Indian Journal of Mathematics
Volume 43, No. 3, 2001

CONTENTS

Abstract: In [9] Makowski and schinzel conjectured that the inequality $(^*)\frac{\sum(\phi(n))}{n} \geq \frac{1}{2}$ holds for all positive integers $n \geq 1$. In this paper we give various sufficient conditions for a positive integer n to satisfy $(^*)$

Abstract: In this paper we give a proof of the following theorem: Let $\varphi(x_1, x_2, \ldots x_k)$ be a continuous real function on $\mathcal{R}^k$ which is non decreasing in each variable and increasing in the first one and $\varphi(x, x, \ldots x) \leq x$, for every $x \in R$. If (a_n) is a bounded sequence which satisfies the inequality

$$a_{n+k} \leq \varphi(a_{n+k-1}, a_{n+k-2,\ldots a_n}) \quad \text{for} \quad n \in N \cup \{0\}\,.$$

then it must be convergent.

Abstract: Let A be a cross-convolution and define the functions f_A and $f^{(}*)$ by $f_A(n) = \sum_{d/n,(d,n)=1} h(d)(n/d)^s$, where g and h are bounded arithmetical functions, g is multiplicative and $r, s > 0$. In this paper we establish an asymptotic formula for $\sum_n \leq x f_A(n) f^*(n)$ which extends and improves known results.

Abstract: Sufficient conditions have been obtained for oscillation of solutions of a class of linear hyperbolic differential equations of neutral type with variable co-efficients and Neumann boundary conditions. Unlike earlier studies, the problem cannotbe reduced to a neutral differential inequality which does not admit a positive solutions.

Abstract: In this paper we prove a fixed theorem for nonexpansive multivalued mapping in a complete metric space.

Abstract:???

Fang Mingliang And Yuan Wenjun

On The Normality For Families Of Meromorphic Functions* 341-351

Abstract: For families of meromorphic functions in a domain, three criteria for normality are proved in this paper.

P. N. Natarajan

Matrix Transformations Between certain Sequence Spaces Over Valued Fields II 353-358

Abstract: In this present paper, K denotes a complete non-trivally valued field. If $A = (a_{nk}), a_{nk} \in k, n, k = 1, 2, \ldots$ is an infinite matrix, necessary and sufficient conditions for $A : c_0(p) \longrightarrow Q, A : c(p) \longrightarrow A, A : l_\infty \longrightarrow Q$ are obtained.

JYH-Chung Jeng And Young-Ye Huang

Some Best Approximation Theorems Of KY Fan Type 359-366

Abstract: We apply the KKM-map principle to obtain some best approximation theorems of Ky Fan type for both of single valued and multivalued continuous functions on closed convex subsets of a topological vector-space, Especially, in the setting of reflexive Branch space. Kapoor's result [5] is generalized.

Biswanath Garai, Chanda Bandyopadhyay And Chandan Chattopadhyay

Dense Sets And cd-spaces 367-372

Abstract: In this paper defining cd-space in terms of dense sets, we have characterized cd-spaces and studied different properties of

such spaces. Infact these spaces have been connected with spaces like resolvable, irresolvable, open hereditarily irresolvable, connected etc.

Abstract: A fixed point theorem is proved in a complete metrically convex metric space. Our result generalizes theorems of Assad [3] and Chatterjea [4].

Abstract: A common fixed point theorem involving six mappings is proved in compact metric spaces which is also used to prove yet another fixed point theorem concerning best approximation. In process result due to Brosowski, Singh, Hicks-Humphries and Saheb et al. are generalized and improved.

Abstract: Some Characterizations of compact and invertible weighted composition operators on the space of continuously differentiable functions are obtained in this paper.

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