A248162, Wolfdieter Lang, Nov 02 2014

The first rows of this irregular triangle are given as lists belonging to increasing number of parts:

```
n\k  1   2   3  4   5   6   7  8  9  10  11  12  13 14 15  16 17 18   19 29  21  22 23   24 25 26  27 28  29  30 ...
1:  [0]
2:  [2] [0]
3:  [6] [2] [0]
4: [12] [6,  4][2] [0]
5: [20][12,  8][6,  4] [2] [0]
6: [30][20, 14,12][12,  8,  6][6,  4] [2] [0]
7: [42][30, 22,18][20, 14, 12,10][12,  8,  6] [6,  4][2][0]
8: [56][42, 32,26, 24][30, 22,18, 16, 14][20, 14, 12,10, 8][12, 8, 6] [ 6, 4] [2] [0]
9: [72][56, 44,36, 32][42, 32,26, 24, 24, 20, 18][30,22,18, 16,14,12] [20,14, 12, 10, 8] [12, 8, 6] [6, 4] [2] [0]
...
```

Row n=10 with 42 entries is: [90] [72, 58, 48, 42, 40] [56, 44, 36, 32, 34, 28, 26, 24] [42, 32, 26, 24, 24, 20, 18, 18, 16] [30, 22, 18, 16, 14, 12, 10] [20, 14, 12, 10, 8] [12, 8, 6] [6, 4] [2] [0]

The corresponding (rational) probabilities are (in lowest terms):

```
n\k 1    2    3      4     5     6      7     8     9    10    11   12    13    14    15   16    17    18     19    20     21   22 ...
1: [0]
2: [1]  [0]
3: [1] [1/3] [0]
4: [1] [1/2, 1/3]  [1/6]  [0]
5: [1] [3/5, 2/5]  [3/10, 1/5] [1/10]  [0]
6: [1] [2/3, 7/15,  2/5] [2/5,  4/15,  1/5] [1/5, 2/15][1/15] [0]
7: [1] [5/7, 11/21, 3/7][10/21, 1/3,   2/7, 5/21] [2/7, 4/21, 1/7] [1/7, 2/21] [1/21] [0]
8: [1] [3/4, 4/7,  13/28, 3/7] [15/28,11/28, 9/28, 2/7, 1/4] [5/14, 1/4, 3/14, 5/28, 1/7] [3/14, 1/7, 3/28] [3/28, 1/14] [1/28] [0]
...
```

Row n=9 with 30 entries is: [1] [7/9, 11/18, 1/2, 4/9] [7/12, 4/9, 13/36, 1/3, 1/3, 5/18, 1/4] [5/12, 11/36, 1/4, 2/9, 7/36, 1/6] [5/18, 7/36, 1/6, 5/36, 1/9] [1/6, 1/9, 1/12] [1/12, 1/18] [1/36] [0].

Row n=10 with 42 entries is: [1], [4/5, 29/45, 8/15, 7/15, 4/9], [28/45, 22/45, 2/5, 16/45, 17/45, 14/45, 13/45, 4/15], [7/15, 16/45, 13/45, 4/15, 4/15, 2/9, 1/5, 1/5, 8/45], [1/3, 11/45, 1/5, 8/45, 7/45, 2/15, 1/9], [2/9, 7/45, 2/15, 1/9, 4/45], [2/15, 4/45, 1/15], [1/15, 2/45], [1/45], [0].