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CONTENTS WITH ABSTRACT

Abstract: The main purpose of this paper is to show that the sequence space $\ell_{\triangle}(p_n)$ studied in [9], where (p_n) is a bounded sequence of positive real numbers is k-nearly uniformly convex (k-NUC) for $k \geq 2$ when $\liminf_{n \longrightarrow \infty} p_n > 1$. Therefore it is fully k-rotund (kR), NUC and has a drop property.

Abstract: The purpose of this paper is to establish a strong convergence of an implicit iteration process to a common fixed point for three continuous strongly pseudocontractive mappings. The results presented in this paper extend and improve the corresponding results of [14-15, 20].

Abstract: In this paper, the authors introduce and study the classes $S^*_{s,n}(\omega)T(\omega,\alpha,\beta)$, $S^*_{c,n}(\omega)T(\omega,\alpha,\beta)$ and $S^*_{sc,n}(\omega)T(\omega,\alpha,\beta)$ consisting of analytic functions with negative coefficients defined by using Sălăgean derivative operator. These classes are respectively, n-ω-starlike with respect to symmetric points, n-ω-starlike with respect to conjugate points and n-ω-starlike with respect to symmetric conjugate points. Properties such as coefficient estimates, distortion theorem, extreme points, Radius theorem, and the consequences of the parametrics involved are discussed.

Abstract: A monotonicity Theorem for AC_kG function is given by using higher order approximate derivative

Abstract: In this paper, we introduce the generalized class $S^n_j(p,q,\alpha;A,B)$ of analytic and p-valent functions with negative coefficients defined by the operator $D^n_p f^{(q)}(z)$. We give some properties of functions in this class and obtain numerous sharp results including (for example) coefficient estimates, distortion theorem, radii of starlikeness, convexity, close-to-convexity and modified-Hadamard products of functions belonging to this class. Finally, several applications involving an integral operator and certain fractional calculus operators are also considered.

Abstract: In this paper, we find several new modular relations connecting $\xi(q)$ with $\xi(q^3)$, $\xi(q^5)$, $\xi(q^7)$, $\xi(q^9)$, $\xi(q^{11})$ and $\xi(q^{13})$, where $\xi(q)$ is the parameter associated with Ramanujan's cubic continued fraction introduced by Mahadeva Naika.

Abstract: The concept of dom-color number of a graph was introduced by Arumugam, Sahul Hamid and Muthukamatchi [1]. The dom-color number $d_\chi(G)$ is the maximum number of color classes which are dominating sets of G, where the maximum is taken over all k-colorings of G. In this paper we have characterized a family of graphs with $d_\chi(G) = 1$ and also graphs with $\Delta(G) = n - 1$ and $\rho(G) = \beta_0(G)$. We find a relation between dom-color number and fall coloring number. We also show that edge stability number and edge subdivision number are one and the same.

Abstract: A fractional order Laplace equation is obtained from the standard Laplace equation by replacing the integer order partial derivatives by fractional Riesz-Feller derivative and Caputo

derivative. The exact solution (Green function) to the fractional Laplace equation described as a Cauchy problem is obtained by using Laplace and Fourier transforms. Starting from its Fourier-Laplace representation, the exact solution is investigated with respect to its scaling and similarity properties. An exact solution in Mainardi function for the fractional Laplace equation is also derived as a special case. The existence of the Mellin-Barnes integral of the Mittag-Leffler and the Mainardi functions and the series representation of the H-function are also obtained.