 5 个解:

1.  $12 * (2 + 12 - 12) = 24$

2.  $12 + 2 * 12 - 12 = 24$

3.  $12 + (12 + 12) / 2 = 24$

4.  $2 * (12 + 12 - 12) = 24$

5.  $2 * 12 * 12 / 12 = 24$

817. [2, 12, 12, 13] - 3 个解:

1.  $2 * 12 / (13 - 12) = 24$

2.  $2 * (13 - 12 / 12) = 24$

3.  $2 * 12 * (13 - 12) = 24$

818. [2, 12, 13, 13] - 4 个解:

1.  $13 + 2 * 12 - 13 = 24$

2.  $12 * (2 + 13 - 13) = 24$

3.  $2 * (12 + 13 - 13) = 24$

4.  $2 * 12 * 13 / 13 = 24$

819. [2, 13, 13, 13] - 1 个解:

1.  $2 * (13 - 13 / 13) = 24$

820. [3, 3, 3, 3] - 1 个解:

1.  $3 * 3 * 3 - 3 = 24$

821. [3, 3, 3, 4] - 2 个解:

1.  $4 * (3 * 3 - 3) = 24$

2.  $3 + 3 * (3 + 4) = 24$

822. [3, 3, 3, 5] - 1 个解:

1.  $3 * 3 + 3 * 5 = 24$

823. [3, 3, 3, 6] - 4 个解:

1.  $6 + 3 * (3 + 3) = 24$

2.  $6 * (3 + 3 / 3) = 24$

3.  $3 * (3 + 6) - 3 = 24$

4.  $3 + 3 + 3 * 6 = 24$

824. [3, 3, 3, 7] - 2 个解:

1.  $(3 + 3) * (7 - 3) = 24$

2.  $3 * (7 + 3 / 3) = 24$

825.  $[3, 3, 3, 8] - 4$  个解:

1.  $8 * (3 + 3 - 3) = 24$
2.  $3 * (3 + 8 - 3) = 24$
3.  $3 + 3 * 8 - 3 = 24$
4.  $3 * 3 * 8 / 3 = 24$

826.  $[3, 3, 3, 9] - 1$  个解:

1.  $3 * (9 - 3 / 3) = 24$

827.  $[3, 3, 3, 10] - 2$  个解:

1.  $3 * 10 - (3 + 3) = 24$
2.  $3 + 3 * (10 - 3) = 24$

828.  $[3, 3, 3, 11] - 1$  个解:

1.  $3 * 11 - 3 * 3 = 24$

829.  $[3, 3, 3, 12] - 4$  个解:

1.  $12 * (3 + 3) / 3 = 24$
2.  $3 + 12 + 3 * 3 = 24$
3.  $12 * (3 - 3 / 3) = 24$
4.  $3 * (12 - 3) - 3 = 24$

830.  $[3, 3, 3, 13] -$  无解

831.  $[3, 3, 4, 4] - 2$  个解:

1.  $3 * 4 + 3 * 4 = 24$
2.  $3 * (3 * 4 - 4) = 24$

832.  $[3, 3, 4, 5] - 3$  个解:

1.  $4 * (5 + 3 / 3) = 24$
2.  $3 * 4 * (5 - 3) = 24$
3.  $3 * (4 + 5) - 3 = 24$

833.  $[3, 3, 4, 6] - 4$  个解:

1.  $6 * (3 + 4 - 3) = 24$
2.  $4 * (3 + 6 - 3) = 24$
3.  $3 + 4 * 6 - 3 = 24$
4.  $3 * 4 * 6 / 3 = 24$

834.  $[3, 3, 4, 7] - 2$  个解:

1.  $4 * (7 - 3 / 3) = 24$
2.  $3 * (4 + 7 - 3) = 24$

835.  $[3, 3, 4, 8] - 4$  个解:

1.  $(3 + 3) * (8 - 4) = 24$
2.  $8 * (4 - 3 / 3) = 24$
3.  $3 * 8 / (4 - 3) = 24$
4.  $3 * 8 * (4 - 3) = 24$

836.  $[3, 3, 4, 9] - 3$  个解:

1.  $3 + 9 + 3 * 4 = 24$
2.  $3 * (3 + 9 - 4) = 24$
3.  $4 * (3 + 9 / 3) = 24$

837.  $[3, 3, 4, 10] -$  无解

838.  $[3, 3, 4, 11] - 2$  个解:

1.  $4 + 11 + 3 * 3 = 24$
2.  $3 + 3 * (11 - 4) = 24$

839.  $[3, 3, 4, 12] - 5$  个解:

1.  $12 * (3 + 3 - 4) = 24$
2.  $4 * (12 - (3 + 3)) = 24$
3.  $3 * 12 - 3 * 4 = 24$
4.  $3 * 3 * 4 - 12 = 24$
5.  $3 * (4 + 12 / 3) = 24$

840.  $[3, 3, 4, 13] - 1$  个解:

1.  $3 * (13 - 4) - 3 = 24$

841.  $[3, 3, 5, 5] - 1$  个解:

1.  $5 * 5 - 3 / 3 = 24$

842.  $[3, 3, 5, 6] - 7$  个解:

1.  $5 * 6 - (3 + 3) = 24$
2.  $5 * (3 + 3) - 6 = 24$
3.  $6 * (3 * 3 - 5) = 24$
4.  $6 * (5 - 3 / 3) = 24$
5.  $(3 + 5) * (6 - 3) = 24$
6.  $3 + 6 + 3 * 5 = 24$
7.  $3 * (5 + 6 - 3) = 24$

843.  $[3, 3, 5, 7] - 1$  个解:

1.  $3 * (3 * 5 - 7) = 24$

844.  $[3, 3, 5, 8] -$  无解

845.  $[3, 3, 5, 9] - 4$  个解:

1.  $(3 + 3) * (9 - 5) = 24$
2.  $9 * (3 + 5) / 3 = 24$
3.  $(5 - 3) * (3 + 9) = 24$
4.  $3 * (5 + 9 / 3) = 24$

846.  $[3, 3, 5, 10] - 3$  个解:

1.  $5 + 10 + 3 * 3 = 24$
2.  $10 * (3 - 3 / 5) = 24$
3.  $3 * (3 + 10 - 5) = 24$

847.  $[3, 3, 5, 11] -$  无解

848.  $[3, 3, 5, 12] - 2$  个解:

1.  $12 + 3 * 5 - 3 = 24$
2.  $3 + 3 * (12 - 5) = 24$

849.  $[3, 3, 5, 13] - 2$  个解:

1.  $3 * 13 - 3 * 5 = 24$
2.  $3 + 3 + 5 + 13 = 24$

850.  $[3, 3, 6, 6] - 1$  个解:

1.  $3 * (6 + 6 / 3) = 24$

851.  $[3, 3, 6, 7] - 3$  个解:

1.  $3 + 7 * (6 - 3) = 24$
2.  $3 * (3 + 7) - 6 = 24$
3.  $6 + 3 * 7 - 3 = 24$

852.  $[3, 3, 6, 8] - 2$  个解:

1.  $8 * (3 * 3 - 6) = 24$
2.  $8 * (3 + 6) / 3 = 24$

853.  $[3, 3, 6, 9] - 6$  个解:

1.  $6 + 9 + 3 * 3 = 24$
2.  $9 * (6 - 3) - 3 = 24$
3.  $9 + 3 * 6 - 3 = 24$
4.  $6 * (3 + 9) / 3 = 24$
5.  $6 + 3 * (9 - 3) = 24$
6.  $3 + 3 * 9 - 6 = 24$

854.  $[3, 3, 6, 10] - 4$  个解:

1.  $(3 + 3) * (10 - 6) = 24$
2.  $6 * (10 - (3 + 3)) = 24$
3.  $3 * (3 * 6 - 10) = 24$
4.  $3 * (10 - 6 / 3) = 24$

855.  $[3, 3, 6, 11] - 3$  个解:

1.  $3 * 11 - (3 + 6) = 24$
2.  $(6 - 3) * (11 - 3) = 24$
3.  $3 * (3 + 11 - 6) = 24$

856.  $[3, 3, 6, 12] - 2$  个解:

1.  $6 * (3 + 3) - 12 = 24$
2.  $3 + 3 + 6 + 12 = 24$

857.  $[3, 3, 6, 13] - 3$  个解:

1.  $6 * (13 - 3 * 3) = 24$
2.  $3 * (13 - 3) - 6 = 24$
3.  $3 + 3 * (13 - 6) = 24$

858.  $[3, 3, 7, 7] - 1$  个解:

1.  $7 * (3 + 3 / 7) = 24$

859.  $[3, 3, 7, 8] - 1$  个解:

1.  $7 + 8 + 3 * 3 = 24$

860.  $[3, 3, 7, 9] - 3$  个解:

1.  $(7 - 3) * (9 - 3) = 24$

2.  $3 * 7 + 9 / 3 = 24$

3.  $3 + 7 * 9 / 3 = 24$

861.  $[3, 3, 7, 10] -$  无解

862.  $[3, 3, 7, 11] - 2$  个解:

1.  $(3 + 3) * (11 - 7) = 24$

2.  $3 + 3 + 7 + 11 = 24$

863.  $[3, 3, 7, 12] - 3$  个解:

1.  $12 * (3 * 3 - 7) = 24$

2.  $12 + 3 * (7 - 3) = 24$

3.  $3 * (3 + 12 - 7) = 24$

864.  $[3, 3, 7, 13] - 1$  个解:

1.  $3 * (3 * 7 - 13) = 24$

865.  $[3, 3, 8, 8] - 1$  个解:

1.  $8 / (3 - 8 / 3) = 24$

866.  $[3, 3, 8, 9] - 3$  个解:

1.  $8 * (9 - (3 + 3)) = 24$

2.  $3 * (3 + 8) - 9 = 24$

3.  $9 + 3 * (8 - 3) = 24$

867.  $[3, 3, 8, 10] - 2$  个解:

1.  $8 / (10 / 3 - 3) = 24$

2.  $3 + 3 + 8 + 10 = 24$

868.  $[3, 3, 8, 11] -$  无解

869.  $[3, 3, 8, 12] - 4$  个解:

1.  $(3 + 3) * (12 - 8) = 24$

2.  $12 * (8 - (3 + 3)) = 24$

3.  $8 * (12 - 3 * 3) = 24$

4.  $8 * (12 - 3) / 3 = 24$

870.  $[3, 3, 8, 13] - 1$  个解:

1.  $3 * (3 + 13 - 8) = 24$

871.  $[3, 3, 9, 9] - 4$  个解:

1.  $3 * 9 - 9 / 3 = 24$

2.  $9 * (3 - 3 / 9) = 24$

3.  $3 + 3 + 9 + 9 = 24$

4.  $9 * 9 / 3 - 3 = 24$

872.  $[3, 3, 9, 10] - 1$  个解:

1.  $3 + 3 * 10 - 9 = 24$

873.  $[3, 3, 9, 11] - 2$  个解:

1.  $3 * (11 - 9 / 3) = 24$

2.  $9 * (11 - 3) / 3 = 24$

874.  $[3, 3, 9, 12] - 3$  个解:

1.  $3 * 12 - (3 + 9) = 24$

2.  $3 * (3 + 9) - 12 = 24$

3.  $12 * (9 - 3) / 3 = 24$

875.  $[3, 3, 9, 13] - 1$  个解:

1.  $(3 + 3) * (13 - 9) = 24$

876.  $[3, 3, 10, 10] -$  无解

877.  $[3, 3, 10, 11] -$  无解

878.  $[3, 3, 10, 12] -$  无解

879.  $[3, 3, 10, 13] - 1$  个解:

1.  $10 + 13 + 3 / 3 = 24$

880.  $[3, 3, 11, 11] -$  无解

881.  $[3, 3, 11, 12] - 3$  个解:

1.  $12 * (11 - 3 * 3) = 24$

2.  $11 + 12 + 3 / 3 = 24$

3.  $3 + 3 * 11 - 12 = 24$

882.  $[3, 3, 11, 13] - 4$  个解:

1.  $13 + 3 * 11 / 3 = 24$

2.  $11 + 3 * 13 / 3 = 24$

3.  $3 + 11 + 13 - 3 = 24$

4.  $3 * (11 + 13) / 3 = 24$

883.  $[3, 3, 12, 12] - 5$  个解:

1.  $12 * 12 / (3 + 3) = 24$

2.  $12 + 3 * 12 / 3 = 24$

3.  $3 * (12 - 12 / 3) = 24$

4.  $3 + 12 + 12 - 3 = 24$

5.  $3 * (12 + 12) / 3 = 24$

884.  $[3, 3, 12, 13] - 2$  个解:

1.  $12 + 13 - 3 / 3 = 24$

2.  $3 * 13 - (3 + 12) = 24$

885.  $[3, 3, 13, 13] -$  无解

886.  $[3, 4, 4, 4] - 1$  个解:

1.  $4 * (3 + 4) - 4 = 24$

887.  $[3, 4, 4, 5] - 2$  个解:

1.  $3 + 5 + 4 * 4 = 24$

2.  $4 * (4 + 5 - 3) = 24$

888.  $[3, 4, 4, 6] - 7$  个解:

1.  $4 * 6 / (4 - 3) = 24$

2.  $4 * 6 * (4 - 3) = 24$

3.  $4 * (3 * 4 - 6) = 24$

4.  $(4 + 4) * (6 - 3) = 24$

5.  $6 * (3 + 4 / 4) = 24$

6.  $4 * (4 + 6 / 3) = 24$

7.  $3 * 4 * (6 - 4) = 24$

889.  $[3, 4, 4, 7] - 2$  个解:

1.  $3 * (7 + 4 / 4) = 24$

2.  $4 * (3 + 7 - 4) = 24$

890.  $[3, 4, 4, 8] - 7$  个解:

1.  $8 * (3 + 4 - 4) = 24$

2.  $4 + 8 + 3 * 4 = 24$

3.  $3 * (4 * 4 - 8) = 24$

4.  $4 + 4 * (8 - 3) = 24$

5.  $4 + 3 * 8 - 4 = 24$

6.  $3 * (4 + 8 - 4) = 24$

7.  $3 * 4 * 8 / 4 = 24$

891.  $[3, 4, 4, 9] - 4$  个解:

1.  $4 * 9 - 3 * 4 = 24$

2.  $9 * (4 - 4 / 3) = 24$

3.  $9 * (4 + 4) / 3 = 24$

4.  $3 * (9 - 4 / 4) = 24$

892.  $[3, 4, 4, 10] - 1$  个解:

1.  $4 * (10 - 3) - 4 = 24$

893.  $[3, 4, 4, 11] - 1$  个解:

1.  $11 + 4 * 4 - 3 = 24$

894.  $[3, 4, 4, 12] - 2$  个解:

$$1. 12 * (3 - 4 / 4) = 24$$

$$2. 4 * (3 + 12 / 4) = 24$$

895.  $[3, 4, 4, 13] - 2$  个解:

$$1. 4 * (13 - (3 + 4)) = 24$$

$$2. 3 + 4 + 4 + 13 = 24$$

896.  $[3, 4, 5, 5] - 2$  个解:

$$1. 4 + 5 + 3 * 5 = 24$$

$$2. 3 + 5 * 5 - 4 = 24$$

897.  $[3, 4, 5, 6] - 1$  个解:

$$1. 6 * (3 + 5 - 4) = 24$$

898.  $[3, 4, 5, 7] - 6$  个解:

$$1. 5 + 7 + 3 * 4 = 24$$

$$2. (3 + 5) * (7 - 4) = 24$$

$$3. 7 + 4 * 5 - 3 = 24$$

$$4. 4 + 5 * (7 - 3) = 24$$

$$5. 3 * (5 + 7 - 4) = 24$$

$$6. 3 * 4 * (7 - 5) = 24$$

899.  $[3, 4, 5, 8] - 7$  个解:

$$1. 4 * 8 - (3 + 5) = 24$$

$$2. 4 * (3 + 5) - 8 = 24$$

$$3. (5 - 3) * (4 + 8) = 24$$

$$4. 8 * (4 + 5) / 3 = 24$$

$$5. 3 * 8 / (5 - 4) = 24$$

$$6. 3 * 8 * (5 - 4) = 24$$

$$7. 4 * (3 + 8 - 5) = 24$$

900.  $[3, 4, 5, 9] - 2$  个解:

$$1. 4 * (3 * 5 - 9) = 24$$

$$2. 3 * (4 + 9 - 5) = 24$$

901.  $[3, 4, 5, 10] - 2$  个解:

$$1. 4 + 10 * (5 - 3) = 24$$

$$2. 3 * 4 * 10 / 5 = 24$$

902.  $[3, 4, 5, 11] - 2$  个解:

$$1. 5 * (3 + 4) - 11 = 24$$

$$2. 3 * 11 - (4 + 5) = 24$$

903.  $[3, 4, 5, 12] - 8$  个解:

$$1. 12 * (3 + 4 - 5) = 24$$

$$2. 12 * (3 + 5) / 4 = 24$$

$$3. 4 * 12 / (5 - 3) = 24$$

$$4. 4 * 5 + 12 / 3 = 24$$

$$5. 3 * (4 * 5 - 12) = 24$$

$$6. 3 * (5 + 12 / 4) = 24$$

$$7. 3 + 4 + 5 + 12 = 24$$

$$8. 4 + 5 * 12 / 3 = 24$$

904.  $[3, 4, 5, 13] - 2$  个解:

$$1. 13 + 3 * 5 - 4 = 24$$

$$2. 4 * (5 + 13) / 3 = 24$$

905.  $[3, 4, 6, 6] - 4$  个解:

$$1. 6 * 6 - 3 * 4 = 24$$

$$2. 6 + 6 + 3 * 4 = 24$$

$$3. 3 * (4 + 6) - 6 = 24$$

$$4. 3 * (6 + 6 - 4) = 24$$

906.  $[3, 4, 6, 7] -$  无解

907.  $[3, 4, 6, 8] - 5$  个解:

$$1. 6 * (3 * 4 - 8) = 24$$

$$2. 4 * (8 - 6 / 3) = 24$$

$$3. 6 * (4 + 8) / 3 = 24$$

$$4. 3 * (6 + 8 / 4) = 24$$

$$5. 3 * 4 * (8 - 6) = 24$$

908.  $[3, 4, 6, 9] - 2$  个解:

$$1. (6 - 4) * (3 + 9) = 24$$

$$2. 4 * (3 + 9 - 6) = 24$$

909.  $[3, 4, 6, 10] - 4$  个解:

$$1. 10 + 3 * 6 - 4 = 24$$

$$2. 3 * (4 + 10 - 6) = 24$$

$$3. 6 + 3 * (10 - 4) = 24$$

$$4. 4 + 6 * 10 / 3 = 24$$

910.  $[3, 4, 6, 11] - 3$  个解:

$$1. 6 * (11 - (3 + 4)) = 24$$

$$2. 6 / (3 - 11 / 4) = 24$$

$$3. 3 + 4 + 6 + 11 = 24$$

911.  $[3, 4, 6, 12] - 7$  个解:

$$1. 4 * (3 + 6) - 12 = 24$$

$$2. (6 - 3) * (12 - 4) = 24$$

$$3. 12 + 4 * (6 - 3) = 24$$

$$4. 4 * (3 * 6 - 12) = 24$$

$$5. 12 * (4 - 6 / 3) = 24$$

$$6. 3 * 4 * 12 / 6 = 24$$

$$7. 4 * (6 + 12) / 3 = 24$$

912.  $[3, 4, 6, 13] - 2$  个解:

$$1. 6 * (3 + 13) / 4 = 24$$

$$2. 6 / (13 / 4 - 3) = 24$$

913.  $[3, 4, 7, 7] - 4$  个解:

$$1. 7 * (7 - 3) - 4 = 24$$

$$2. 7 + 3 * 7 - 4 = 24$$

$$3. 3 + 7 * (7 - 4) = 24$$

$$4. 3 + 4 * 7 - 7 = 24$$

914.  $[3, 4, 7, 8] - 1$  个解:

$$1. 8 + 4 * (7 - 3) = 24$$

915.  $[3, 4, 7, 9] - 4$  个解:

$$1. 3 * (4 + 7) - 9 = 24$$

$$2. 9 * (7 - 4) - 3 = 24$$

$$3. 4 + 3 * 9 - 7 = 24$$

$$4. 3 * 4 * (9 - 7) = 24$$

916.  $[3, 4, 7, 10] - 3$  个解:

$$1. (7 - 3) * (10 - 4) = 24$$

$$2. 4 * (3 + 10 - 7) = 24$$

$$3. 3 + 4 + 7 + 10 = 24$$

917.  $[3, 4, 7, 11] - 3$  个解:

$$1. (7 - 4) * (11 - 3) = 24$$

$$2. 3 * (4 + 11 - 7) = 24$$

$$3. 4 * (7 + 11) / 3 = 24$$

918.  $[3, 4, 7, 12] - 4$  个解:

$$1. 3 * 7 + 12 / 4 = 24$$

$$2. 4 * 7 - 12 / 3 = 24$$

$$3. 7 * 12 / 3 - 4 = 24$$

$$4. 3 + 7 * 12 / 4 = 24$$

919.  $[3, 4, 7, 13] -$  无解

920.  $[3, 4, 8, 8] -$  无解

921.  $[3, 4, 8, 9] - 4$  个解:

$$1. 8 * (3 * 4 - 9) = 24$$

$$2. (8 - 4) * (9 - 3) = 24$$

$$3. 8 * (3 + 9) / 4 = 24$$

$$4. 3 + 4 + 8 + 9 = 24$$

922.  $[3, 4, 8, 10] - 4$  个解:

$$1. 8 * (10 - (3 + 4)) = 24$$

$$2. 3 * (10 - 8 / 4) = 24$$

$$3. 4 * (8 + 10) / 3 = 24$$

$$4. 3 * 4 * (10 - 8) = 24$$

923.  $[3, 4, 8, 11] - 4$  个解:

1.  $3 + 4 * 8 - 11 = 24$
2.  $4 * (3 + 11 - 8) = 24$
3.  $4 * (11 - 3) - 8 = 24$
4.  $8 / (4 - 11 / 3) = 24$

924.  $[3, 4, 8, 12] - 6$  个解:

1.  $4 * 12 - 3 * 8 = 24$
2.  $3 * 12 - (4 + 8) = 24$
3.  $3 * (4 + 8) - 12 = 24$
4.  $12 + 3 * (8 - 4) = 24$
5.  $3 * (4 + 12 - 8) = 24$
6.  $8 + 4 * 12 / 3 = 24$

925.  $[3, 4, 8, 13] - 2$  个解:

1.  $8 / (13 / 3 - 4) = 24$
2.  $8 * (13 - 4) / 3 = 24$

926.  $[3, 4, 9, 9] - 4$  个解:

1.  $4 * 9 - (3 + 9) = 24$
2.  $4 * (9 - 9 / 3) = 24$
3.  $9 + 3 * (9 - 4) = 24$
4.  $4 * (9 + 9) / 3 = 24$

927.  $[3, 4, 9, 10] -$  无解

928.  $[3, 4, 9, 11] - 2$  个解:

1.  $3 * 4 * (11 - 9) = 24$
2.  $(9 * 11 - 3) / 4 = 24$

929.  $[3, 4, 9, 12] - 7$  个解:

1.  $12 * (9 - (3 + 4)) = 24$
2.  $3 * 9 - 12 / 4 = 24$
3.  $12 + 4 * 9 / 3 = 24$
4.  $4 * (3 + 12 - 9) = 24$
5.  $9 * (12 - 4) / 3 = 24$
6.  $9 * (3 - 4 / 12) = 24$
7.  $9 * 12 / 4 - 3 = 24$

930.  $[3, 4, 9, 13] - 1$  个解:

1.  $3 * (4 + 13 - 9) = 24$

931.  $[3, 4, 10, 10] - 1$  个解:

1.  $4 + 3 * 10 - 10 = 24$

932.  $[3, 4, 10, 11] -$  无解

933.  $[3, 4, 10, 12] - 5$  个解:

1.  $12 * (3 * 4 - 10) = 24$

$$2. 12 * (10 - 4) / 3 = 24$$

$$3. 12 / (3 - 10 / 4) = 24$$

$$4. 4 * (10 - 12 / 3) = 24$$

$$5. 3 * 4 * (12 - 10) = 24$$

934.  $[3, 4, 10, 13] - 3$  个解:

1.  $4 * 10 - (3 + 13) = 24$
2.  $4 * (3 + 13 - 10) = 24$
3.  $4 + 10 + 13 - 3 = 24$

935.  $[3, 4, 11, 11] -$  无解

936.  $[3, 4, 11, 12] - 3$  个解:

1.  $12 * (11 - 3) / 4 = 24$
2.  $3 * (11 - 12 / 4) = 24$
3.  $4 + 11 + 12 - 3 = 24$

937.  $[3, 4, 11, 13] - 9$  个解:

1.  $(4 - 3) * (11 + 13) = 24$
2.  $(11 + 13) / (4 - 3) = 24$
3.  $13 + 11 * (4 - 3) = 24$
4.  $13 + 11 / (4 - 3) = 24$
5.  $11 + 13 * (4 - 3) = 24$
6.  $11 + 13 / (4 - 3) = 24$
7.  $4 + 3 * 11 - 13 = 24$
8.  $3 * 13 - (4 + 11) = 24$
9.  $3 * 4 * (13 - 11) = 24$

938.  $[3, 4, 12, 12] - 5$  个解:

1.  $(4 - 3) * (12 + 12) = 24$
2.  $(12 + 12) / (4 - 3) = 24$
3.  $12 + 12 * (4 - 3) = 24$
4.  $12 + 12 / (4 - 3) = 24$
5.  $4 * (12 - 3) - 12 = 24$

939.  $[3, 4, 12, 13] - 1$  个解:

1.  $3 + 12 + 13 - 4 = 24$

940.  $[3, 4, 13, 13] -$  无解

941.  $[3, 5, 5, 5] -$  无解

942.  $[3, 5, 5, 6] - 2$  个解:

1.  $3 * (5 + 5) - 6 = 24$
2.  $6 * (3 + 5 / 5) = 24$

943.  $[3, 5, 5, 7] - 2$  个解:

1.  $(5 - 3) * (5 + 7) = 24$
2.  $3 * (7 + 5 / 5) = 24$

944.  $[3, 5, 5, 8] - 5$  个解:

1.  $(3 + 5) * (8 - 5) = 24$
2.  $8 * (3 + 5 - 5) = 24$
3.  $5 + 3 * 8 - 5 = 24$
4.  $3 * (5 + 8 - 5) = 24$
5.  $3 * 5 * 8 / 5 = 24$

945.  $[3, 5, 5, 9] - 2$  个解:

1.  $3 * (9 - 5 / 5) = 24$
2.  $5 * (3 + 9 / 5) = 24$

946.  $[3, 5, 5, 10] -$  无解

947.  $[3, 5, 5, 11] - 1$  个解:

1.  $3 + 5 + 5 + 11 = 24$

948.  $[3, 5, 5, 12] - 1$  个解:

1.  $12 * (3 - 5 / 5) = 24$

949.  $[3, 5, 5, 13] -$  无解

950.  $[3, 5, 6, 6] - 2$  个解:

1.  $(5 - 3) * (6 + 6) = 24$
2.  $6 * (3 + 6 - 5) = 24$

951.  $[3, 5, 6, 7] - 2$  个解:

1.  $6 * (5 + 7) / 3 = 24$
2.  $3 * (6 + 7 - 5) = 24$

952.  $[3, 5, 6, 8] - 4$  个解:

1.  $6 * 8 / (5 - 3) = 24$
2.  $8 * (5 - 6 / 3) = 24$
3.  $3 * 8 / (6 - 5) = 24$
4.  $3 * 8 * (6 - 5) = 24$

953.  $[3, 5, 6, 9] - 7$  个解:

1.  $(3 + 5) * (9 - 6) = 24$
2.  $6 + 9 * (5 - 3) = 24$
3.  $9 + 5 * (6 - 3) = 24$
4.  $3 * (5 + 6) - 9 = 24$
5.  $3 + 5 * 6 - 9 = 24$
6.  $5 * (9 - 3) - 6 = 24$
7.  $3 * (5 + 9 - 6) = 24$

954.  $[3, 5, 6, 10] - 2$  个解:

1.  $3 * (6 + 10 / 5) = 24$
2.  $3 + 5 + 6 + 10 = 24$



955.  $[3, 5, 6, 11] - 3$  个解:

1.  $6 * (3 * 5 - 11) = 24$
2.  $11 + 3 * 6 - 5 = 24$
3.  $6 + 3 * (11 - 5) = 24$

956.  $[3, 5, 6, 12] - 3$  个解:

1.  $12 * (3 + 5 - 6) = 24$
2.  $6 * (12 - (3 + 5)) = 24$
3.  $12 + 6 * (5 - 3) = 24$

957.  $[3, 5, 6, 13] - 1$  个解:

1.  $(6 - 3) * (13 - 5) = 24$

958.  $[3, 5, 7, 7] -$  无解

959.  $[3, 5, 7, 8] - 3$  个解:

1.  $8 + 3 * 7 - 5 = 24$
2.  $5 * 7 - (3 + 8) = 24$
3.  $3 + 7 * (8 - 5) = 24$

960.  $[3, 5, 7, 9] - 4$  个解:

1.  $5 * 9 - 3 * 7 = 24$
2.  $9 * (5 - 7 / 3) = 24$
3.  $(7 - 5) * (3 + 9) = 24$
4.  $3 + 5 + 7 + 9 = 24$

961.  $[3, 5, 7, 10] - 3$  个解:

1.  $(3 + 5) * (10 - 7) = 24$
2.  $10 + 7 * (5 - 3) = 24$
3.  $3 * (5 + 10 - 7) = 24$

962.  $[3, 5, 7, 11] - 2$  个解:

1.  $(7 - 3) * (11 - 5) = 24$
2.  $(7 * 11 - 5) / 3 = 24$

963.  $[3, 5, 7, 12] - 3$  个解:

1.  $12 * (3 + 7) / 5 = 24$
2.  $3 * 12 - (5 + 7) = 24$
3.  $3 * (5 + 7) - 12 = 24$

964.  $[3, 5, 7, 13] - 1$  个解:

1.  $(7 + 5 * 13) / 3 = 24$

965.  $[3, 5, 8, 8] - 2$  个解:

1.  $8 + 8 * (5 - 3) = 24$
2.  $3 + 5 + 8 + 8 = 24$

966.  $[3, 5, 8, 9] - 2$  个解:

1.  $9 * (8 - 5) - 3 = 24$

$$2. 5 + 3 * 9 - 8 = 24$$

967.  $[3, 5, 8, 10] -$  无解

968.  $[3, 5, 8, 11] - 4$  个解:

1.  $(3 + 5) * (11 - 8) = 24$
2.  $8 * (11 - (3 + 5)) = 24$
3.  $(8 - 5) * (11 - 3) = 24$
4.  $3 * (5 + 11 - 8) = 24$

969.  $[3, 5, 8, 12] - 2$  个解:

1.  $8 * (3 * 5 - 12) = 24$
2.  $8 * (3 + 12) / 5 = 24$

970.  $[3, 5, 8, 13] - 1$  个解:

1.  $5 * 8 - (3 + 13) = 24$

971.  $[3, 5, 9, 9] - 3$  个解:

1.  $(9 - 3) * (9 - 5) = 24$
2.  $(9 - 5) * (9 - 3) = 24$
3.  $9 + 5 * 9 / 3 = 24$

972.  $[3, 5, 9, 10] - 2$  个解:

1.  $10 * (3 + 9) / 5 = 24$
2.  $9 + 3 * (10 - 5) = 24$

973.  $[3, 5, 9, 11] -$  无解

974.  $[3, 5, 9, 12] - 4$  个解:

1.  $(3 + 5) * (12 - 9) = 24$
2.  $12 * (5 - 9 / 3) = 24$
3.  $12 + 3 * (9 - 5) = 24$
4.  $3 * (5 + 12 - 9) = 24$

975.  $[3, 5, 9, 13] - 3$  个解:

1.  $9 * (13 - 5) / 3 = 24$
2.  $5 + 9 + 13 - 3 = 24$
3.  $(3 + 9 * 13) / 5 = 24$

976.  $[3, 5, 10, 10] - 1$  个解:

1.  $3 * (10 - 10 / 5) = 24$

977.  $[3, 5, 10, 11] - 2$  个解:

1.  $5 * (10 - 3) - 11 = 24$
2.  $5 + 3 * 10 - 11 = 24$

978.  $[3, 5, 10, 12] - 2$  个解:

1.  $12 * (10 - (3 + 5)) = 24$
2.  $5 + 10 + 12 - 3 = 24$

979.  $[3, 5, 10, 13] - 3$  个解:

1.  $(3 + 5) * (13 - 10) = 24$
2.  $3 * 13 - (5 + 10) = 24$
3.  $3 * (5 + 13 - 10) = 24$

980.  $[3, 5, 11, 11] - 1$  个解:

1.  $5 + 11 + 11 - 3 = 24$

981.  $[3, 5, 11, 12] - 1$  个解:

1.  $12 * (11 - 5) / 3 = 24$

982.  $[3, 5, 11, 13] -$  无解

983.  $[3, 5, 12, 12] - 2$  个解:

1.  $5 * 12 - 3 * 12 = 24$
2.  $(12 + 5 * 12) / 3 = 24$

984.  $[3, 5, 12, 13] - 2$  个解:

1.  $12 * (3 * 5 - 13) = 24$
2.  $12 * (13 - 3) / 5 = 24$

985.  $[3, 5, 13, 13] - 1$  个解:

1.  $3 + 13 + 13 - 5 = 24$

986.  $[3, 6, 6, 6] - 4$  个解:

1.  $6 + 6 * (6 - 3) = 24$
2.  $6 * (6 - 6 / 3) = 24$
3.  $6 * (6 + 6) / 3 = 24$
4.  $6 * (3 + 6 / 6) = 24$

987.  $[3, 6, 6, 7] - 3$  个解:

1.  $6 * 7 - 3 * 6 = 24$
2.  $3 * (7 + 6 / 6) = 24$
3.  $6 * (3 + 7 - 6) = 24$

988.  $[3, 6, 6, 8] - 5$  个解:

1.  $8 * (3 + 6 - 6) = 24$
2.  $6 * (8 - 3) - 6 = 24$
3.  $6 + 3 * 8 - 6 = 24$
4.  $3 * (6 + 8 - 6) = 24$
5.  $3 * 6 * 8 / 6 = 24$

989.  $[3, 6, 6, 9] - 4$  个解:

1.  $6 * 6 - (3 + 9) = 24$
2.  $3 * (9 - 6 / 6) = 24$
3.  $6 + 6 * 9 / 3 = 24$
4.  $3 + 6 + 6 + 9 = 24$

990.  $[3, 6, 6, 10] - 1$  个解:

1.  $10 * (6 - 3) - 6 = 24$

991.  $[3, 6, 6, 11] - 1$  个解:

1.  $(6 + 6 * 11) / 3 = 24$

992.  $[3, 6, 6, 12] - 8$  个解:

1.  $6 * 12 / (6 - 3) = 24$

2.  $12 + 3 * 6 - 6 = 24$

3.  $3 * 12 - (6 + 6) = 24$

4.  $3 * (6 + 6) - 12 = 24$

5.  $12 + 6 * 6 / 3 = 24$

6.  $12 * (3 - 6 / 6) = 24$

7.  $6 + 3 * (12 - 6) = 24$

8.  $3 * (6 + 12 / 6) = 24$

993.  $[3, 6, 6, 13] - 2$  个解:

1.  $6 * (13 - (3 + 6)) = 24$

2.  $(6 * 13 - 6) / 3 = 24$

994.  $[3, 6, 7, 7] - 2$  个解:

1.  $3 * (7 + 7 - 6) = 24$

2.  $6 * (3 + 7 / 7) = 24$

995.  $[3, 6, 7, 8] - 4$  个解:

1.  $3 * 8 / (7 - 6) = 24$

2.  $3 * 8 * (7 - 6) = 24$

3.  $6 * (3 + 8 - 7) = 24$

4.  $3 + 6 + 7 + 8 = 24$

996.  $[3, 6, 7, 9] - 4$  个解:

1.  $9 + 3 * 7 - 6 = 24$

2.  $6 * (7 - 9 / 3) = 24$

3.  $3 * (6 + 9 - 7) = 24$

4.  $3 + 7 * (9 - 6) = 24$

997.  $[3, 6, 7, 10] - 1$  个解:

1.  $10 + 6 * 7 / 3 = 24$

998.  $[3, 6, 7, 11] -$  无解

999.  $[3, 6, 7, 12] - 2$  个解:

1.  $12 * (3 + 6 - 7) = 24$

2.  $(7 - 3) * (12 - 6) = 24$

1000.  $[3, 6, 7, 13] - 2$  个解:

1.  $13 + 3 * 6 - 7 = 24$

2.  $6 + 3 * (13 - 7) = 24$

1001.  $[3, 6, 8, 8] - 3$  个解:

1.  $6 * 8 - 3 * 8 = 24$

2.  $8 + 6 * 8 / 3 = 24$

3.  $6 * (3 + 8 / 8) = 24$

1002.  $[3, 6, 8, 9] - 4$  个解:

1.  $8 * 9 / (6 - 3) = 24$

2.  $(8 - 6) * (3 + 9) = 24$

3.  $6 * (3 + 9 - 8) = 24$

4.  $8 * (6 - 9 / 3) = 24$

1003.  $[3, 6, 8, 10] - 1$  个解:

1.  $3 * (6 + 10 - 8) = 24$

1004.  $[3, 6, 8, 11] -$  无解

1005.  $[3, 6, 8, 12] - 2$  个解:

1.  $8 * (12 - (3 + 6)) = 24$

2.  $6 * (8 - 12 / 3) = 24$

1006.  $[3, 6, 8, 13] - 1$  个解:

1.  $6 + 8 + 13 - 3 = 24$

1007.  $[3, 6, 9, 9] - 3$  个解:

1.  $6 + 3 * 9 - 9 = 24$

2.  $9 * (9 - 6) - 3 = 24$

3.  $6 * (3 + 9 / 9) = 24$

1008.  $[3, 6, 9, 10] - 5$  个解:

1.  $(9 - 3) * (10 - 6) = 24$

2.  $6 * 9 - 3 * 10 = 24$

3.  $6 * (3 + 10 - 9) = 24$

4.  $9 * (6 - 10 / 3) = 24$

5.  $9 * 10 / 3 - 6 = 24$

1009.  $[3, 6, 9, 11] - 4$  个解:

1.  $11 * (6 - 3) - 9 = 24$

2.  $(9 - 6) * (11 - 3) = 24$

3.  $3 * (6 + 11 - 9) = 24$

4.  $9 + 3 * (11 - 6) = 24$

1010.  $[3, 6, 9, 12] - 4$  个解:

1.  $12 * (3 + 9) / 6 = 24$

2.  $6 * (9 - 3) - 12 = 24$

3.  $3 * 6 * 12 / 9 = 24$

4.  $6 + 9 + 12 - 3 = 24$

1011.  $[3, 6, 9, 13] - 3$  个解:

1.  $9 + 13 + 6 / 3 = 24$

2.  $3 * 13 - (6 + 9) = 24$

3.  $9 * (3 + 13) / 6 = 24$

1012.  $[3, 6, 10, 10] - 2$  个解:

1.  $10 * (3 - 6 / 10) = 24$

2.  $6 * (3 + 10 / 10) = 24$

1013.  $[3, 6, 10, 11] - 2$  个解:

1.  $6 * (3 + 11 - 10) = 24$

2.  $6 + 10 + 11 - 3 = 24$

1014.  $[3, 6, 10, 12] - 7$  个解:

1.  $10 + 12 + 6 / 3 = 24$

2.  $6 + 3 * 10 - 12 = 24$

3.  $12 + 3 * (10 - 6) = 24$

4.  $6 * 10 - 3 * 12 = 24$

5.  $(12 + 6 * 10) / 3 = 24$

6.  $3 * (6 + 12 - 10) = 24$

7.  $3 * (10 - 12 / 6) = 24$

1015.  $[3, 6, 10, 13] -$  无解

1016.  $[3, 6, 11, 11] - 2$  个解:

1.  $11 + 11 + 6 / 3 = 24$

2.  $6 * (3 + 11 / 11) = 24$

1017.  $[3, 6, 11, 12] - 2$  个解:

1.  $12 * (11 - (3 + 6)) = 24$

2.  $6 * (3 + 12 - 11) = 24$

1018.  $[3, 6, 11, 13] - 1$  个解:

1.  $3 * (6 + 13 - 11) = 24$

1019.  $[3, 6, 12, 12] - 4$  个解:

1.  $12 * (6 - 3) - 12 = 24$

2.  $12 * (6 - 12 / 3) = 24$

3.  $12 * (12 - 6) / 3 = 24$

4.  $6 * (3 + 12 / 12) = 24$

1020.  $[3, 6, 12, 13] - 1$  个解:

1.  $6 * (3 + 13 - 12) = 24$

1021.  $[3, 6, 13, 13] - 2$  个解:

1.  $13 + 13 - 6 / 3 = 24$

2.  $6 * (3 + 13 / 13) = 24$

1022.  $[3, 7, 7, 7] - 2$  个解:

1.  $3 * (7 + 7 / 7) = 24$

2.  $3 + 7 + 7 + 7 = 24$

1023.  $[3, 7, 7, 8]$  - 4 个解:

1.  $8 * (3 + 7 - 7) = 24$
2.  $7 + 3 * 8 - 7 = 24$
3.  $3 * (7 + 8 - 7) = 24$
4.  $3 * 7 * 8 / 7 = 24$

1024.  $[3, 7, 7, 9]$  - 1 个解:

1.  $3 * (9 - 7 / 7) = 24$

1025.  $[3, 7, 7, 10]$  - 2 个解:

1.  $10 + 3 * 7 - 7 = 24$
2.  $3 + 7 * (10 - 7) = 24$

1026.  $[3, 7, 7, 11]$  - 无解

1027.  $[3, 7, 7, 12]$  - 1 个解:

1.  $12 * (3 - 7 / 7) = 24$

1028.  $[3, 7, 7, 13]$  - 2 个解:

1.  $(7 - 3) * (13 - 7) = 24$
2.  $7 + 7 + 13 - 3 = 24$

1029.  $[3, 7, 8, 8]$  - 4 个解:

1.  $8 * (7 - 3) - 8 = 24$
2.  $3 * 8 / (8 - 7) = 24$
3.  $3 * 8 * (8 - 7) = 24$
4.  $3 * (7 + 8 / 8) = 24$

1030.  $[3, 7, 8, 9]$  - 1 个解:

1.  $3 * (7 + 9 - 8) = 24$

1031.  $[3, 7, 8, 10]$  - 无解

1032.  $[3, 7, 8, 11]$  - 3 个解:

1.  $11 + 3 * 7 - 8 = 24$
2.  $7 * (8 - 3) - 11 = 24$
3.  $3 + 7 * (11 - 8) = 24$

1033.  $[3, 7, 8, 12]$  - 4 个解:

1.  $12 * (3 + 7 - 8) = 24$
2.  $8 * 12 / (7 - 3) = 24$
3.  $8 * (7 - 12 / 3) = 24$
4.  $7 + 8 + 12 - 3 = 24$

1034.  $[3, 7, 8, 13]$  - 2 个解:

1.  $8 * (13 - (3 + 7)) = 24$
2.  $3 * 13 - (7 + 8) = 24$

1035.  $[3, 7, 9, 9]$  - 4 个解:

1.  $(3 + 9) * (9 - 7) = 24$
2.  $(9 - 7) * (3 + 9) = 24$
3.  $(9 + 7 * 9) / 3 = 24$
4.  $3 * (7 + 9 / 9) = 24$

1036.  $[3, 7, 9, 10]$  - 3 个解:

1.  $7 + 3 * 9 - 10 = 24$
2.  $3 * (7 + 10 - 9) = 24$
3.  $9 * (10 - 7) - 3 = 24$

1037.  $[3, 7, 9, 11]$  - 2 个解:

1.  $(9 - 3) * (11 - 7) = 24$
2.  $7 + 9 + 11 - 3 = 24$

1038.  $[3, 7, 9, 12]$  - 4 个解:

1.  $9 * (7 - 3) - 12 = 24$
2.  $12 + 3 * 7 - 9 = 24$
3.  $9 + 3 * (12 - 7) = 24$
4.  $3 + 7 * (12 - 9) = 24$

1039.  $[3, 7, 9, 13]$  - 2 个解:

1.  $7 * 9 - 3 * 13 = 24$
2.  $9 * (7 - 13 / 3) = 24$

1040.  $[3, 7, 10, 10]$  - 2 个解:

1.  $7 + 10 + 10 - 3 = 24$
2.  $3 * (7 + 10 / 10) = 24$

1041.  $[3, 7, 10, 11]$  - 2 个解:

1.  $(10 - 7) * (11 - 3) = 24$
2.  $3 * (7 + 11 - 10) = 24$

1042.  $[3, 7, 10, 12]$  - 无解

1043.  $[3, 7, 10, 13]$  - 3 个解:

1.  $13 + 3 * 7 - 10 = 24$
2.  $7 + 3 * 10 - 13 = 24$
3.  $3 + 7 * (13 - 10) = 24$

1044.  $[3, 7, 11, 11]$  - 1 个解:

1.  $3 * (7 + 11 / 11) = 24$

1045.  $[3, 7, 11, 12]$  - 3 个解:

1.  $12 * (3 + 11) / 7 = 24$
2.  $12 + 3 * (11 - 7) = 24$
3.  $3 * (7 + 12 - 11) = 24$

1046.  $[3, 7, 11, 13]$  - 无解

1047.  $[3, 7, 12, 12]$  - 3 个解:

1.  $12 * (12 - (3 + 7)) = 24$
2.  $(7 * 12 - 12) / 3 = 24$
3.  $3 * (7 + 12 / 12) = 24$

1048.  $[3, 7, 12, 13]$  - 3 个解:

1.  $7 + 13 + 12 / 3 = 24$
2.  $3 * (7 + 13 - 12) = 24$
3.  $12 * (13 - 7) / 3 = 24$

1049.  $[3, 7, 13, 13]$  - 1 个解:

1.  $3 * (7 + 13 / 13) = 24$

1050.  $[3, 8, 8, 8]$  - 5 个解:

1.  $8 * (3 + 8 - 8) = 24$
2.  $8 + 3 * 8 - 8 = 24$
3.  $3 * (8 + 8 - 8) = 24$
4.  $3 * 8 * 8 / 8 = 24$
5.  $(8 + 8 * 8) / 3 = 24$

1051.  $[3, 8, 8, 9]$  - 3 个解:

1.  $3 * 8 / (9 - 8) = 24$
2.  $3 * (9 - 8 / 8) = 24$
3.  $3 * 8 * (9 - 8) = 24$

1052.  $[3, 8, 8, 10]$  - 1 个解:

1.  $(8 * 10 - 8) / 3 = 24$

1053.  $[3, 8, 8, 11]$  - 1 个解:

1.  $8 + 8 + 11 - 3 = 24$

1054.  $[3, 8, 8, 12]$  - 2 个解:

1.  $12 * (3 - 8 / 8) = 24$
2.  $8 * 12 / 3 - 8 = 24$

1055.  $[3, 8, 8, 13]$  - 无解

1056.  $[3, 8, 9, 9]$  - 4 个解:

1.  $9 + 3 * 8 - 9 = 24$
2.  $8 * (3 + 9 - 9) = 24$
3.  $3 * (8 + 9 - 9) = 24$
4.  $3 * 8 * 9 / 9 = 24$

1057.  $[3, 8, 9, 10]$  - 4 个解:

1.  $3 * 8 / (10 - 9) = 24$
2.  $(3 + 9) * (10 - 8) = 24$
3.  $8 + 9 + 10 - 3 = 24$
4.  $3 * 8 * (10 - 9) = 24$

1058.  $[3, 8, 9, 11]$  - 2 个解:

1.  $8 + 3 * 9 - 11 = 24$
2.  $9 * (11 - 8) - 3 = 24$

1059.  $[3, 8, 9, 12]$  - 2 个解:

1.  $12 * (3 + 8 - 9) = 24$
2.  $(9 - 3) * (12 - 8) = 24$

1060.  $[3, 8, 9, 13]$  - 2 个解:

1.  $8 + 13 + 9 / 3 = 24$
2.  $9 + 3 * (13 - 8) = 24$

1061.  $[3, 8, 10, 10]$  - 4 个解:

1.  $10 + 3 * 8 - 10 = 24$
2.  $8 * (3 + 10 - 10) = 24$
3.  $3 * (8 + 10 - 10) = 24$
4.  $3 * 8 * 10 / 10 = 24$

1062.  $[3, 8, 10, 11]$  - 2 个解:

1.  $3 * 8 / (11 - 10) = 24$
2.  $3 * 8 * (11 - 10) = 24$

1063.  $[3, 8, 10, 12]$  - 1 个解:

1.  $10 * 12 / (8 - 3) = 24$

1064.  $[3, 8, 10, 13]$  - 无解

1065.  $[3, 8, 11, 11]$  - 6 个解:

1.  $11 + 3 * 8 - 11 = 24$
2.  $8 * (3 + 11 - 11) = 24$
3.  $(11 - 3) * (11 - 8) = 24$
4.  $3 * (8 + 11 - 11) = 24$
5.  $(11 - 8) * (11 - 3) = 24$
6.  $3 * 8 * 11 / 11 = 24$

1066.  $[3, 8, 11, 12]$  - 2 个解:

1.  $3 * 8 / (12 - 11) = 24$
2.  $3 * 8 * (12 - 11) = 24$

1067.  $[3, 8, 11, 13]$  - 无解

1068.  $[3, 8, 12, 12]$  - 6 个解:

1.  $12 + 3 * 8 - 12 = 24$
2.  $8 * (3 + 12 - 12) = 24$
3.  $8 + 12 + 12 / 3 = 24$
4.  $3 * (8 + 12 - 12) = 24$
5.  $12 + 3 * (12 - 8) = 24$
6.  $3 * 8 * 12 / 12 = 24$

1069.  $[3, 8, 12, 13]$  - 4 个解:

1.  $12 * (13 - (3 + 8)) = 24$
2.  $3 * 8 / (13 - 12) = 24$
3.  $12 * (3 + 13) / 8 = 24$
4.  $3 * 8 * (13 - 12) = 24$

1070.  $[3, 8, 13, 13]$  - 4 个解:

1.  $13 + 3 * 8 - 13 = 24$
2.  $8 * (3 + 13 - 13) = 24$
3.  $3 * (8 + 13 - 13) = 24$
4.  $3 * 8 * 13 / 13 = 24$

1071.  $[3, 9, 9, 9]$  - 3 个解:

1.  $(9 * 9 - 9) / 3 = 24$
2.  $3 * (9 - 9 / 9) = 24$
3.  $9 + 9 + 9 - 3 = 24$

1072.  $[3, 9, 9, 10]$  - 1 个解:

1.  $3 * (9 + 9 - 10) = 24$

1073.  $[3, 9, 9, 11]$  - 2 个解:

1.  $(3 + 9) * (11 - 9) = 24$
2.  $9 * 11 / 3 - 9 = 24$

1074.  $[3, 9, 9, 12]$  - 4 个解:

1.  $9 + 3 * 9 - 12 = 24$
2.  $9 + 12 + 9 / 3 = 24$
3.  $12 * (3 - 9 / 9) = 24$
4.  $9 * (12 - 9) - 3 = 24$

1075.  $[3, 9, 9, 13]$  - 1 个解:

1.  $(9 - 3) * (13 - 9) = 24$

1076.  $[3, 9, 10, 10]$  - 1 个解:

1.  $3 * (9 - 10 / 10) = 24$

1077.  $[3, 9, 10, 11]$  - 2 个解:

1.  $10 + 11 + 9 / 3 = 24$
2.  $3 * (9 + 10 - 11) = 24$

1078.  $[3, 9, 10, 12]$  - 2 个解:

1.  $(3 + 9) * (12 - 10) = 24$
2.  $12 * (3 + 9 - 10) = 24$

1079.  $[3, 9, 10, 13]$  - 2 个解:

1.  $10 + 3 * 9 - 13 = 24$
2.  $9 * (13 - 10) - 3 = 24$

1080.  $[3, 9, 11, 11]$  - 2 个解:

1.  $11 * (3 - 9 / 11) = 24$
2.  $3 * (9 - 11 / 11) = 24$

1081.  $[3, 9, 11, 12]$  - 3 个解:

1.  $(11 - 3) * (12 - 9) = 24$
2.  $3 * (9 + 11 - 12) = 24$
3.  $9 + 11 + 12 / 3 = 24$

1082.  $[3, 9, 11, 13]$  - 1 个解:

1.  $(3 + 9) * (13 - 11) = 24$

1083.  $[3, 9, 12, 12]$  - 3 个解:

1.  $12 * 12 / (9 - 3) = 24$
2.  $9 * 12 / 3 - 12 = 24$
3.  $3 * (9 - 12 / 12) = 24$

1084.  $[3, 9, 12, 13]$  - 2 个解:

1.  $3 * (9 + 12 - 13) = 24$
2.  $12 + 3 * (13 - 9) = 24$

1085.  $[3, 9, 13, 13]$  - 1 个解:

1.  $3 * (9 - 13 / 13) = 24$

1086.  $[3, 10, 10, 10]$  - 无解

1087.  $[3, 10, 10, 11]$  - 无解

1088.  $[3, 10, 10, 12]$  - 3 个解:

1.  $3 * (10 + 10 - 12) = 24$
2.  $12 * (3 - 10 / 10) = 24$
3.  $10 + 10 + 12 / 3 = 24$

1089.  $[3, 10, 10, 13]$  - 无解

1090.  $[3, 10, 11, 11]$  - 无解

1091.  $[3, 10, 11, 12]$  - 1 个解:

1.  $12 * (3 + 10 - 11) = 24$

1092.  $[3, 10, 11, 13]$  - 2 个解:

1.  $(11 - 3) * (13 - 10) = 24$
2.  $3 * (10 + 11 - 13) = 24$

1093.  $[3, 10, 12, 12]$  - 无解

1094.  $[3, 10, 12, 13]$  - 无解

1095.  $[3, 10, 13, 13]$  - 无解

1096.  $[3, 11, 11, 11]$  - 无解

1097.  $[3, 11, 11, 12]$  - 1个解:

1.  $12 * (3 - 11 / 11) = 24$

1098.  $[3, 11, 11, 13]$  - 无解

1099.  $[3, 11, 12, 12]$  - 1个解:

1.  $12 * (3 + 11 - 12) = 24$

1100.  $[3, 11, 12, 13]$  - 无解

1101.  $[3, 11, 13, 13]$  - 无解

1102.  $[3, 12, 12, 12]$  - 1个解:

1.  $12 * (3 - 12 / 12) = 24$

1103.  $[3, 12, 12, 13]$  - 1个解:

1.  $12 * (3 + 12 - 13) = 24$

1104.  $[3, 12, 13, 13]$  - 1个解:

1.  $12 * (3 - 13 / 13) = 24$

1105.  $[3, 13, 13, 13]$  - 无解

1106.  $[4, 4, 4, 4]$  - 1个解:

1.  $4 + 4 + 4 * 4 = 24$

1107.  $[4, 4, 4, 5]$  - 1个解:

1.  $4 * (5 + 4 / 4) = 24$

1108.  $[4, 4, 4, 6]$  - 4个解:

1.  $6 * (4 + 4 - 4) = 24$

2.  $4 * (4 + 6 - 4) = 24$

3.  $4 + 4 * 6 - 4 = 24$

4.  $4 * 4 * 6 / 4 = 24$

1109.  $[4, 4, 4, 7]$  - 2个解:

1.  $(4 + 4) * (7 - 4) = 24$

2.  $4 * (7 - 4 / 4) = 24$

1110.  $[4, 4, 4, 8]$  - 4个解:

1.  $4 * 8 - (4 + 4) = 24$

2.  $4 * (4 + 4) - 8 = 24$

3.  $8 * (4 - 4 / 4) = 24$

4.  $4 * (4 + 8 / 4) = 24$

1111.  $[4, 4, 4, 9]$  - 1个解:

1.  $4 + 4 * (9 - 4) = 24$

1112.  $[4, 4, 4, 10]$  - 2个解:

1.  $4 * 10 - 4 * 4 = 24$

2.  $4 * (4 * 4 - 10) = 24$

1113.  $[4, 4, 4, 11]$  - 1个解:

1.  $4 * (11 - 4) - 4 = 24$

1114.  $[4, 4, 4, 12]$  - 3个解:

1.  $12 * (4 + 4) / 4 = 24$

2.  $12 + 4 * 4 - 4 = 24$

3.  $4 + 4 + 4 + 12 = 24$

1115.  $[4, 4, 4, 13]$  - 无解

1116.  $[4, 4, 5, 5]$  - 3个解:

1.  $5 * 5 - 4 / 4 = 24$

2.  $5 * (4 + 4 / 5) = 24$

3.  $4 * (5 + 5 - 4) = 24$

1117.  $[4, 4, 5, 6]$  - 3个解:

1.  $6 * (5 - 4 / 4) = 24$

2.  $4 * 6 / (5 - 4) = 24$

3.  $4 * 6 * (5 - 4) = 24$

1118.  $[4, 4, 5, 7]$  - 1个解:

1.  $4 * (4 + 7 - 5) = 24$

1119.  $[4, 4, 5, 8]$  - 5个解:

1.  $(4 + 4) * (8 - 5) = 24$

2.  $8 * (4 + 4 - 5) = 24$

3.  $5 * 8 - 4 * 4 = 24$

4.  $8 + 4 * 5 - 4 = 24$

5.  $4 + 5 * (8 - 4) = 24$

1120.  $[4, 4, 5, 9]$  - 无解

1121.  $[4, 4, 5, 10]$  - 2个解:

1.  $4 + 4 * (10 - 5) = 24$

2.  $4 * (4 + 10 / 5) = 24$

1122.  $[4, 4, 5, 11]$  - 2个解:

1.  $4 * 11 - 4 * 5 = 24$

2.  $4 + 4 + 5 + 11 = 24$

1123.  $[4, 4, 5, 12]$  - 2个解:

1.  $4 * (4 + 5) - 12 = 24$

2.  $4 * (12 - 5) - 4 = 24$

1124.  $[4, 4, 5, 13]$  - 1个解:

1.  $13 + 4 * 4 - 5 = 24$

1125.  $[4, 4, 6, 6]$  - 无解

1126.  $[4, 4, 6, 7]$  - 无解

1127.  $[4, 4, 6, 8]$  - 2个解:

1.  $(6 - 4) * (4 + 8) = 24$

2.  $4 * (4 + 8 - 6) = 24$

1128.  $[4, 4, 6, 9]$  - 2个解:

1.  $(4 + 4) * (9 - 6) = 24$

2.  $4 * 4 * 9 / 6 = 24$

1129.  $[4, 4, 6, 10]$  - 2个解:

1.  $4 + 10 * (6 - 4) = 24$

2.  $4 + 4 + 6 + 10 = 24$

1130.  $[4, 4, 6, 11]$  - 1个解:

1.  $4 + 4 * (11 - 6) = 24$

1131.  $[4, 4, 6, 12]$  - 7个解:

1.  $12 * (4 + 4 - 6) = 24$

2.  $6 * (12 - (4 + 4)) = 24$

3.  $6 * (4 * 4 - 12) = 24$

4.  $4 * 12 / (6 - 4) = 24$

5.  $4 * 12 - 4 * 6 = 24$

6.  $6 * (4 + 12) / 4 = 24$

7.  $4 * (4 + 12 / 6) = 24$

1132.  $[4, 4, 6, 13]$  - 1个解:

1.  $4 * (13 - 6) - 4 = 24$

1133.  $[4, 4, 7, 7]$  - 1个解:

1.  $7 * (4 - 4 / 7) = 24$

1134.  $[4, 4, 7, 8]$  - 2个解:

1.  $4 + 4 * 7 - 8 = 24$

2.  $7 * (8 - 4) - 4 = 24$

1135.  $[4, 4, 7, 9]$  - 2个解:

1.  $4 * (4 + 9 - 7) = 24$

2.  $4 + 4 + 7 + 9 = 24$

1136.  $[4, 4, 7, 10]$  - 1个解:

1.  $(4 + 4) * (10 - 7) = 24$

1137. [4, 4, 7, 11] - 无解

1138. [4, 4, 7, 12] - 3 个解:

1.  $(7 - 4) * (12 - 4) = 24$
2.  $12 + 4 * (7 - 4) = 24$
3.  $4 + 4 * (12 - 7) = 24$

1139. [4, 4, 7, 13] - 1 个解:

1.  $4 * 13 - 4 * 7 = 24$

1140. [4, 4, 8, 8] - 4 个解:

1.  $8 * (4 + 8) / 4 = 24$
2.  $8 + 4 * (8 - 4) = 24$
3.  $4 * (8 - 8 / 4) = 24$
4.  $4 + 4 + 8 + 8 = 24$

1141. [4, 4, 8, 9] - 1 个解:

1.  $4 * 9 - (4 + 8) = 24$

1142. [4, 4, 8, 10] - 3 个解:

1.  $(8 - 4) * (10 - 4) = 24$
2.  $4 * (4 + 10 - 8) = 24$
3.  $4 + 8 * 10 / 4 = 24$

1143. [4, 4, 8, 11] - 2 个解:

1.  $(4 + 4) * (11 - 8) = 24$
2.  $8 * (11 - (4 + 4)) = 24$

1144. [4, 4, 8, 12] - 4 个解:

1.  $4 + 4 * 8 - 12 = 24$
2.  $12 * (4 - 8 / 4) = 24$
3.  $4 * (12 - 4) - 8 = 24$
4.  $4 * 4 * 12 / 8 = 24$

1145. [4, 4, 8, 13] - 2 个解:

1.  $8 * (4 * 4 - 13) = 24$
2.  $4 + 4 * (13 - 8) = 24$

1146. [4, 4, 9, 9] - 无解

1147. [4, 4, 9, 10] - 无解

1148. [4, 4, 9, 11] - 1 个解:

1.  $4 * (4 + 11 - 9) = 24$

1149. [4, 4, 9, 12] - 2 个解:

1.  $(4 + 4) * (12 - 9) = 24$
2.  $4 * (9 - 12 / 4) = 24$

1150. [4, 4, 9, 13] - 无解

1151. [4, 4, 10, 10] - 1 个解:

1.  $(10 * 10 - 4) / 4 = 24$

1152. [4, 4, 10, 11] - 无解

1153. [4, 4, 10, 12] - 3 个解:

1.  $12 * (10 - (4 + 4)) = 24$
2.  $4 * 10 - (4 + 12) = 24$
3.  $4 * (4 + 12 - 10) = 24$

1154. [4, 4, 10, 13] - 2 个解:

1.  $(4 + 4) * (13 - 10) = 24$
2.  $10 + 13 + 4 / 4 = 24$

1155. [4, 4, 11, 11] - 无解

1156. [4, 4, 11, 12] - 1 个解:

1.  $11 + 12 + 4 / 4 = 24$

1157. [4, 4, 11, 13] - 5 个解:

1.  $13 + 4 * 11 / 4 = 24$
2.  $4 * (4 + 13 - 11) = 24$
3.  $11 + 4 * 13 / 4 = 24$
4.  $4 + 11 + 13 - 4 = 24$
5.  $4 * (11 + 13) / 4 = 24$

1158. [4, 4, 12, 12] - 4 个解:

1.  $12 * (12 - 4) / 4 = 24$
2.  $12 + 4 * 12 / 4 = 24$
3.  $4 + 12 + 12 - 4 = 24$
4.  $4 * (12 + 12) / 4 = 24$

1159. [4, 4, 12, 13] - 2 个解:

1.  $12 + 13 - 4 / 4 = 24$
2.  $4 * (13 - 4) - 12 = 24$

1160. [4, 4, 13, 13] - 无解

1161. [4, 5, 5, 5] - 2 个解:

1.  $4 + 5 * 5 - 5 = 24$
2.  $4 * (5 + 5 / 5) = 24$

1162. [4, 5, 5, 6] - 4 个解:

1.  $6 * (4 + 5 - 5) = 24$
2.  $5 + 4 * 6 - 5 = 24$
3.  $4 * (5 + 6 - 5) = 24$
4.  $4 * 5 * 6 / 5 = 24$

1163. [4, 5, 5, 7] - 1 个解:

1.  $4 * (7 - 5 / 5) = 24$

1164. [4, 5, 5, 8] - 1 个解:

1.  $8 * (4 - 5 / 5) = 24$

1165. [4, 5, 5, 9] - 2 个解:

1.  $9 + 4 * 5 - 5 = 24$
2.  $4 + 5 * (9 - 5) = 24$

1166. [4, 5, 5, 10] - 1 个解:

1.  $4 + 5 + 5 + 10 = 24$

1167. [4, 5, 5, 11] - 无解

1168. [4, 5, 5, 12] - 无解

1169. [4, 5, 5, 13] - 无解

1170. [4, 5, 6, 6] - 3 个解:

1.  $4 * 6 / (6 - 5) = 24$
2.  $4 * 6 * (6 - 5) = 24$
3.  $4 * (5 + 6 / 6) = 24$

1171. [4, 5, 6, 7] - 2 个解:

1.  $(6 - 4) * (5 + 7) = 24$
2.  $4 * (5 + 7 - 6) = 24$

1172. [4, 5, 6, 8] - 1 个解:

1.  $8 * (4 + 5 - 6) = 24$

1173. [4, 5, 6, 9] - 1 个解:

1.  $4 + 5 + 6 + 9 = 24$

1174. [4, 5, 6, 10] - 4 个解:

1.  $10 + 4 * 5 - 6 = 24$
2.  $4 + 5 * 6 - 10 = 24$
3.  $5 * (10 - 4) - 6 = 24$
4.  $4 + 5 * (10 - 6) = 24$

1175. [4, 5, 6, 11] - 1 个解:

1.  $6 * (5 + 11) / 4 = 24$

1176. [4, 5, 6, 12] - 1 个解:

1.  $12 * (4 + 6) / 5 = 24$

1177. [4, 5, 6, 13] - 1 个解:

1.  $6 * (13 - (4 + 5)) = 24$

1178.  $[4, 5, 7, 7] - 2$  个解:

1.  $5 * 7 - (4 + 7) = 24$
2.  $4 * (5 + 7 / 7) = 24$

1179.  $[4, 5, 7, 8] - 4$  个解:

1.  $8 * (5 + 7) / 4 = 24$
2.  $(7 - 5) * (4 + 8) = 24$
3.  $4 * (5 + 8 - 7) = 24$
4.  $4 + 5 + 7 + 8 = 24$

1180.  $[4, 5, 7, 9] - 4$  个解:

1.  $9 + 5 * (7 - 4) = 24$
2.  $5 + 4 * 7 - 9 = 24$
3.  $4 * 9 - (5 + 7) = 24$
4.  $7 * (9 - 5) - 4 = 24$

1181.  $[4, 5, 7, 10] - 1$  个解:

1.  $4 + 10 * (7 - 5) = 24$

1182.  $[4, 5, 7, 11] - 2$  个解:

1.  $11 + 4 * 5 - 7 = 24$
2.  $4 + 5 * (11 - 7) = 24$

1183.  $[4, 5, 7, 12] - 2$  个解:

1.  $12 * (4 + 5 - 7) = 24$
2.  $4 * 12 / (7 - 5) = 24$

1184.  $[4, 5, 7, 13] - 2$  个解:

1.  $(7 - 4) * (13 - 5) = 24$
2.  $(5 + 7 * 13) / 4 = 24$

1185.  $[4, 5, 8, 8] - 2$  个解:

1.  $8 * (5 - 8 / 4) = 24$
2.  $4 * (5 + 8 / 8) = 24$

1186.  $[4, 5, 8, 9] - 2$  个解:

1.  $4 * (5 + 9 - 8) = 24$
2.  $8 + 4 * (9 - 5) = 24$

1187.  $[4, 5, 8, 10] - 4$  个解:

1.  $10 * (4 + 8) / 5 = 24$
2.  $10 * (4 - 8 / 5) = 24$
3.  $4 * (8 - 10 / 5) = 24$
4.  $5 * (4 + 8 / 10) = 24$

1188.  $[4, 5, 8, 11] - 2$  个解:

1.  $(8 - 4) * (11 - 5) = 24$
2.  $8 * (4 + 11) / 5 = 24$

1189.  $[4, 5, 8, 12] - 6$  个解:

1.  $8 * (12 - (4 + 5)) = 24$
2.  $12 + 4 * 5 - 8 = 24$
3.  $(8 - 5) * (12 - 4) = 24$
4.  $12 + 4 * (8 - 5) = 24$
5.  $5 * 8 - (4 + 12) = 24$
6.  $4 + 5 * (12 - 8) = 24$

1190.  $[4, 5, 8, 13] - 2$  个解:

1.  $5 + 4 * 8 - 13 = 24$
2.  $4 * (13 - 5) - 8 = 24$

1191.  $[4, 5, 9, 9] - 1$  个解:

1.  $4 * (5 + 9 / 9) = 24$

1192.  $[4, 5, 9, 10] - 2$  个解:

1.  $(9 - 5) * (10 - 4) = 24$
2.  $4 * (5 + 10 - 9) = 24$

1193.  $[4, 5, 9, 11] -$  无解

1194.  $[4, 5, 9, 12] - 2$  个解:

1.  $5 * 12 - 4 * 9 = 24$
2.  $9 + 5 * 12 / 4 = 24$

1195.  $[4, 5, 9, 13] - 2$  个解:

1.  $13 + 4 * 5 - 9 = 24$
2.  $4 + 5 * (13 - 9) = 24$

1196.  $[4, 5, 10, 10] - 2$  个解:

1.  $4 + 10 * 10 / 5 = 24$
2.  $4 * (5 + 10 / 10) = 24$

1197.  $[4, 5, 10, 11] - 2$  个解:

1.  $4 * 10 - (5 + 11) = 24$
2.  $4 * (5 + 11 - 10) = 24$

1198.  $[4, 5, 10, 12] - 2$  个解:

1.  $12 * (4 - 10 / 5) = 24$
2.  $4 * 5 * 12 / 10 = 24$

1199.  $[4, 5, 10, 13] - 1$  个解:

1.  $5 + 10 + 13 - 4 = 24$

1200.  $[4, 5, 11, 11] - 2$  个解:

1.  $5 * (11 - 4) - 11 = 24$
2.  $4 * (5 + 11 / 11) = 24$

1201.  $[4, 5, 11, 12] - 3$  个解:

1.  $12 * (11 - (4 + 5)) = 24$
2.  $4 * (5 + 12 - 11) = 24$
3.  $5 + 11 + 12 - 4 = 24$

1202.  $[4, 5, 11, 13] - 6$  个解:

1.  $(5 - 4) * (11 + 13) = 24$
2.  $(11 + 13) / (5 - 4) = 24$
3.  $13 + 11 * (5 - 4) = 24$
4.  $13 + 11 / (5 - 4) = 24$
5.  $11 + 13 * (5 - 4) = 24$
6.  $11 + 13 / (5 - 4) = 24$

1203.  $[4, 5, 12, 12] - 6$  个解:

1.  $(5 - 4) * (12 + 12) = 24$
2.  $(12 + 12) / (5 - 4) = 24$
3.  $12 + 12 * (5 - 4) = 24$
4.  $12 + 12 / (5 - 4) = 24$
5.  $12 * (5 - 12 / 4) = 24$
6.  $4 * (5 + 12 / 12) = 24$

1204.  $[4, 5, 12, 13] - 3$  个解:

1.  $4 * (5 + 13 - 12) = 24$
2.  $12 * (13 - 5) / 4 = 24$
3.  $4 + 12 + 13 - 5 = 24$

1205.  $[4, 5, 13, 13] - 1$  个解:

1.  $4 * (5 + 13 / 13) = 24$

1206.  $[4, 6, 6, 6] - 6$  个解:

1.  $6 * (4 + 6 - 6) = 24$
2.  $(6 - 4) * (6 + 6) = 24$
3.  $6 + 4 * 6 - 6 = 24$
4.  $(6 + 6) * (6 - 4) = 24$
5.  $4 * (6 + 6 - 6) = 24$
6.  $4 * 6 * 6 / 6 = 24$

1207.  $[4, 6, 6, 7] - 4$  个解:

1.  $4 * 6 / (7 - 6) = 24$
2.  $4 * (7 - 6 / 6) = 24$
3.  $6 + 6 * (7 - 4) = 24$
4.  $4 * 6 * (7 - 6) = 24$

1208.  $[4, 6, 6, 8] - 7$  个解:

1.  $6 * 8 / (6 - 4) = 24$
2.  $6 * 8 - 4 * 6 = 24$
3.  $8 * (6 + 6) / 4 = 24$
4.  $6 * 6 - (4 + 8) = 24$
5.  $8 * (4 - 6 / 6) = 24$

6.  $6 * (6 - 8 / 4) = 24$   
 7.  $4 + 6 + 6 + 8 = 24$
1209.  $[4, 6, 6, 9] - 3$  个解:  
 1.  $6 + 9 * (6 - 4) = 24$   
 2.  $4 * 9 - (6 + 6) = 24$   
 3.  $6 * (9 - 4) - 6 = 24$
1210.  $[4, 6, 6, 10] - 1$  个解:  
 1.  $6 * (6 + 10) / 4 = 24$
1211.  $[4, 6, 6, 11] -$  无解
1212.  $[4, 6, 6, 12] - 2$  个解:  
 1.  $12 + 6 * (6 - 4) = 24$   
 2.  $6 + 6 * 12 / 4 = 24$
1213.  $[4, 6, 6, 13] -$  无解
1214.  $[4, 6, 7, 7] - 5$  个解:  
 1.  $7 + 4 * 6 - 7 = 24$   
 2.  $6 * (4 + 7 - 7) = 24$   
 3.  $4 * (6 + 7 - 7) = 24$   
 4.  $4 * 6 * 7 / 7 = 24$   
 5.  $4 + 6 + 7 + 7 = 24$
1215.  $[4, 6, 7, 8] - 3$  个解:  
 1.  $8 * (4 + 6 - 7) = 24$   
 2.  $4 * 6 / (8 - 7) = 24$   
 3.  $4 * 6 * (8 - 7) = 24$
1216.  $[4, 6, 7, 9] - 1$  个解:  
 1.  $6 * (7 + 9) / 4 = 24$
1217.  $[4, 6, 7, 10] - 4$  个解:  
 1.  $10 + 7 * (6 - 4) = 24$   
 2.  $10 * (7 - 4) - 6 = 24$   
 3.  $6 + 4 * 7 - 10 = 24$   
 4.  $7 * (10 - 6) - 4 = 24$
1218.  $[4, 6, 7, 11] -$  无解
1219.  $[4, 6, 7, 12] - 2$  个解:  
 1.  $6 * 12 / (7 - 4) = 24$   
 2.  $6 * (7 - 12 / 4) = 24$
1220.  $[4, 6, 7, 13] -$  无解
1221.  $[4, 6, 8, 8] - 8$  个解:

1.  $8 + 8 * (6 - 4) = 24$   
 2.  $8 + 4 * 6 - 8 = 24$   
 3.  $(4 + 8) * (8 - 6) = 24$   
 4.  $6 * (4 + 8 - 8) = 24$   
 5.  $4 * (6 + 8 - 8) = 24$   
 6.  $(8 - 6) * (4 + 8) = 24$   
 7.  $4 * 6 * 8 / 8 = 24$   
 8.  $6 * (8 + 8) / 4 = 24$
1222.  $[4, 6, 8, 9] - 4$  个解:  
 1.  $4 * 6 / (9 - 8) = 24$   
 2.  $9 * (4 - 8 / 6) = 24$   
 3.  $4 * 6 * (9 - 8) = 24$   
 4.  $6 + 8 * 9 / 4 = 24$
1223.  $[4, 6, 8, 10] - 2$  个解:  
 1.  $4 + 10 * (8 - 6) = 24$   
 2.  $8 + 4 * (10 - 6) = 24$
1224.  $[4, 6, 8, 11] -$  无解
1225.  $[4, 6, 8, 12] - 7$  个解:  
 1.  $12 * (4 + 6 - 8) = 24$   
 2.  $12 * (4 + 8) / 6 = 24$   
 3.  $(8 - 4) * (12 - 6) = 24$   
 4.  $4 * 12 / (8 - 6) = 24$   
 5.  $12 + 6 * 8 / 4 = 24$   
 6.  $8 * (6 - 12 / 4) = 24$   
 7.  $4 * (8 - 12 / 6) = 24$
1226.  $[4, 6, 8, 13] - 1$  个解:  
 1.  $8 * (13 - (4 + 6)) = 24$
1227.  $[4, 6, 9, 9] - 4$  个解:  
 1.  $9 + 4 * 6 - 9 = 24$   
 2.  $6 * (4 + 9 - 9) = 24$   
 3.  $4 * (6 + 9 - 9) = 24$   
 4.  $4 * 6 * 9 / 9 = 24$
1228.  $[4, 6, 9, 10] - 5$  个解:  
 1.  $4 * 6 / (10 - 9) = 24$   
 2.  $6 * 10 - 4 * 9 = 24$   
 3.  $9 + 6 * 10 / 4 = 24$   
 4.  $4 * 6 * (10 - 9) = 24$   
 5.  $(6 + 9 * 10) / 4 = 24$
1229.  $[4, 6, 9, 11] -$  无解
1230.  $[4, 6, 9, 12] - 3$  个解:

1.  $(9 - 6) * (12 - 4) = 24$   
 2.  $12 + 4 * (9 - 6) = 24$   
 3.  $9 * (4 + 12) / 6 = 24$
1231.  $[4, 6, 9, 13] - 1$  个解:  
 1.  $6 + 9 + 13 - 4 = 24$
1232.  $[4, 6, 10, 10] - 7$  个解:  
 1.  $10 + 4 * 6 - 10 = 24$   
 2.  $6 * (4 + 10 - 10) = 24$   
 3.  $(10 - 4) * (10 - 6) = 24$   
 4.  $4 * 10 - (6 + 10) = 24$   
 5.  $4 * (6 + 10 - 10) = 24$   
 6.  $(10 - 6) * (10 - 4) = 24$   
 7.  $4 * 6 * 10 / 10 = 24$
1233.  $[4, 6, 10, 11] - 2$  个解:  
 1.  $4 * 6 / (11 - 10) = 24$   
 2.  $4 * 6 * (11 - 10) = 24$
1234.  $[4, 6, 10, 12] - 4$  个解:  
 1.  $6 * (10 - 4) - 12 = 24$   
 2.  $6 + 10 + 12 - 4 = 24$   
 3.  $10 * 12 / 4 - 6 = 24$   
 4.  $4 + 10 * 12 / 6 = 24$
1235.  $[4, 6, 10, 13] -$  无解
1236.  $[4, 6, 11, 11] - 5$  个解:  
 1.  $11 + 4 * 6 - 11 = 24$   
 2.  $6 * (4 + 11 - 11) = 24$   
 3.  $4 * (6 + 11 - 11) = 24$   
 4.  $4 * 6 * 11 / 11 = 24$   
 5.  $6 + 11 + 11 - 4 = 24$
1237.  $[4, 6, 11, 12] - 2$  个解:  
 1.  $4 * 6 / (12 - 11) = 24$   
 2.  $4 * 6 * (12 - 11) = 24$
1238.  $[4, 6, 11, 13] -$  无解
1239.  $[4, 6, 12, 12] - 7$  个解:  
 1.  $12 * (12 - (4 + 6)) = 24$   
 2.  $12 + 4 * 6 - 12 = 24$   
 3.  $6 * (4 + 12 - 12) = 24$   
 4.  $6 * 12 - 4 * 12 = 24$   
 5.  $4 * (6 + 12 - 12) = 24$   
 6.  $4 * 6 * 12 / 12 = 24$   
 7.  $12 * (4 - 12 / 6) = 24$



1240.  $[4, 6, 12, 13] - 2$  个解:

1.  $4 * 6 / (13 - 12) = 24$
2.  $4 * 6 * (13 - 12) = 24$

1241.  $[4, 6, 13, 13] - 5$  个解:

1.  $13 + 4 * 6 - 13 = 24$
2.  $6 * (4 + 13 - 13) = 24$
3.  $4 * (6 + 13 - 13) = 24$
4.  $4 * 6 * 13 / 13 = 24$
5.  $4 + 13 + 13 - 6 = 24$

1242.  $[4, 7, 7, 7] - 1$  个解:

1.  $4 * (7 - 7 / 7) = 24$

1243.  $[4, 7, 7, 8] - 2$  个解:

1.  $4 * (7 + 7 - 8) = 24$
2.  $8 * (4 - 7 / 7) = 24$

1244.  $[4, 7, 7, 9] -$  无解

1245.  $[4, 7, 7, 10] -$  无解

1246.  $[4, 7, 7, 11] - 2$  个解:

1.  $7 + 4 * 7 - 11 = 24$
2.  $7 * (11 - 7) - 4 = 24$

1247.  $[4, 7, 7, 12] -$  无解

1248.  $[4, 7, 7, 13] -$  无解

1249.  $[4, 7, 8, 8] - 3$  个解:

1.  $8 * (4 + 7 - 8) = 24$
2.  $7 * 8 - 4 * 8 = 24$
3.  $4 * (7 - 8 / 8) = 24$

1250.  $[4, 7, 8, 9] - 3$  个解:

1.  $8 * 9 / (7 - 4) = 24$
2.  $(4 + 8) * (9 - 7) = 24$
3.  $4 * (7 + 8 - 9) = 24$

1251.  $[4, 7, 8, 10] - 1$  个解:

1.  $10 + 7 * 8 / 4 = 24$

1252.  $[4, 7, 8, 11] - 1$  个解:

1.  $8 + 4 * (11 - 7) = 24$

1253.  $[4, 7, 8, 12] - 2$  个解:

1.  $8 + 4 * 7 - 12 = 24$

$$2. 7 * (12 - 8) - 4 = 24$$

1254.  $[4, 7, 8, 13] - 2$  个解:

1.  $(8 - 4) * (13 - 7) = 24$
2.  $7 + 8 + 13 - 4 = 24$

1255.  $[4, 7, 9, 9] - 1$  个解:

1.  $4 * (7 - 9 / 9) = 24$

1256.  $[4, 7, 9, 10] - 3$  个解:

1.  $4 * 10 - (7 + 9) = 24$
2.  $4 * (7 + 9 - 10) = 24$
3.  $4 + 10 * (9 - 7) = 24$

1257.  $[4, 7, 9, 11] - 2$  个解:

1.  $11 * (7 - 4) - 9 = 24$
2.  $7 * (9 - 4) - 11 = 24$

1258.  $[4, 7, 9, 12] - 3$  个解:

1.  $12 * (4 + 7 - 9) = 24$
2.  $4 * 12 / (9 - 7) = 24$
3.  $7 + 9 + 12 - 4 = 24$

1259.  $[4, 7, 9, 13] - 2$  个解:

1.  $9 + 4 * 7 - 13 = 24$
2.  $7 * (13 - 9) - 4 = 24$

1260.  $[4, 7, 10, 10] - 1$  个解:

1.  $4 * (7 - 10 / 10) = 24$

1261.  $[4, 7, 10, 11] - 3$  个解:

1.  $(10 - 4) * (11 - 7) = 24$
2.  $4 * (7 + 10 - 11) = 24$
3.  $7 + 10 + 11 - 4 = 24$

1262.  $[4, 7, 10, 12] - 3$  个解:

1.  $12 * (4 + 10) / 7 = 24$
2.  $(10 - 7) * (12 - 4) = 24$
3.  $12 + 4 * (10 - 7) = 24$

1263.  $[4, 7, 10, 13] -$  无解

1264.  $[4, 7, 11, 11] - 1$  个解:

1.  $4 * (7 - 11 / 11) = 24$

1265.  $[4, 7, 11, 12] - 1$  个解:

1.  $4 * (7 + 11 - 12) = 24$

1266.  $[4, 7, 11, 13] - 1$  个解:

$$1. 4 * 11 - (7 + 13) = 24$$

1267.  $[4, 7, 12, 12] - 3$  个解:

1.  $12 * (7 - 4) - 12 = 24$
2.  $(12 + 7 * 12) / 4 = 24$
3.  $4 * (7 - 12 / 12) = 24$

1268.  $[4, 7, 12, 13] - 2$  个解:

1.  $12 * (13 - (4 + 7)) = 24$
2.  $4 * (7 + 12 - 13) = 24$

1269.  $[4, 7, 13, 13] - 1$  个解:

1.  $4 * (7 - 13 / 13) = 24$

1270.  $[4, 8, 8, 8] - 3$  个解:

1.  $8 * (8 - 4) - 8 = 24$
2.  $8 + 8 * 8 / 4 = 24$
3.  $8 * (4 - 8 / 8) = 24$

1271.  $[4, 8, 8, 9] - 1$  个解:

1.  $8 * (4 + 8 - 9) = 24$

1272.  $[4, 8, 8, 10] - 4$  个解:

1.  $(4 + 8) * (10 - 8) = 24$
2.  $4 * 10 - (8 + 8) = 24$
3.  $4 * (8 + 8 - 10) = 24$
4.  $8 * 8 - 4 * 10 = 24$

1273.  $[4, 8, 8, 11] - 1$  个解:

1.  $(8 + 8 * 11) / 4 = 24$

1274.  $[4, 8, 8, 12] - 3$  个解:

1.  $8 * 12 / (8 - 4) = 24$
2.  $8 + 4 * (12 - 8) = 24$
3.  $8 + 8 + 12 - 4 = 24$

1275.  $[4, 8, 8, 13] - 1$  个解:

1.  $(8 * 13 - 8) / 4 = 24$

1276.  $[4, 8, 9, 9] - 1$  个解:

1.  $8 * (4 - 9 / 9) = 24$

1277.  $[4, 8, 9, 10] - 1$  个解:

1.  $8 * (4 + 9 - 10) = 24$

1278.  $[4, 8, 9, 11] - 3$  个解:

1.  $(4 + 8) * (11 - 9) = 24$
2.  $4 * (8 + 9 - 11) = 24$
3.  $8 + 9 + 11 - 4 = 24$

1279. [4, 8, 9, 12] - 3 个解:

1.  $9 * (8 - 4) - 12 = 24$
2.  $8 * 9 - 4 * 12 = 24$
3.  $4 * 8 * 9 / 12 = 24$

1280. [4, 8, 9, 13] - 2 个解:

1.  $9 + 13 + 8 / 4 = 24$
2.  $8 + 4 * (13 - 9) = 24$

1281. [4, 8, 10, 10] - 3 个解:

1.  $4 + 10 * (10 - 8) = 24$
2.  $8 + 10 + 10 - 4 = 24$
3.  $8 * (4 - 10 / 10) = 24$

1282. [4, 8, 10, 11] - 1 个解:

1.  $8 * (4 + 10 - 11) = 24$

1283. [4, 8, 10, 12] - 6 个解:

1.  $(4 + 8) * (12 - 10) = 24$
2.  $12 * (4 + 8 - 10) = 24$
3.  $10 + 12 + 8 / 4 = 24$
4.  $(10 - 4) * (12 - 8) = 24$
5.  $4 * (8 + 10 - 12) = 24$
6.  $4 * 12 / (10 - 8) = 24$

1284. [4, 8, 10, 13] - 无解

1285. [4, 8, 11, 11] - 2 个解:

1.  $11 + 11 + 8 / 4 = 24$
2.  $8 * (4 - 11 / 11) = 24$

1286. [4, 8, 11, 12] - 4 个解:

1.  $8 * (4 + 11 - 12) = 24$
2.  $4 * 11 - (8 + 12) = 24$
3.  $(11 - 8) * (12 - 4) = 24$
4.  $12 + 4 * (11 - 8) = 24$

1287. [4, 8, 11, 13] - 2 个解:

1.  $(4 + 8) * (13 - 11) = 24$
2.  $4 * (8 + 11 - 13) = 24$

1288. [4, 8, 12, 12] - 2 个解:

1.  $12 * (4 + 12) / 8 = 24$
2.  $8 * (4 - 12 / 12) = 24$

1289. [4, 8, 12, 13] - 2 个解:

1.  $8 * (4 + 12 - 13) = 24$
2.  $8 + 13 + 12 / 4 = 24$

1290. [4, 8, 13, 13] - 2 个解:

1.  $13 + 13 - 8 / 4 = 24$
2.  $8 * (4 - 13 / 13) = 24$

1291. [4, 9, 9, 9] - 无解

1292. [4, 9, 9, 10] - 1 个解:

1.  $9 + 9 + 10 - 4 = 24$

1293. [4, 9, 9, 11] - 无解

1294. [4, 9, 9, 12] - 2 个解:

1.  $4 * (9 + 9 - 12) = 24$
2.  $9 * (4 - 12 / 9) = 24$

1295. [4, 9, 9, 13] - 无解

1296. [4, 9, 10, 10] - 无解

1297. [4, 9, 10, 11] - 1 个解:

1.  $4 + 10 * (11 - 9) = 24$

1298. [4, 9, 10, 12] - 1 个解:

1.  $10 * 12 / (9 - 4) = 24$

1299. [4, 9, 10, 13] - 2 个解:

1.  $(10 - 4) * (13 - 9) = 24$
2.  $4 * (9 + 10 - 13) = 24$

1300. [4, 9, 11, 11] - 1 个解:

1.  $4 * 11 - (9 + 11) = 24$

1301. [4, 9, 11, 12] - 3 个解:

1.  $12 * (4 + 9 - 11) = 24$
2.  $4 * 12 / (11 - 9) = 24$
3.  $11 * 12 / 4 - 9 = 24$

1302. [4, 9, 11, 13] - 无解

1303. [4, 9, 12, 12] - 5 个解:

1.  $(12 - 4) * (12 - 9) = 24$
2.  $9 + 12 + 12 / 4 = 24$
3.  $(12 - 9) * (12 - 4) = 24$
4.  $12 + 4 * (12 - 9) = 24$
5.  $(9 * 12 - 12) / 4 = 24$

1304. [4, 9, 12, 13] - 无解

1305. [4, 9, 13, 13] - 无解

1306. [4, 10, 10, 10] - 无解

1307. [4, 10, 10, 11] - 1 个解:

1.  $4 * 11 - (10 + 10) = 24$

1308. [4, 10, 10, 12] - 1 个解:

1.  $4 + 10 * (12 - 10) = 24$

1309. [4, 10, 10, 13] - 无解

1310. [4, 10, 11, 11] - 无解

1311. [4, 10, 11, 12] - 1 个解:

1.  $10 + 11 + 12 / 4 = 24$

1312. [4, 10, 11, 13] - 1 个解:

1.  $4 + 10 * (13 - 11) = 24$

1313. [4, 10, 12, 12] - 3 个解:

1.  $12 * (4 + 10 - 12) = 24$
2.  $12 * 12 / (10 - 4) = 24$
3.  $4 * 12 / (12 - 10) = 24$

1314. [4, 10, 12, 13] - 2 个解:

1.  $(12 - 4) * (13 - 10) = 24$
2.  $12 + 4 * (13 - 10) = 24$

1315. [4, 10, 13, 13] - 无解

1316. [4, 11, 11, 11] - 无解

1317. [4, 11, 11, 12] - 无解

1318. [4, 11, 11, 13] - 无解

1319. [4, 11, 12, 12] - 无解

1320. [4, 11, 12, 13] - 3 个解:

1.  $12 * (4 + 11 - 13) = 24$
2.  $4 * 12 - (11 + 13) = 24$
3.  $4 * 12 / (13 - 11) = 24$

1321. [4, 11, 13, 13] - 无解

1322. [4, 12, 12, 12] - 2 个解:

1.  $4 * 12 - (12 + 12) = 24$
2.  $12 * 12 / 4 - 12 = 24$

1323. [4, 12, 12, 13] - 无解

1324. [4, 12, 13, 13] - 无解

1325. [4, 13, 13, 13] - 无解

1326. [5, 5, 5, 5] - 1个解:

1.  $5 * 5 - 5 / 5 = 24$

1327. [5, 5, 5, 6] - 2个解:

1.  $5 + 5 * 5 - 6 = 24$

2.  $6 * (5 - 5 / 5) = 24$

1328. [5, 5, 5, 7] - 无解

1329. [5, 5, 5, 8] - 无解

1330. [5, 5, 5, 9] - 1个解:

1.  $5 + 5 + 5 + 9 = 24$

1331. [5, 5, 5, 10] - 无解

1332. [5, 5, 5, 11] - 无解

1333. [5, 5, 5, 12] - 1个解:

1.  $12 * (5 + 5) / 5 = 24$

1334. [5, 5, 5, 13] - 无解

1335. [5, 5, 6, 6] - 3个解:

1.  $6 * (5 + 5 - 6) = 24$

2.  $5 * 5 - 6 / 6 = 24$

3.  $5 * (6 - 6 / 5) = 24$

1336. [5, 5, 6, 7] - 2个解:

1.  $6 + 5 * 5 - 7 = 24$

2.  $5 * 7 - (5 + 6) = 24$

1337. [5, 5, 6, 8] - 1个解:

1.  $5 + 5 + 6 + 8 = 24$

1338. [5, 5, 6, 9] - 无解

1339. [5, 5, 6, 10] - 无解

1340. [5, 5, 6, 11] - 2个解:

1.  $5 + 5 * 6 - 11 = 24$

2.  $5 * (11 - 5) - 6 = 24$

1341. [5, 5, 6, 12] - 无解

1342. [5, 5, 6, 13] - 无解

1343. [5, 5, 7, 7] - 5个解:

1.  $7 * 7 - 5 * 5 = 24$

2.  $5 * 5 - 7 / 7 = 24$

3.  $(5 + 7) * (7 - 5) = 24$

4.  $(7 - 5) * (5 + 7) = 24$

5.  $5 + 5 + 7 + 7 = 24$

1344. [5, 5, 7, 8] - 2个解:

1.  $8 * (5 + 5 - 7) = 24$

2.  $7 + 5 * 5 - 8 = 24$

1345. [5, 5, 7, 9] - 无解

1346. [5, 5, 7, 10] - 1个解:

1.  $10 * (5 + 7) / 5 = 24$

1347. [5, 5, 7, 11] - 1个解:

1.  $5 * (7 - 11 / 5) = 24$

1348. [5, 5, 7, 12] - 无解

1349. [5, 5, 7, 13] - 无解

1350. [5, 5, 8, 8] - 1个解:

1.  $5 * 5 - 8 / 8 = 24$

1351. [5, 5, 8, 9] - 2个解:

1.  $8 + 5 * 5 - 9 = 24$

2.  $9 + 5 * (8 - 5) = 24$

1352. [5, 5, 8, 10] - 2个解:

1.  $8 * (5 + 10) / 5 = 24$

2.  $8 * (5 - 10 / 5) = 24$

1353. [5, 5, 8, 11] - 1个解:

1.  $5 * 8 - (5 + 11) = 24$

1354. [5, 5, 8, 12] - 1个解:

1.  $12 * (5 + 5 - 8) = 24$

1355. [5, 5, 8, 13] - 2个解:

1.  $8 * (13 - (5 + 5)) = 24$

2.  $(8 - 5) * (13 - 5) = 24$

1356. [5, 5, 9, 9] - 1个解:

1.  $5 * 5 - 9 / 9 = 24$

1357. [5, 5, 9, 10] - 1个解:

1.  $9 + 5 * 5 - 10 = 24$

1358. [5, 5, 9, 11] - 1个解:

1.  $(9 - 5) * (11 - 5) = 24$

1359. [5, 5, 9, 12] - 无解

1360. [5, 5, 9, 13] - 无解

1361. [5, 5, 10, 10] - 1个解:

1.  $5 * 5 - 10 / 10 = 24$

1362. [5, 5, 10, 11] - 1个解:

1.  $10 + 5 * 5 - 11 = 24$

1363. [5, 5, 10, 12] - 无解

1364. [5, 5, 10, 13] - 2个解:

1.  $10 + 13 + 5 / 5 = 24$

2.  $10 * (5 - 13 / 5) = 24$

1365. [5, 5, 11, 11] - 1个解:

1.  $5 * 5 - 11 / 11 = 24$

1366. [5, 5, 11, 12] - 3个解:

1.  $11 + 5 * 5 - 12 = 24$

2.  $11 + 12 + 5 / 5 = 24$

3.  $5 * (12 - 5) - 11 = 24$

1367. [5, 5, 11, 13] - 4个解:

1.  $13 + 5 * 11 / 5 = 24$

2.  $11 + 5 * 13 / 5 = 24$

3.  $5 + 11 + 13 - 5 = 24$

4.  $5 * (11 + 13) / 5 = 24$

1368. [5, 5, 12, 12] - 5个解:

1.  $12 * (12 - (5 + 5)) = 24$

2.  $5 * 5 - 12 / 12 = 24$

3.  $12 + 5 * 12 / 5 = 24$

4.  $5 + 12 + 12 - 5 = 24$

5.  $5 * (12 + 12) / 5 = 24$

1369. [5, 5, 12, 13] - 2个解:

1.  $12 + 5 * 5 - 13 = 24$

2.  $12 + 13 - 5 / 5 = 24$

1370.  $[5, 5, 13, 13] - 1$  个解:

1.  $5 * 5 - 13 / 13 = 24$

1371.  $[5, 6, 6, 6] - 1$  个解:

1.  $6 * (5 - 6 / 6) = 24$

1372.  $[5, 6, 6, 7] - 4$  个解:

1.  $6 * (5 + 6 - 7) = 24$

2.  $(6 + 6) * (7 - 5) = 24$

3.  $6 * 6 - (5 + 7) = 24$

4.  $5 + 6 + 6 + 7 = 24$

1373.  $[5, 6, 6, 8] - 1$  个解:

1.  $6 + 6 * (8 - 5) = 24$

1374.  $[5, 6, 6, 9] - 1$  个解:

1.  $6 * 9 - 5 * 6 = 24$

1375.  $[5, 6, 6, 10] - 3$  个解:

1.  $10 * (6 + 6) / 5 = 24$

2.  $6 * (10 - 5) - 6 = 24$

3.  $6 * (6 - 10 / 5) = 24$

1376.  $[5, 6, 6, 11] -$  无解

1377.  $[5, 6, 6, 12] - 3$  个解:

1.  $6 + 5 * 6 - 12 = 24$

2.  $5 * 12 - 6 * 6 = 24$

3.  $5 * (12 - 6) - 6 = 24$

1378.  $[5, 6, 6, 13] -$  无解

1379.  $[5, 6, 7, 7] - 1$  个解:

1.  $6 * (5 - 7 / 7) = 24$

1380.  $[5, 6, 7, 8] - 3$  个解:

1.  $(5 + 7) * (8 - 6) = 24$

2.  $6 * (5 + 7 - 8) = 24$

3.  $6 * 8 / (7 - 5) = 24$

1381.  $[5, 6, 7, 9] - 1$  个解:

1.  $6 + 9 * (7 - 5) = 24$

1382.  $[5, 6, 7, 10] -$  无解

1383.  $[5, 6, 7, 11] -$  无解

1384.  $[5, 6, 7, 12] - 2$  个解:

1.  $12 * (5 + 7) / 6 = 24$

2.  $12 + 6 * (7 - 5) = 24$

1385.  $[5, 6, 7, 13] - 4$  个解:

1.  $7 + 5 * 6 - 13 = 24$

2.  $6 * 7 - (5 + 13) = 24$

3.  $6 * (7 + 13) / 5 = 24$

4.  $5 * (13 - 7) - 6 = 24$

1386.  $[5, 6, 8, 8] - 2$  个解:

1.  $8 * (5 + 6 - 8) = 24$

2.  $6 * (5 - 8 / 8) = 24$

1387.  $[5, 6, 8, 9] - 2$  个解:

1.  $6 * (5 + 8 - 9) = 24$

2.  $8 * (6 + 9) / 5 = 24$

1388.  $[5, 6, 8, 10] - 3$  个解:

1.  $10 * (8 - 5) - 6 = 24$

2.  $5 * 8 - (6 + 10) = 24$

3.  $5 * 6 * 8 / 10 = 24$

1389.  $[5, 6, 8, 11] -$  无解

1390.  $[5, 6, 8, 12] - 3$  个解:

1.  $6 * 12 / (8 - 5) = 24$

2.  $8 * (5 - 12 / 6) = 24$

3.  $6 * (8 + 12) / 5 = 24$

1391.  $[5, 6, 8, 13] - 1$  个解:

1.  $8 * (5 + 13) / 6 = 24$

1392.  $[5, 6, 9, 9] - 2$  个解:

1.  $9 + 5 * (9 - 6) = 24$

2.  $6 * (5 - 9 / 9) = 24$

1393.  $[5, 6, 9, 10] - 2$  个解:

1.  $6 * (5 + 9 - 10) = 24$

2.  $6 + 9 * 10 / 5 = 24$

1394.  $[5, 6, 9, 11] - 2$  个解:

1.  $9 * (5 + 11) / 6 = 24$

2.  $6 * (9 + 11) / 5 = 24$

1395.  $[5, 6, 9, 12] - 2$  个解:

1.  $12 * (5 + 6 - 9) = 24$

2.  $(9 - 5) * (12 - 6) = 24$

1396.  $[5, 6, 9, 13] - 1$  个解:

1.  $(9 - 6) * (13 - 5) = 24$

1397.  $[5, 6, 10, 10] - 2$  个解:

1.  $6 * (10 + 10) / 5 = 24$

2.  $6 * (5 - 10 / 10) = 24$

1398.  $[5, 6, 10, 11] - 2$  个解:

1.  $6 * (5 + 10 - 11) = 24$

2.  $(10 - 6) * (11 - 5) = 24$

1399.  $[5, 6, 10, 12] - 2$  个解:

1.  $12 + 6 * 10 / 5 = 24$

2.  $5 * (6 - 12 / 10) = 24$

1400.  $[5, 6, 10, 13] - 1$  个解:

1.  $6 + 10 + 13 - 5 = 24$

1401.  $[5, 6, 11, 11] - 1$  个解:

1.  $6 * (5 - 11 / 11) = 24$

1402.  $[5, 6, 11, 12] - 3$  个解:

1.  $6 * (5 + 11 - 12) = 24$

2.  $6 * (11 - 5) - 12 = 24$

3.  $6 + 11 + 12 - 5 = 24$

1403.  $[5, 6, 11, 13] - 7$  个解:

1.  $(6 - 5) * (11 + 13) = 24$

2.  $(11 + 13) / (6 - 5) = 24$

3.  $13 + 11 * (6 - 5) = 24$

4.  $13 + 11 / (6 - 5) = 24$

5.  $11 + 13 * (6 - 5) = 24$

6.  $11 + 13 / (6 - 5) = 24$

7.  $5 * (13 - 6) - 11 = 24$

1404.  $[5, 6, 12, 12] - 5$  个解:

1.  $(6 - 5) * (12 + 12) = 24$

2.  $(12 + 12) / (6 - 5) = 24$

3.  $12 + 12 * (6 - 5) = 24$

4.  $12 + 12 / (6 - 5) = 24$

5.  $6 * (5 - 12 / 12) = 24$

1405.  $[5, 6, 12, 13] - 3$  个解:

1.  $12 * (13 - (5 + 6)) = 24$

2.  $6 * (5 + 12 - 13) = 24$

3.  $5 + 12 + 13 - 6 = 24$

1406.  $[5, 6, 13, 13] - 1$  个解:

1.  $6 * (5 - 13 / 13) = 24$

1407. [5, 7, 7, 7] - 无解

1408. [5, 7, 7, 8] - 无解

1409. [5, 7, 7, 9] - 1个解:  
1.  $(5 + 7) * (9 - 7) = 24$

1410. [5, 7, 7, 10] - 1个解:  
1.  $10 + 7 * (7 - 5) = 24$

1411. [5, 7, 7, 11] - 1个解:  
1.  $7 * (5 - 11 / 7) = 24$

1412. [5, 7, 7, 12] - 无解

1413. [5, 7, 7, 13] - 无解

1414. [5, 7, 8, 8] - 2个解:  
1.  $8 + 8 * (7 - 5) = 24$   
2.  $8 * (7 + 8) / 5 = 24$

1415. [5, 7, 8, 9] - 2个解:  
1.  $8 * (5 + 7 - 9) = 24$   
2.  $5 * 8 - (7 + 9) = 24$

1416. [5, 7, 8, 10] - 1个解:  
1.  $(5 + 7) * (10 - 8) = 24$

1417. [5, 7, 8, 11] - 无解

1418. [5, 7, 8, 12] - 无解

1419. [5, 7, 8, 13] - 无解

1420. [5, 7, 9, 9] - 无解

1421. [5, 7, 9, 10] - 1个解:  
1.  $9 + 5 * (10 - 7) = 24$

1422. [5, 7, 9, 11] - 1个解:  
1.  $(5 + 7) * (11 - 9) = 24$

1423. [5, 7, 9, 12] - 1个解:  
1.  $12 * (5 + 9) / 7 = 24$

1424. [5, 7, 9, 13] - 2个解:  
1.  $(9 - 5) * (13 - 7) = 24$   
2.  $7 + 9 + 13 - 5 = 24$

1425. [5, 7, 10, 10] - 1个解:  
1.  $10 + 7 * 10 / 5 = 24$

1426. [5, 7, 10, 11] - 1个解:  
1.  $7 * (10 - 5) - 11 = 24$

1427. [5, 7, 10, 12] - 3个解:  
1.  $(5 + 7) * (12 - 10) = 24$   
2.  $12 * (5 + 7 - 10) = 24$   
3.  $7 + 10 + 12 - 5 = 24$

1428. [5, 7, 10, 13] - 1个解:  
1.  $(10 - 7) * (13 - 5) = 24$

1429. [5, 7, 11, 11] - 3个解:  
1.  $(11 - 5) * (11 - 7) = 24$   
2.  $(11 - 7) * (11 - 5) = 24$   
3.  $7 + 11 + 11 - 5 = 24$

1430. [5, 7, 11, 12] - 无解

1431. [5, 7, 11, 13] - 1个解:  
1.  $(5 + 7) * (13 - 11) = 24$

1432. [5, 7, 12, 12] - 1个解:  
1.  $7 * 12 - 5 * 12 = 24$

1433. [5, 7, 12, 13] - 无解

1434. [5, 7, 13, 13] - 1个解:  
1.  $5 + 13 + 13 - 7 = 24$

1435. [5, 8, 8, 8] - 2个解:  
1.  $5 * 8 - (8 + 8) = 24$   
2.  $8 * 8 - 5 * 8 = 24$

1436. [5, 8, 8, 9] - 2个解:  
1.  $8 * 9 / (8 - 5) = 24$   
2.  $8 * (9 - 5) - 8 = 24$

1437. [5, 8, 8, 10] - 2个解:  
1.  $8 * (5 + 8 - 10) = 24$   
2.  $8 + 8 * 10 / 5 = 24$

1438. [5, 8, 8, 11] - 无解

1439. [5, 8, 8, 12] - 无解

1440. [5, 8, 8, 13] - 1个解:

1.  $8 + 8 + 13 - 5 = 24$

1441. [5, 8, 9, 9] - 无解

1442. [5, 8, 9, 10] - 无解

1443. [5, 8, 9, 11] - 3个解:  
1.  $11 * (8 - 5) - 9 = 24$   
2.  $8 * (5 + 9 - 11) = 24$   
3.  $9 + 5 * (11 - 8) = 24$

1444. [5, 8, 9, 12] - 2个解:  
1.  $8 * 12 / (9 - 5) = 24$   
2.  $8 + 9 + 12 - 5 = 24$

1445. [5, 8, 9, 13] - 1个解:  
1.  $5 * 9 - (8 + 13) = 24$

1446. [5, 8, 10, 10] - 无解

1447. [5, 8, 10, 11] - 1个解:  
1.  $8 + 10 + 11 - 5 = 24$

1448. [5, 8, 10, 12] - 1个解:  
1.  $8 * (5 + 10 - 12) = 24$

1449. [5, 8, 10, 13] - 无解

1450. [5, 8, 11, 11] - 无解

1451. [5, 8, 11, 12] - 3个解:  
1.  $12 * (5 + 8 - 11) = 24$   
2.  $12 * (5 + 11) / 8 = 24$   
3.  $(11 - 5) * (12 - 8) = 24$

1452. [5, 8, 11, 13] - 2个解:  
1.  $8 * (5 + 11 - 13) = 24$   
2.  $(11 - 8) * (13 - 5) = 24$

1453. [5, 8, 12, 12] - 1个解:  
1.  $12 * (8 - 5) - 12 = 24$

1454. [5, 8, 12, 13] - 无解

1455. [5, 8, 13, 13] - 无解

1456. [5, 9, 9, 9] - 无解

1457. [5, 9, 9, 10] - 无解

1458. [5, 9, 9, 11] - 1 个解:

1.  $9 + 9 + 11 - 5 = 24$

1459. [5, 9, 9, 12] - 3 个解:

1.  $9 * (9 - 5) - 12 = 24$

2.  $5 * 9 - (9 + 12) = 24$

3.  $9 + 5 * (12 - 9) = 24$

1460. [5, 9, 9, 13] - 无解

1461. [5, 9, 10, 10] - 1 个解:

1.  $9 + 10 + 10 - 5 = 24$

1462. [5, 9, 10, 11] - 1 个解:

1.  $5 * 9 - (10 + 11) = 24$

1463. [5, 9, 10, 12] - 无解

1464. [5, 9, 10, 13] - 2 个解:

1.  $9 + 13 + 10 / 5 = 24$

2.  $9 + 5 * (13 - 10) = 24$

1465. [5, 9, 11, 11] - 无解

1466. [5, 9, 11, 12] - 无解

1467. [5, 9, 11, 13] - 1 个解:

1.  $(11 - 5) * (13 - 9) = 24$

1468. [5, 9, 12, 12] - 2 个解:

1.  $12 * (5 + 9 - 12) = 24$

2.  $(12 + 9 * 12) / 5 = 24$

1469. [5, 9, 12, 13] - 2 个解:

1.  $(12 - 9) * (13 - 5) = 24$

2.  $12 * (5 + 13) / 9 = 24$

1470. [5, 9, 13, 13] - 无解

1471. [5, 10, 10, 10] - 无解

1472. [5, 10, 10, 11] - 1 个解:

1.  $(10 + 10 * 11) / 5 = 24$

1473. [5, 10, 10, 12] - 2 个解:

1.  $10 * 12 / (10 - 5) = 24$

2.  $10 + 12 + 10 / 5 = 24$

1474. [5, 10, 10, 13] - 1 个解:

1.  $(10 * 13 - 10) / 5 = 24$

1475. [5, 10, 11, 11] - 1 个解:

1.  $11 + 11 + 10 / 5 = 24$

1476. [5, 10, 11, 12] - 无解

1477. [5, 10, 11, 13] - 无解

1478. [5, 10, 12, 12] - 无解

1479. [5, 10, 12, 13] - 1 个解:

1.  $12 * (5 + 10 - 13) = 24$

1480. [5, 10, 13, 13] - 4 个解:

1.  $5 * 10 - (13 + 13) = 24$

2.  $13 + 13 - 10 / 5 = 24$

3.  $(13 - 5) * (13 - 10) = 24$

4.  $(13 - 10) * (13 - 5) = 24$

1481. [5, 11, 11, 11] - 无解

1482. [5, 11, 11, 12] - 无解

1483. [5, 11, 11, 13] - 无解

1484. [5, 11, 12, 12] - 2 个解:

1.  $12 * 12 / (11 - 5) = 24$

2.  $(11 * 12 - 12) / 5 = 24$

1485. [5, 11, 12, 13] - 无解

1486. [5, 11, 13, 13] - 无解

1487. [5, 12, 12, 12] - 无解

1488. [5, 12, 12, 13] - 无解

1489. [5, 12, 13, 13] - 无解

1490. [5, 13, 13, 13] - 无解

1491. [6, 6, 6, 6] - 2 个解:

1.  $6 * 6 - (6 + 6) = 24$

2.  $6 + 6 + 6 + 6 = 24$

1492. [6, 6, 6, 7] - 无解

1493. [6, 6, 6, 8] - 2 个解:

1.  $(6 + 6) * (8 - 6) = 24$

2.  $6 * (6 + 6 - 8) = 24$

1494. [6, 6, 6, 9] - 2 个解:

1.  $6 * 6 * 6 / 9 = 24$

2.  $6 + 6 * (9 - 6) = 24$

1495. [6, 6, 6, 10] - 1 个解:

1.  $6 * 10 - 6 * 6 = 24$

1496. [6, 6, 6, 11] - 1 个解:

1.  $6 * (11 - 6) - 6 = 24$

1497. [6, 6, 6, 12] - 2 个解:

1.  $12 * (6 + 6) / 6 = 24$

2.  $6 * (6 - 12 / 6) = 24$

1498. [6, 6, 6, 13] - 无解

1499. [6, 6, 7, 7] - 无解

1500. [6, 6, 7, 8] - 无解

1501. [6, 6, 7, 9] - 2 个解:

1.  $(6 + 6) * (9 - 7) = 24$

2.  $6 * (6 + 7 - 9) = 24$

1502. [6, 6, 7, 10] - 1 个解:

1.  $6 + 6 * (10 - 7) = 24$

1503. [6, 6, 7, 11] - 1 个解:

1.  $6 * 11 - 6 * 7 = 24$

1504. [6, 6, 7, 12] - 2 个解:

1.  $6 * 7 - (6 + 12) = 24$

2.  $6 * (12 - 7) - 6 = 24$

1505. [6, 6, 7, 13] - 无解

1506. [6, 6, 8, 8] - 1 个解:

1.  $6 * 8 / (8 - 6) = 24$

1507. [6, 6, 8, 9] - 2 个解:

1.  $8 * (6 + 6 - 9) = 24$

2.  $6 + 9 * (8 - 6) = 24$

1508. [6, 6, 8, 10] - 2 个解:

1.  $(6 + 6) * (10 - 8) = 24$

$$2. 6 * (6 + 8 - 10) = 24$$

1509. [6, 6, 8, 11] - 1 个解:

$$1. 6 + 6 * (11 - 8) = 24$$

1510. [6, 6, 8, 12] - 4 个解:

$$1. 12 + 6 * (8 - 6) = 24$$

$$2. 6 * 12 - 6 * 8 = 24$$

$$3. 6 * 6 * 8 / 12 = 24$$

$$4. 8 * (6 + 12) / 6 = 24$$

1511. [6, 6, 8, 13] - 1 个解:

$$1. 6 * (13 - 8) - 6 = 24$$

1512. [6, 6, 9, 9] - 无解

1513. [6, 6, 9, 10] - 2 个解:

$$1. 10 * (9 - 6) - 6 = 24$$

$$2. 9 * (6 + 10) / 6 = 24$$

1514. [6, 6, 9, 11] - 2 个解:

$$1. (6 + 6) * (11 - 9) = 24$$

$$2. 6 * (6 + 9 - 11) = 24$$

1515. [6, 6, 9, 12] - 3 个解:

$$1. 6 * 12 / (9 - 6) = 24$$

$$2. 6 + 6 * (12 - 9) = 24$$

$$3. 6 + 9 * 12 / 6 = 24$$

1516. [6, 6, 9, 13] - 1 个解:

$$1. 6 * 13 - 6 * 9 = 24$$

1517. [6, 6, 10, 10] - 无解

1518. [6, 6, 10, 11] - 无解

1519. [6, 6, 10, 12] - 4 个解:

$$1. (6 + 6) * (12 - 10) = 24$$

$$2. 12 * (6 + 6 - 10) = 24$$

$$3. 6 * (6 + 10 - 12) = 24$$

$$4. (10 - 6) * (12 - 6) = 24$$

1520. [6, 6, 10, 13] - 2 个解:

$$1. 10 + 13 + 6 / 6 = 24$$

$$2. 6 + 6 * (13 - 10) = 24$$

1521. [6, 6, 11, 11] - 无解

1522. [6, 6, 11, 12] - 1 个解:

$$1. 11 + 12 + 6 / 6 = 24$$

1523. [6, 6, 11, 13] - 6 个解:

$$1. (6 + 6) * (13 - 11) = 24$$

$$2. 6 * (6 + 11 - 13) = 24$$

$$3. 13 + 6 * 11 / 6 = 24$$

$$4. 11 + 6 * 13 / 6 = 24$$

$$5. 6 + 11 + 13 - 6 = 24$$

$$6. 6 * (11 + 13) / 6 = 24$$

1524. [6, 6, 12, 12] - 4 个解:

$$1. 6 * (12 - 6) - 12 = 24$$

$$2. 12 + 6 * 12 / 6 = 24$$

$$3. 6 + 12 + 12 - 6 = 24$$

$$4. 6 * (12 + 12) / 6 = 24$$

1525. [6, 6, 12, 13] - 1 个解:

$$1. 12 + 13 - 6 / 6 = 24$$

1526. [6, 6, 13, 13] - 无解

1527. [6, 7, 7, 7] - 无解

1528. [6, 7, 7, 8] - 无解

1529. [6, 7, 7, 9] - 无解

1530. [6, 7, 7, 10] - 1 个解:

$$1. 6 * (7 + 7 - 10) = 24$$

1531. [6, 7, 7, 11] - 1 个解:

$$1. 6 * 7 - (7 + 11) = 24$$

1532. [6, 7, 7, 12] - 无解

1533. [6, 7, 7, 13] - 无解

1534. [6, 7, 8, 8] - 无解

1535. [6, 7, 8, 9] - 1 个解:

$$1. 6 * 8 / (9 - 7) = 24$$

1536. [6, 7, 8, 10] - 3 个解:

$$1. 8 * (6 + 7 - 10) = 24$$

$$2. 6 * 7 - (8 + 10) = 24$$

$$3. 10 + 7 * (8 - 6) = 24$$

1537. [6, 7, 8, 11] - 2 个解:

$$1. 6 * (7 + 8 - 11) = 24$$

$$2. 8 * (7 + 11) / 6 = 24$$

1538. [6, 7, 8, 12] - 1 个解:

$$1. 12 * (6 + 8) / 7 = 24$$

1539. [6, 7, 8, 13] - 无解

1540. [6, 7, 9, 9] - 3 个解:

$$1. 6 * 7 - (9 + 9) = 24$$

$$2. 9 * (7 + 9) / 6 = 24$$

$$3. 6 + 9 * (9 - 7) = 24$$

1541. [6, 7, 9, 10] - 无解

1542. [6, 7, 9, 11] - 无解

1543. [6, 7, 9, 12] - 2 个解:

$$1. 6 * (7 + 9 - 12) = 24$$

$$2. 12 + 6 * (9 - 7) = 24$$

1544. [6, 7, 9, 13] - 无解

1545. [6, 7, 10, 10] - 1 个解:

$$1. 10 * (10 - 7) - 6 = 24$$

1546. [6, 7, 10, 11] - 无解

1547. [6, 7, 10, 12] - 3 个解:

$$1. 7 * 12 - 6 * 10 = 24$$

$$2. 6 * 12 / (10 - 7) = 24$$

$$3. 10 + 7 * 12 / 6 = 24$$

1548. [6, 7, 10, 13] - 3 个解:

$$1. (10 - 6) * (13 - 7) = 24$$

$$2. 6 * (7 + 10 - 13) = 24$$

$$3. 7 + 10 + 13 - 6 = 24$$

1549. [6, 7, 11, 11] - 1 个解:

$$1. 7 * (11 - 6) - 11 = 24$$

1550. [6, 7, 11, 12] - 3 个解:

$$1. 12 * (6 + 7 - 11) = 24$$

$$2. (11 - 7) * (12 - 6) = 24$$

$$3. 7 + 11 + 12 - 6 = 24$$

1551. [6, 7, 11, 13] - 6 个解:

$$1. (7 - 6) * (11 + 13) = 24$$

$$2. (11 + 13) / (7 - 6) = 24$$

$$3. 13 + 11 * (7 - 6) = 24$$

4.  $13 + 11 \div (7 - 6) = 24$   
 5.  $11 + 13 * (7 - 6) = 24$   
 6.  $11 + 13 \div (7 - 6) = 24$

1552.  $[6, 7, 12, 12] - 4$  个解:  
 1.  $(7 - 6) * (12 + 12) = 24$   
 2.  $(12 + 12) \div (7 - 6) = 24$   
 3.  $12 + 12 * (7 - 6) = 24$   
 4.  $12 + 12 \div (7 - 6) = 24$

1553.  $[6, 7, 12, 13] - 2$  个解:  
 1.  $6 * (13 - 7) - 12 = 24$   
 2.  $6 + 12 + 13 - 7 = 24$

1554.  $[6, 7, 13, 13] -$  无解

1555.  $[6, 8, 8, 8] - 1$  个解:  
 1.  $8 + 8 * (8 - 6) = 24$

1556.  $[6, 8, 8, 9] - 2$  个解:  
 1.  $8 * 9 - 6 * 8 = 24$   
 2.  $9 * (8 + 8) \div 6 = 24$

1557.  $[6, 8, 8, 10] - 3$  个解:  
 1.  $6 * 8 \div (10 - 8) = 24$   
 2.  $8 * (10 - 6) - 8 = 24$   
 3.  $8 * (8 + 10) \div 6 = 24$

1558.  $[6, 8, 8, 11] - 1$  个解:  
 1.  $8 * (6 + 8 - 11) = 24$

1559.  $[6, 8, 8, 12] - 2$  个解:  
 1.  $6 * (8 + 8 - 12) = 24$   
 2.  $8 + 8 * 12 \div 6 = 24$

1560.  $[6, 8, 8, 13] -$  无解

1561.  $[6, 8, 9, 9] - 2$  个解:  
 1.  $8 * 9 \div (9 - 6) = 24$   
 2.  $8 * (9 + 9) \div 6 = 24$

1562.  $[6, 8, 9, 10] - 1$  个解:  
 1.  $6 + 9 * (10 - 8) = 24$

1563.  $[6, 8, 9, 11] - 1$  个解:  
 1.  $6 * 8 \div (11 - 9) = 24$

1564.  $[6, 8, 9, 12] - 2$  个解:  
 1.  $8 * (6 + 9 - 12) = 24$

2.  $12 + 8 * 9 \div 6 = 24$

1565.  $[6, 8, 9, 13] - 2$  个解:  
 1.  $6 * (8 + 9 - 13) = 24$   
 2.  $8 + 9 + 13 - 6 = 24$

1566.  $[6, 8, 10, 10] -$  无解

1567.  $[6, 8, 10, 11] - 1$  个解:  
 1.  $10 * (11 - 8) - 6 = 24$

1568.  $[6, 8, 10, 12] - 5$  个解:  
 1.  $6 * 8 \div (12 - 10) = 24$   
 2.  $12 * (6 + 10) \div 8 = 24$   
 3.  $8 * 12 \div (10 - 6) = 24$   
 4.  $12 + 6 * (10 - 8) = 24$   
 5.  $8 + 10 + 12 - 6 = 24$

1569.  $[6, 8, 10, 13] - 1$  个解:  
 1.  $8 * (6 + 10 - 13) = 24$

1570.  $[6, 8, 11, 11] - 1$  个解:  
 1.  $8 + 11 + 11 - 6 = 24$

1571.  $[6, 8, 11, 12] - 1$  个解:  
 1.  $6 * 12 \div (11 - 8) = 24$

1572.  $[6, 8, 11, 13] - 2$  个解:  
 1.  $6 * 8 - (11 + 13) = 24$   
 2.  $6 * 8 \div (13 - 11) = 24$

1573.  $[6, 8, 12, 12] - 6$  个解:  
 1.  $12 * (6 + 8 - 12) = 24$   
 2.  $6 * 8 - (12 + 12) = 24$   
 3.  $(12 - 6) * (12 - 8) = 24$   
 4.  $8 * 12 - 6 * 12 = 24$   
 5.  $(12 - 8) * (12 - 6) = 24$   
 6.  $6 + 12 * 12 \div 8 = 24$

1574.  $[6, 8, 12, 13] -$  无解

1575.  $[6, 8, 13, 13] - 1$  个解:  
 1.  $6 + 13 + 13 - 8 = 24$

1576.  $[6, 9, 9, 9] -$  无解

1577.  $[6, 9, 9, 10] - 1$  个解:  
 1.  $9 + 9 * 10 \div 6 = 24$

1578.  $[6, 9, 9, 11] - 2$  个解:  
 1.  $11 * (9 - 6) - 9 = 24$   
 2.  $6 + 9 * (11 - 9) = 24$

1579.  $[6, 9, 9, 12] - 1$  个解:  
 1.  $9 + 9 + 12 - 6 = 24$

1580.  $[6, 9, 9, 13] -$  无解

1581.  $[6, 9, 10, 10] -$  无解

1582.  $[6, 9, 10, 11] - 2$  个解:  
 1.  $9 * 10 - 6 * 11 = 24$   
 2.  $9 + 10 + 11 - 6 = 24$

1583.  $[6, 9, 10, 12] - 3$  个解:  
 1.  $9 * (10 - 6) - 12 = 24$   
 2.  $10 * (12 - 9) - 6 = 24$   
 3.  $6 + 9 * (12 - 10) = 24$

1584.  $[6, 9, 10, 13] -$  无解

1585.  $[6, 9, 11, 11] -$  无解

1586.  $[6, 9, 11, 12] - 1$  个解:  
 1.  $12 + 6 * (11 - 9) = 24$

1587.  $[6, 9, 11, 13] - 1$  个解:  
 1.  $6 + 9 * (13 - 11) = 24$

1588.  $[6, 9, 12, 12] - 3$  个解:  
 1.  $12 * (9 - 6) - 12 = 24$   
 2.  $12 * (6 + 12) \div 9 = 24$   
 3.  $6 * 12 \div (12 - 9) = 24$

1589.  $[6, 9, 12, 13] - 3$  个解:  
 1.  $12 * (6 + 9 - 13) = 24$   
 2.  $(12 - 6) * (13 - 9) = 24$   
 3.  $9 + 13 + 12 \div 6 = 24$

1590.  $[6, 9, 13, 13] -$  无解

1591.  $[6, 10, 10, 10] - 1$  个解:  
 1.  $10 + 10 + 10 - 6 = 24$

1592.  $[6, 10, 10, 11] -$  无解

1593.  $[6, 10, 10, 12] -$  无解



1594. [6, 10, 10, 13] - 1 个解:  
1.  $10 * (13 - 10) - 6 = 24$

1595. [6, 10, 11, 11] - 无解

1596. [6, 10, 11, 12] - 1 个解:  
1.  $10 * 12 / (11 - 6) = 24$

1597. [6, 10, 11, 13] - 无解

1598. [6, 10, 12, 12] - 2 个解:  
1.  $10 + 12 + 12 / 6 = 24$   
2.  $12 + 6 * (12 - 10) = 24$

1599. [6, 10, 12, 13] - 1 个解:  
1.  $6 * 12 / (13 - 10) = 24$

1600. [6, 10, 13, 13] - 无解

1601. [6, 11, 11, 11] - 无解

1602. [6, 11, 11, 12] - 1 个解:  
1.  $11 + 11 + 12 / 6 = 24$

1603. [6, 11, 11, 13] - 无解

1604. [6, 11, 12, 12] - 1 个解:  
1.  $(12 + 11 * 12) / 6 = 24$

1605. [6, 11, 12, 13] - 1 个解:  
1.  $12 + 6 * (13 - 11) = 24$

1606. [6, 11, 13, 13] - 无解

1607. [6, 12, 12, 12] - 1 个解:  
1.  $12 * 12 / (12 - 6) = 24$

1608. [6, 12, 12, 13] - 1 个解:  
1.  $(12 * 13 - 12) / 6 = 24$

1609. [6, 12, 13, 13] - 1 个解:  
1.  $13 + 13 - 12 / 6 = 24$

1610. [6, 13, 13, 13] - 无解

1611. [7, 7, 7, 7] - 无解

1612. [7, 7, 7, 8] - 无解

1613. [7, 7, 7, 9] - 无解

1614. [7, 7, 7, 10] - 无解

1615. [7, 7, 7, 11] - 无解

1616. [7, 7, 7, 12] - 1 个解:  
1.  $12 * (7 + 7) / 7 = 24$

1617. [7, 7, 7, 13] - 无解

1618. [7, 7, 8, 8] - 无解

1619. [7, 7, 8, 9] - 无解

1620. [7, 7, 8, 10] - 无解

1621. [7, 7, 8, 11] - 1 个解:  
1.  $8 * (7 + 7 - 11) = 24$

1622. [7, 7, 8, 12] - 无解

1623. [7, 7, 8, 13] - 无解

1624. [7, 7, 9, 9] - 无解

1625. [7, 7, 9, 10] - 1 个解:  
1.  $10 + 7 * (9 - 7) = 24$

1626. [7, 7, 9, 11] - 无解

1627. [7, 7, 9, 12] - 无解

1628. [7, 7, 9, 13] - 无解

1629. [7, 7, 10, 10] - 无解

1630. [7, 7, 10, 11] - 无解

1631. [7, 7, 10, 12] - 无解

1632. [7, 7, 10, 13] - 1 个解:  
1.  $10 + 13 + 7 / 7 = 24$

1633. [7, 7, 11, 11] - 无解

1634. [7, 7, 11, 12] - 2 个解:  
1.  $11 + 12 + 7 / 7 = 24$   
2.  $7 * (12 - 7) - 11 = 24$

1635. [7, 7, 11, 13] - 5 个解:  
1.  $(11 - 7) * (13 - 7) = 24$   
2.  $13 + 7 * 11 / 7 = 24$   
3.  $11 + 7 * 13 / 7 = 24$   
4.  $7 + 11 + 13 - 7 = 24$   
5.  $7 * (11 + 13) / 7 = 24$

1636. [7, 7, 12, 12] - 4 个解:  
1.  $12 * (7 + 7 - 12) = 24$   
2.  $12 + 7 * 12 / 7 = 24$   
3.  $7 + 12 + 12 - 7 = 24$   
4.  $7 * (12 + 12) / 7 = 24$

1637. [7, 7, 12, 13] - 2 个解:  
1.  $7 * 7 - (12 + 13) = 24$   
2.  $12 + 13 - 7 / 7 = 24$

1638. [7, 7, 13, 13] - 无解

1639. [7, 8, 8, 8] - 无解

1640. [7, 8, 8, 9] - 1 个解:  
1.  $8 + 8 * (9 - 7) = 24$

1641. [7, 8, 8, 10] - 1 个解:  
1.  $8 * 10 - 7 * 8 = 24$

1642. [7, 8, 8, 11] - 1 个解:  
1.  $8 * (11 - 7) - 8 = 24$

1643. [7, 8, 8, 12] - 1 个解:  
1.  $8 * (7 + 8 - 12) = 24$

1644. [7, 8, 8, 13] - 1 个解:  
1.  $8 * (8 + 13) / 7 = 24$

1645. [7, 8, 9, 9] - 无解

1646. [7, 8, 9, 10] - 1 个解:  
1.  $8 * 9 / (10 - 7) = 24$

1647. [7, 8, 9, 11] - 无解

1648. [7, 8, 9, 12] - 2 个解:  
1.  $12 * (7 + 9) / 8 = 24$   
2.  $8 * (9 + 12) / 7 = 24$

1649. [7, 8, 9, 13] - 1 个解:

1. $8 * (7 + 9 - 13) = 24$	1664. [7, 9, 9, 13] - 1 个解: 1. $9 + 9 + 13 - 7 = 24$	1682. [7, 10, 12, 12] - 2 个解: 1. $12 * (10 - 7) - 12 = 24$ 2. $10 * 12 / (12 - 7) = 24$
1650. [7, 8, 10, 10] - 1 个解: 1. $10 + 7 * (10 - 8) = 24$	1665. [7, 9, 10, 10] - 无解	1683. [7, 10, 12, 13] - 1 个解: 1. $12 * (7 + 13) / 10 = 24$
1651. [7, 8, 10, 11] - 1 个解: 1. $8 * (10 + 11) / 7 = 24$	1666. [7, 9, 10, 11] - 2 个解: 1. $11 * (10 - 7) - 9 = 24$ 2. $10 + 7 * (11 - 9) = 24$	1684. [7, 10, 13, 13] - 无解
1652. [7, 8, 10, 12] - 无解	1667. [7, 9, 10, 12] - 1 个解: 1. $9 + 10 + 12 - 7 = 24$	1685. [7, 11, 11, 11] - 无解
1653. [7, 8, 10, 13] - 1 个解: 1. $8 + 10 + 13 - 7 = 24$	1668. [7, 9, 10, 13] - 无解	1686. [7, 11, 11, 12] - 无解
1654. [7, 8, 11, 11] - 无解	1669. [7, 9, 11, 11] - 1 个解: 1. $9 + 11 + 11 - 7 = 24$	1687. [7, 11, 11, 13] - 无解
1655. [7, 8, 11, 12] - 2 个解: 1. $8 * 12 / (11 - 7) = 24$ 2. $8 + 11 + 12 - 7 = 24$	1670. [7, 9, 11, 12] - 2 个解: 1. $12 * (7 + 11) / 9 = 24$ 2. $9 * (11 - 7) - 12 = 24$	1688. [7, 11, 12, 12] - 无解
1656. [7, 8, 11, 13] - 7 个解: 1. $(8 - 7) * (11 + 13) = 24$ 2. $(11 + 13) / (8 - 7) = 24$ 3. $13 + 11 * (8 - 7) = 24$ 4. $13 + 11 / (8 - 7) = 24$ 5. $11 + 13 * (8 - 7) = 24$ 6. $11 + 13 / (8 - 7) = 24$ 7. $7 * (13 - 8) - 11 = 24$	1671. [7, 9, 11, 13] - 无解	1689. [7, 11, 12, 13] - 无解
1657. [7, 8, 12, 12] - 4 个解: 1. $(8 - 7) * (12 + 12) = 24$ 2. $(12 + 12) / (8 - 7) = 24$ 3. $12 + 12 * (8 - 7) = 24$ 4. $12 + 12 / (8 - 7) = 24$	1672. [7, 9, 12, 12] - 1 个解: 1. $9 * 12 - 7 * 12 = 24$	1690. [7, 11, 13, 13] - 无解
1658. [7, 8, 12, 13] - 3 个解: 1. $12 * (7 + 8 - 13) = 24$ 2. $(12 - 8) * (13 - 7) = 24$ 3. $7 + 12 + 13 - 8 = 24$	1673. [7, 9, 12, 13] - 无解	1691. [7, 12, 12, 12] - 无解
1659. [7, 8, 13, 13] - 无解	1674. [7, 9, 13, 13] - 3 个解: 1. $(13 - 7) * (13 - 9) = 24$ 2. $(13 - 9) * (13 - 7) = 24$ 3. $7 + 13 + 13 - 9 = 24$	1692. [7, 12, 12, 13] - 2 个解: 1. $12 * 12 / (13 - 7) = 24$ 2. $(12 + 12 * 13) / 7 = 24$
1660. [7, 9, 9, 9] - 无解	1675. [7, 10, 10, 10] - 无解	1693. [7, 12, 13, 13] - 无解
1661. [7, 9, 9, 10] - 无解	1676. [7, 10, 10, 11] - 1 个解: 1. $10 + 10 + 11 - 7 = 24$	1694. [7, 13, 13, 13] - 无解
1662. [7, 9, 9, 11] - 无解	1677. [7, 10, 10, 12] - 1 个解: 1. $10 + 7 * (12 - 10) = 24$	1695. [8, 8, 8, 8] - 无解
1663. [7, 9, 9, 12] - 无解	1678. [7, 10, 10, 13] - 无解	1696. [8, 8, 8, 9] - 无解
	1679. [7, 10, 11, 11] - 无解	1697. [8, 8, 8, 10] - 1 个解: 1. $8 + 8 * (10 - 8) = 24$
	1680. [7, 10, 11, 12] - 无解	1698. [8, 8, 8, 11] - 1 个解: 1. $8 * 11 - 8 * 8 = 24$
	1681. [7, 10, 11, 13] - 1 个解: 1. $10 + 7 * (13 - 11) = 24$	1699. [8, 8, 8, 12] - 2 个解: 1. $12 * (8 + 8) / 8 = 24$ 2. $8 * (12 - 8) - 8 = 24$
		1700. [8, 8, 8, 13] - 1 个解: 1. $8 * (8 + 8 - 13) = 24$

1701. [8, 8, 9, 9] - 无解

1702. [8, 8, 9, 10] - 无解

1703. [8, 8, 9, 11] - 2个解:

1.  $8 * 9 / (11 - 8) = 24$
2.  $8 + 8 * (11 - 9) = 24$

1704. [8, 8, 9, 12] - 1个解:

1.  $8 * 12 - 8 * 9 = 24$

1705. [8, 8, 9, 13] - 1个解:

1.  $8 * (13 - 9) - 8 = 24$

1706. [8, 8, 10, 10] - 无解

1707. [8, 8, 10, 11] - 无解

1708. [8, 8, 10, 12] - 1个解:

1.  $8 + 8 * (12 - 10) = 24$

1709. [8, 8, 10, 13] - 2个解:

1.  $10 + 13 + 8 / 8 = 24$
2.  $8 * 13 - 8 * 10 = 24$

1710. [8, 8, 11, 11] - 无解

1711. [8, 8, 11, 12] - 1个解:

1.  $11 + 12 + 8 / 8 = 24$

1712. [8, 8, 11, 13] - 5个解:

1.  $13 + 8 * 11 / 8 = 24$
2.  $11 + 8 * 13 / 8 = 24$
3.  $8 + 11 + 13 - 8 = 24$
4.  $8 * (11 + 13) / 8 = 24$
5.  $8 + 8 * (13 - 11) = 24$

1713. [8, 8, 12, 12] - 4个解:

1.  $8 * 12 / (12 - 8) = 24$
2.  $12 + 8 * 12 / 8 = 24$
3.  $8 + 12 + 12 - 8 = 24$
4.  $8 * (12 + 12) / 8 = 24$

1714. [8, 8, 12, 13] - 1个解:

1.  $12 + 13 - 8 / 8 = 24$

1715. [8, 8, 13, 13] - 无解

1716. [8, 9, 9, 9] - 无解

1717. [8, 9, 9, 10] - 无解

1718. [8, 9, 9, 11] - 无解

1719. [8, 9, 9, 12] - 1个解:

1.  $8 * 9 / (12 - 9) = 24$

1720. [8, 9, 9, 13] - 无解

1721. [8, 9, 10, 10] - 无解

1722. [8, 9, 10, 11] - 无解

1723. [8, 9, 10, 12] - 2个解:

1.  $12 * (8 + 10) / 9 = 24$
2.  $9 + 10 * 12 / 8 = 24$

1724. [8, 9, 10, 13] - 2个解:

1.  $8 * 9 / (13 - 10) = 24$
2.  $9 + 10 + 13 - 8 = 24$

1725. [8, 9, 11, 11] - 1个解:

1.  $11 * (11 - 8) - 9 = 24$

1726. [8, 9, 11, 12] - 1个解:

1.  $9 + 11 + 12 - 8 = 24$

1727. [8, 9, 11, 13] - 6个解:

1.  $(9 - 8) * (11 + 13) = 24$
2.  $(11 + 13) / (9 - 8) = 24$
3.  $13 + 11 * (9 - 8) = 24$
4.  $13 + 11 / (9 - 8) = 24$
5.  $11 + 13 * (9 - 8) = 24$
6.  $11 + 13 / (9 - 8) = 24$

1728. [8, 9, 12, 12] - 6个解:

1.  $(9 - 8) * (12 + 12) = 24$
2.  $(12 + 12) / (9 - 8) = 24$
3.  $12 + 12 * (9 - 8) = 24$
4.  $12 + 12 / (9 - 8) = 24$
5.  $9 * (12 - 8) - 12 = 24$
6.  $8 + 12 * 12 / 9 = 24$

1729. [8, 9, 12, 13] - 2个解:

1.  $8 * 12 / (13 - 9) = 24$
2.  $8 + 12 + 13 - 9 = 24$

1730. [8, 9, 13, 13] - 无解

1731. [8, 10, 10, 10] - 无解

1732. [8, 10, 10, 11] - 无解

1733. [8, 10, 10, 12] - 1个解:

1.  $10 + 10 + 12 - 8 = 24$

1734. [8, 10, 10, 13] - 无解

1735. [8, 10, 11, 11] - 1个解:

1.  $10 + 11 + 11 - 8 = 24$

1736. [8, 10, 11, 12] - 无解

1737. [8, 10, 11, 13] - 无解

1738. [8, 10, 12, 12] - 2个解:

1.  $12 * (8 + 12) / 10 = 24$
2.  $10 * 12 - 8 * 12 = 24$

1739. [8, 10, 12, 13] - 1个解:

1.  $10 * 12 / (13 - 8) = 24$

1740. [8, 10, 13, 13] - 1个解:

1.  $8 + 13 + 13 - 10 = 24$

1741. [8, 11, 11, 11] - 无解

1742. [8, 11, 11, 12] - 无解

1743. [8, 11, 11, 13] - 无解

1744. [8, 11, 12, 12] - 1个解:

1.  $12 * (11 - 8) - 12 = 24$

1745. [8, 11, 12, 13] - 无解

1746. [8, 11, 13, 13] - 无解

1747. [8, 12, 12, 12] - 无解

1748. [8, 12, 12, 13] - 无解

1749. [8, 12, 13, 13] - 无解

1750. [8, 13, 13, 13] - 无解

1751. [9, 9, 9, 9] - 无解

1752. [9, 9, 9, 10] - 无解

1753. [9, 9, 9, 11] - 无解

1754. [9, 9, 9, 12] - 1个解:

1.  $12 * (9 + 9) / 9 = 24$

1755. [9, 9, 9, 13] - 无解

1756. [9, 9, 10, 10] - 无解

1757. [9, 9, 10, 11] - 无解

1758. [9, 9, 10, 12] - 无解

1759. [9, 9, 10, 13] - 1个解:

1.  $10 + 13 + 9 / 9 = 24$

1760. [9, 9, 11, 11] - 无解

1761. [9, 9, 11, 12] - 2个解:

1.  $11 + 12 + 9 / 9 = 24$

2.  $11 * (12 - 9) - 9 = 24$

1762. [9, 9, 11, 13] - 4个解:

1.  $13 + 9 * 11 / 9 = 24$

2.  $11 + 9 * 13 / 9 = 24$

3.  $9 + 11 + 13 - 9 = 24$

4.  $9 * (11 + 13) / 9 = 24$

1763. [9, 9, 12, 12] - 3个解:

1.  $12 + 9 * 12 / 9 = 24$

2.  $9 + 12 + 12 - 9 = 24$

3.  $9 * (12 + 12) / 9 = 24$

1764. [9, 9, 12, 13] - 2个解:

1.  $12 + 13 - 9 / 9 = 24$

2.  $9 * (13 - 9) - 12 = 24$

1765. [9, 9, 13, 13] - 无解

1766. [9, 10, 10, 10] - 无解

1767. [9, 10, 10, 11] - 无解

1768. [9, 10, 10, 12] - 无解

1769. [9, 10, 10, 13] - 1个解:

1.  $10 + 10 + 13 - 9 = 24$

1770. [9, 10, 11, 11] - 无解

1771. [9, 10, 11, 12] - 2个解:

1.  $12 * (9 + 11) / 10 = 24$

2.  $10 + 11 + 12 - 9 = 24$

1772. [9, 10, 11, 13] - 7个解:

1.  $(10 - 9) * (11 + 13) = 24$

2.  $(11 + 13) / (10 - 9) = 24$

3.  $13 + 11 * (10 - 9) = 24$

4.  $13 + 11 / (10 - 9) = 24$

5.  $11 + 13 * (10 - 9) = 24$

6.  $11 + 13 / (10 - 9) = 24$

7.  $11 * (13 - 10) - 9 = 24$

1773. [9, 10, 12, 12] - 4个解:

1.  $(10 - 9) * (12 + 12) = 24$

2.  $(12 + 12) / (10 - 9) = 24$

3.  $12 + 12 * (10 - 9) = 24$

4.  $12 + 12 / (10 - 9) = 24$

1774. [9, 10, 12, 13] - 1个解:

1.  $9 + 12 + 13 - 10 = 24$

1775. [9, 10, 13, 13] - 无解

1776. [9, 11, 11, 11] - 1个解:

1.  $11 + 11 + 11 - 9 = 24$

1777. [9, 11, 11, 12] - 无解

1778. [9, 11, 11, 13] - 无解

1779. [9, 11, 12, 12] - 1个解:

1.  $11 * 12 - 9 * 12 = 24$

1780. [9, 11, 12, 13] - 1个解:

1.  $12 * (9 + 13) / 11 = 24$

1781. [9, 11, 13, 13] - 1个解:

1.  $9 + 13 + 13 - 11 = 24$

1782. [9, 12, 12, 12] - 1个解:

1.  $12 * (12 - 9) - 12 = 24$

1783. [9, 12, 12, 13] - 无解

1784. [9, 12, 13, 13] - 无解

1785. [9, 13, 13, 13] - 无解

1786. [10, 10, 10, 10] - 无解

1787. [10, 10, 10, 11] - 无解

1788. [10, 10, 10, 12] - 1个解:

1.  $12 * (10 + 10) / 10 = 24$

1789. [10, 10, 10, 13] - 1个解:

1.  $10 + 13 + 10 / 10 = 24$

1790. [10, 10, 11, 11] - 无解

1791. [10, 10, 11, 12] - 1个解:

1.  $11 + 12 + 10 / 10 = 24$

1792. [10, 10, 11, 13] - 4个解:

1.  $13 + 10 * 11 / 10 = 24$

2.  $11 + 10 * 13 / 10 = 24$

3.  $10 + 11 + 13 - 10 = 24$

4.  $10 * (11 + 13) / 10 = 24$

1793. [10, 10, 12, 12] - 3个解:

1.  $12 + 10 * 12 / 10 = 24$

2.  $10 + 12 + 12 - 10 = 24$

3.  $10 * (12 + 12) / 10 = 24$

1794. [10, 10, 12, 13] - 1个解:

1.  $12 + 13 - 10 / 10 = 24$

1795. [10, 10, 13, 13] - 无解

1796. [10, 11, 11, 11] - 无解

1797. [10, 11, 11, 12] - 1个解:

1.  $11 + 11 + 12 - 10 = 24$

1798. [10, 11, 11, 13] - 7个解:

1.  $(11 - 10) * (11 + 13) = 24$

2.  $(11 + 13) / (11 - 10) = 24$

3.  $13 + 11 * (11 - 10) = 24$

4.  $13 + 11 / (11 - 10) = 24$

5.  $11 + 13 * (11 - 10) = 24$

6.  $11 + 13 / (11 - 10) = 24$

7.  $10 + 13 + 11 / 11 = 24$

1799. [10, 11, 12, 12] - 5 个解:

1.  $(11 - 10) * (12 + 12) = 24$
2.  $(12 + 12) / (11 - 10) = 24$
3.  $12 + 12 * (11 - 10) = 24$
4.  $12 + 12 / (11 - 10) = 24$
5.  $12 * (10 + 12) / 11 = 24$

1800. [10, 11, 12, 13] - 1 个解:

1.  $10 + 12 + 13 - 11 = 24$

1801. [10, 11, 13, 13] - 无解

1802. [10, 12, 12, 12] - 1 个解:

1.  $12 * 12 - 10 * 12 = 24$

1803. [10, 12, 12, 13] - 2 个解:

1.  $10 + 13 + 12 / 12 = 24$
2.  $12 * (13 - 10) - 12 = 24$

1804. [10, 12, 13, 13] - 1 个解:

1.  $10 + 13 + 13 - 12 = 24$

1805. [10, 13, 13, 13] - 1 个解:

1.  $10 + 13 + 13 / 13 = 24$

1806. [11, 11, 11, 11] - 无解

1807. [11, 11, 11, 12] - 2 个解:

1.  $12 * (11 + 11) / 11 = 24$
2.  $11 + 12 + 11 / 11 = 24$

1808. [11, 11, 11, 13] - 4 个解:

1.  $13 + 11 * 11 / 11 = 24$
2.  $11 * (11 + 13) / 11 = 24$
3.  $11 + 11 * 13 / 11 = 24$
4.  $11 + 11 + 13 - 11 = 24$

1809. [11, 11, 12, 12] - 3 个解:

1.  $12 + 11 * 12 / 11 = 24$
2.  $11 + 12 + 12 - 11 = 24$
3.  $11 * (12 + 12) / 11 = 24$

1810. [11, 11, 12, 13] - 7 个解:

1.  $12 + 13 - 11 / 11 = 24$
2.  $(12 - 11) * (11 + 13) = 24$
3.  $(11 + 13) / (12 - 11) = 24$
4.  $13 + 11 * (12 - 11) = 24$
5.  $13 + 11 / (12 - 11) = 24$
6.  $11 + 13 * (12 - 11) = 24$

$$7. 11 + 13 / (12 - 11) = 24$$

1811. [11, 11, 13, 13] - 无解

1812. [11, 12, 12, 12] - 6 个解:

1.  $(12 - 11) * (12 + 12) = 24$
2.  $(12 + 12) / (12 - 11) = 24$
3.  $12 + 12 * (12 - 11) = 24$
4.  $12 + 12 / (12 - 11) = 24$
5.  $(12 + 12) * (12 - 11) = 24$
6.  $11 + 12 + 12 / 12 = 24$

1813. [11, 12, 12, 13] - 5 个解:

1.  $12 * 13 - 11 * 12 = 24$
2.  $13 + 11 * 12 / 12 = 24$
3.  $12 * (11 + 13) / 12 = 24$
4.  $11 + 12 + 13 - 12 = 24$
5.  $11 + 12 * 13 / 12 = 24$

1814. [11, 12, 13, 13] - 8 个解:

1.  $(11 + 13) * (13 - 12) = 24$
2.  $(11 + 13) / (13 - 12) = 24$
3.  $(13 - 12) * (11 + 13) = 24$
4.  $13 + 11 * (13 - 12) = 24$
5.  $13 + 11 / (13 - 12) = 24$
6.  $11 + 13 * (13 - 12) = 24$
7.  $11 + 13 / (13 - 12) = 24$
8.  $11 + 12 + 13 / 13 = 24$

1815. [11, 13, 13, 13] - 4 个解:

1.  $13 * (11 + 13) / 13 = 24$
2.  $13 + 11 * 13 / 13 = 24$
3.  $11 + 13 + 13 - 13 = 24$
4.  $11 + 13 * 13 / 13 = 24$

1816. [12, 12, 12, 12] - 3 个解:

1.  $12 * (12 + 12) / 12 = 24$
2.  $12 + 12 * 12 / 12 = 24$
3.  $12 + 12 + 12 - 12 = 24$

1817. [12, 12, 12, 13] - 5 个解:

1.  $(12 + 12) * (13 - 12) = 24$
2.  $(12 + 12) / (13 - 12) = 24$
3.  $12 + 13 - 12 / 12 = 24$
4.  $12 + 12 * (13 - 12) = 24$
5.  $12 + 12 / (13 - 12) = 24$

1818. [12, 12, 13, 13] - 3 个解:

1.  $13 * (12 + 12) / 13 = 24$

$$2. 12 + 12 * 13 / 13 = 24$$

$$3. 12 + 12 + 13 - 13 = 24$$

1819. [12, 13, 13, 13] - 2 个解:

1.  $12 + 13 - 13 / 13 = 24$
2.  $12 * (13 + 13) / 13 = 24$

1820. [13, 13, 13, 13] - 无解