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P R O B L È M E S

P 330, R 2. One can easily prove the result using only set-theoretic topology ([1]).

VIII.2, p. 277, et X.2, p. 366.

([1]) C. Eberhart, *A unique factorization theorem for countable products of circles*, Fundamenta Mathematicae 61 (1968), p. 305-308; see the proof of Lemma 4.

P 333, R 2. The answer is affirmative ([2]).

VIII.2, p. 277, et X.2, p. 366.

([2]) D. G. Paulowich, *Weak contrability and hyperspaces*, Fundamenta Mathematicae 94 (1976), p. 29-35.

P 397, P 399 et P 401, R 2. The formulation of remark R 1 to these problems was inexact. It should have been added that the positive solution of the first two problems and the first part of the third, given by J. Osada, concerns only continuous measures on $\boldsymbol{T}$ (because the set of normal continuous measures on $\boldsymbol{T}$ is identical with $\operatorname{Rad} L_1(\boldsymbol{T})$).

P 399 has in general a negative solution: there exist a compact abelian group G and a normal measure μ on G such that $\mu+\tilde{\mu}\,(\tilde{\mu}(E) = \overline{\mu(-E)})$ is not even analytic. The following example was kindly submitted by Colin C. Graham ([3]).

We let μ' be any continuous probability measure on, say, $[0,1]$, and let Γ be the multiplicative group (of equivalence classes) of unimodular (a.e.) functions in $L^\infty(\mu')$. We give Γ the discrete topology and let $G = \hat{\Gamma}$. Let X be the maximal ideal space of $L^\infty(\mu')$. Then X is naturally embedded as a Kronecker subset in G. Since L^∞ is a semisimple C^*-algebra, L^∞ is isomorphic to $C(X)$, and so there is a probability measure μ on X such that $\hat{\mu}(\gamma) = \int \gamma\, d\mu'$ for all $\gamma \in \Gamma$. In view of $\{\int \gamma\, d\mu' : \gamma \in \Gamma\} = D$ (the closed unit disc), we have $\hat{\mu}(\Gamma) = D$, so μ is normal. Since X is a Kronecker set, the spectrum of $\frac{1}{2}(\mu+\tilde{\mu})$ contains i or $-i$ ([4]) whereas $\frac{1}{2}(\mu+\tilde{\mu})^{\wedge}$ is real valued on Γ.

X.1, 185, et XXXIV.1, p. 143.

([3]) Letter of March 25, 1977.

([4]) W. Rudin, *Fourier analysis on groups*, New York-London 1962; 5.3.3 and 5.3.4.

P 400, R 1. As follows immediately from the preceding remark, the answer is in general negative. Moreover, as Colin C. Graham has observed ([5]), it is negative for any non-discrete lca group G containing a Kronecker set.

Let μ be a continuous probability measure on a Kronecker set in G. Then μ and $\tilde{\mu}$ are analytic ([6]) but, by the argument used in the preceding remark, $\nu = \mu+\tilde{\mu}$ is not.

X.1, p. 185.

([5]) Letter of August 13, 1976.

([6]) W. Rudin, loc. cit. ([4]), 5.5.2 (b).

P 558, R 1. The answer is affirmative ([7]).

XV.2, p. 319.

([7]) J. Grispolakis and E. D. Tymchatyn, *Confluent mappings and acyclicity of Hausdorff continua*, Houston Journal of Mathematics (submitted).

P 681, R 1. H. Delange has noted that the function $(-1)^{w(n)}n$ can serve as a counterexample. The author of the problem wishes to add the additional condition: $f(n)$ positive.

XXI.1, p. 163.

P 729, R 3. In the only remaining case $m = 1$ the answer has been affirmative ([8]).

XXIII.1, p. 176, et XXVII.1, p. 162.

([8]) J. Grispolakis and E. D. Tymchatyn, *On the existence of arcs in rational curves II*, Fundamenta Mathematicae (submitted).

P 832, R 1. The problem turned to appear originally elsewhere ([9]). The answer is affirmative ([10]).

XXVII.2, p. 332.

([9]) W. R. R. Transue, B. Fitzpatrick, Jr., and J. W. Hinrichsen, *Concerning upper semi-continuous decomposition of irreducible continua*, Proceedings of the American Mathematical Society 30 (1971), p. 157-163.

([10]) J. W. Hinrichsen, *Concerning irreducible continua of higher dimension*, Colloquium Mathematicum 28 (1973), p. 227-230.

P 976, R 1. The answer is affirmative [11].

XXXV.2, p. 333.

[11] E. Abo-Zeid, *On σ-connected spaces*, this fascicle, p. 85-90.

P 989, R 1. All questions have positive answers [12].

XXXVI.1, p. 163.

[12] P. Głowacki, *On decomposition of pseudomeasures on some subsets of lca groups*, Colloquium Mathematicum 40 (1979) (to appear).

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P 1043 - P 1046. Formulés dans la communication *On collectionwise normality*.

Ce fascicule, p. 75.