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A. Grytczuk, F. Luca and M. Wójtowicz

SOME RESULTS ON $\sigma(\phi(n))$

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

Stevo Stević

A GENERALIZATION OF THE COPSON'S THEOREM CONCERNING SEQUENCES WHICH SATISFY A LINEAR INEQUALITY

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Let $\varphi(x_1, x_2, \dots, x_k)$ be a continuous real function on \mathcal{R}^k which is nondecreasing in each variable and increasing in the first one and $\varphi(x, x, \dots, x) \leq x$, for every $x \in \mathcal{R}$. If (a_n) is a bounded sequence which satisfies the inequality

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

then it must be convergent.

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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 Banach space. Kapoor's result [5] is generalized.**Biswanath Garai, Chhanda Bandyopadhyay
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Abstract: In this paper defining cd-spaces in terms of dense sets, we have characterized cd-spaces and studied different properties of such spaces. In fact these spaces have been connected with spaces like resolvable, irresolvable, open hereditarily irresolvable, connected, etc.**M. D. Khan and Rahul Bharadwaj**

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A FIXED POINT THEOREM VIA BEST APPROXIMATION

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