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K. C. Prasad and M. Lari

On a farey-like sequence

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A NOTE ON FIXED POINT IN COMPACT METRIC SPACES

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Abstract: In this paper two fixed point theorems in compact metric spaces have been established which generalize the results of G. Jungck (1976, 1979, 1988).

R. D. Giri and A. K. Modi

On theorems of Abu-khuzam and Quadri

177-183

Abstract: In this paper we generalize two results, one by Abu-Khuzam and other by Quadri. These are: (1) For all elements x,y,z of division ring R, if there exist positive integers m=m(x,y), n=n(x,y) such that $(a)(xy^m)^n-(y^mx)^n\in Z(R)(b)(xyz)^n-(zyx)^n\in Z(R)$, then R is commutative; (2) let n>1 be a fixed positive integers and R be a semi-prime ring which satisfies any one of the following identities;

(i)
$$[(xy)^n - x^n y^n, yx] = 0$$
,

$$(ii) \quad [(xy)^n - y^n x^n, yx] = 0$$

for all x, y in R. Then R is commutative.

D. K. Thakkar

ON MAXIMAL COUNTABLY COMPACT SPACES

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Abstract: It has been proved that the one point countable compactification of a usc space (i.e, a space in which convergent sequences have unique limits) is maximal countably compact if and only if the space is sequential. From this is deducd that a maximal countably compact space is always sequentially compact. This provides an affirmative answer to a question raised by D. E. Cameron.

G. N. Purohit and R. P. Patidar

STEADY FLOW AND HEAT TRANSFER BETWEEN TWO ROTATING DISCS OF DIFFERENT TRANSPIRATION

189-207

Abstract: The flow and heat transfer of a viscous incompressible fluid between two

coaxial infinite porous rotating discs has been considered for small cross flow Reynolds number. The discs are rotating with different angular velocities and the rate of injection of the fluid at one disc is different from the rate of suction at the other disc. The governing equation have been solved using regular perturbation technique, taking cross flow Reynolds number as perturbation parameter. Expressions for radial, transverse and axial velocities and temperature have been numerically worked out for different values of parameters involved in the solution. The Nusselt number and the skin-friction coefficientfor various cases have also been calculated at both the discs and the results are expressed in a tabular form.
