﻿Pattern

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(a) (b) (c) (d)

Hints: On the diagonal, row = col. On the opposite diagonal, row + col = size + 1.

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(e) (f) (g) (h) (i)

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(j) (k) # # # # # # # # #

# # # # # # #

# # # # #

# # #

#

(l)

1 1 2 3 4 5 6 7 8 1 8 7 6 5 4 3 2 1

1 2 1 2 3 4 5 6 7 2 1 7 6 5 4 3 2 1

1 2 3 1 2 3 4 5 6 3 2 1 6 5 4 3 2 1

1 2 3 4 1 2 3 4 5 4 3 2 1 5 4 3 2 1

1 2 3 4 5 1 2 3 4 5 4 3 2 1 4 3 2 1

1 2 3 4 5 6 1 2 3 6 5 4 3 2 1 3 2 1

1 2 3 4 5 6 7 1 2 7 6 5 4 3 2 1 2 1

1 2 3 4 5 6 7 8 1 8 7 6 5 4 3 2 1 1

(m) (n) (o) (p)

1 1 2 3 4 5 6 7 8 7 6 5 4 3 2 1

1 2 1 1 2 3 4 5 6 7 6 5 4 3 2 1

1 2 3 2 1 1 2 3 4 5 6 5 4 3 2 1

1 2 3 4 3 2 1 1 2 3 4 5 4 3 2 1

1 2 3 4 5 4 3 2 1 1 2 3 4 3 2 1

1 2 3 4 5 6 5 4 3 2 1 1 2 3 2 1

1 2 3 4 5 6 7 6 5 4 3 2 1 1 2 1

1 2 3 4 5 6 7 8 7 6 5 4 3 2 1 1

(q) (r)

1 1 1 2 3 4 5 6 7 8 7 6 5 4 3 2 1

1 2 2 1 1 2 3 4 5 6 7 7 6 5 4 3 2 1

1 2 3 3 2 1 1 2 3 4 5 6 6 5 4 3 2 1

1 2 3 4 4 3 2 1 1 2 3 4 5 5 4 3 2 1

1 2 3 4 5 5 4 3 2 1 1 2 3 4 4 3 2 1

1 2 3 4 5 6 6 5 4 3 2 1 1 2 3 3 2 1

1 2 3 4 5 6 7 7 6 5 4 3 2 1 1 2 2 1

1 2 3 4 5 6 7 8 7 6 5 4 3 2 1 1 1

(s) (t)

1

2 3 2

3 4 5 4 3

4 5 6 7 6 5 4

5 6 7 8 9 8 7 6 5

6 7 8 9 0 1 0 9 8 7 6

7 8 9 0 1 2 3 2 1 0 9 8 7

8 9 0 1 2 3 4 5 4 3 2 1 0 9 8

(u)

Triangle

1

1 2 1

1 2 4 2 1

1 2 4 8 4 2 1

1 2 4 8 16 8 4 2 1

1 2 4 8 16 32 16 8 4 2 1

1 2 4 8 16 32 64 32 16 8 4 2 1

1 2 4 8 16 32 64 128 64 32 16 8 4 2 1

(a) PowerOf2Triangle

1 1

1 1 1 1

1 2 1 1 2 1

1 3 3 1 1 3 3 1

1 4 6 4 1 1 4 6 4 1

1 5 10 10 5 1 1 5 10 10 5 1

1 6 15 20 15 6 1 1 6 15 20 15 6 1

(b) PascalTriangle1 (c) PascalTriangle2