VSEBINA

V tekstu je predstavljena nova metoda, s katero lahko preštevamo številne razrede stolpčno konveksnih poligonov, glede na vrednosti parametrov, kot sta širina in ploščina.
Prvi korak metode je določitev funkcionalnih enačb, ki jim zadoščajo rodovne funkcije preučevanega razreda poligonov.
Drugi korak predstavlja rešitev dobljenih enačb.
Opisano metodo uporabimo za preštevanje paralelogramskih, usmerjenih konveksnih, konveksnih, stolpčno konveksnih in usmerjenih stolpčno konveksnih poligonov.

Math. Subj. Class. (1991): 05A15
Key words: enumeration, column-convex polygons, directed polyominoes, generating function, stack polygons, area, width, left height, right height.

5. LITERATURA

[1] Mireille Bousquet-Melou, A method for the enumeration of various classes of column-convex polygon, *Discrete Mathematics 154* (1996) str. 1-25.

[2] Mireille Bousquet-Melou in Jean-M-arc Fedou, The generating function of convex polyominoes: the resolution of a q-differential system, *Discrete Mathematics 137* (1995), str. 53-75.

[3] D.A. Klarner and R.L. Rivest, A Procedure for improving the upper bound for the number of n-ominoes, *Can. J. Math. 25* (1973) 585-602.

[4] S. Feretić, D. Svrtan, On the number of coumn-convex polyominoes with given parimeter and number of columns, in:A. Barlotti, M. Delest and R. Pinzani eds., *Proc. 5th Conf. Formal Power Series and Algebraic Combinatorics, Florence*, Italy (June 1993).

[5] D.A. Klarner and R.L. Rivest, Asxmptotic bounds for number of convex n-ominoes, *Discrete Math. 8* (1974) 31-40.

[6] M.-P. Delest and J.-M. Fedou, Enumeration of skew Ferrers diagrams, *Discrete Math. 112* (1993) 65-79.

[7] M. Bousquet-Melou and X.G. Viennot, Empilements de segments et q-enumeration de polyominos convexes diriges, *J. Combin. Theory Ser. A 60* (1992) 196-224.

[8] K.Y.Lin and S.J. Chang, Rigorous results for the number od convex polygons on the square and honeycomb lattices, *J.Phys. A: Math. Gen. 21* (1988) 2635-2642.

[9] M.-P. Delest and S. Dulucq, Enumeration of directed comn-convex animals by perimeter and area, *Croatica Chemica Acta 66* (1993) 59-80.

[10] K.Y.Lin, Exact solution of the convex polygon perimeter and area generating function, *J. Phys. A: Math. Gen. 24* (1991) 2411-2417.

[11] M.-P. Delest and G. Viennot, Algebraic languages and polyominoes enumeration, *Theoret. Comput. Sci. 34* (1984) 169-206.

[12] M.-P. Delest, Generation function for column-convex polyominos, *J. Combin. Theory Ser. A 48* (1988) 12-31.

[13] R. Brak, A.J. Guttmann and I.G. Enting, Exact solution of the row-convex polygon perimeter generating function, *J. Phys. A: Math. Gen. 23* (1990) 2319-2326.