

P R O B L È M E S

P 592, R 1. The answer is positive ⁽¹⁾.

XVII. 1, p. 164.

⁽¹⁾ Alan Zame, *On a problem of Narkiewicz concerning uniform distributions of sequences of integers*, this fascicle, p. 271-273.

P 689, R 2. The announced solution has already appeared in print⁽²⁾.

XXI. 2, p. 245, et XXIII. 2, p. 325.

⁽²⁾ T. Przymusiński, *Metrizability of inverse images of metric spaces under open perfect and 0-dimensional mappings*, this fascicle, p. 175-180.

W. WIĘSŁAW (WROCLAW)

P 762 et P 763. Formulés dans la communication *On some characterizations of the complex number field*.

Ce fascicule, p. 143 et 145.

WILLIAM E. DIETRICH, JR. (AUSTIN, TEXAS)

P 764. Formulé dans la communication *Dense decompositions of locally compact groups*.

Ce fascicule, p. 151.

A. LELEK (STOCKHOLM)

P 765. Formulé dans la communication *An example of a non-compact locally compact arcwise connected metric space with the fixed point property*.

Ce fascicule, p. 167.

E. D. TYMCHATYN (SASKATOON, SASKATCHEWAN)

P 766-P 769. Formulés dans la communication *Continua whose connected subsets are arcwise connected*.

Ce fascicule, p. 173 et 174.

WILLIAM J. GRAY (UNIVERSITY, ALABAMA)

P 770. Formulé dans la communication *On monotone mappings of continua*.

Ce fascicule, p. 188.

WARREN WHITE (RIO DE JANEIRO)

P 771. Formulé dans la communication *Characterizing the interval and the circle by compositions of functions*.

Ce fascicule, p. 189.

L. F. McAULEY (BINGHAMTON, N. Y.) AND B. L. McALLISTER (MONTANA)

P 772-P 774. Formulés dans la communication *A note on cyclic sub-element theory — Reducibility of local connectedness and local simple connectedness*.

Ce fascicule, p. 218.

J. PŁONKA (WROCLAW)

P 775. As is known, the maximal idempotent reduct of a non-trivial Boolean algebra is ternary ⁽³⁾. Is it true that every idempotent reduct of such an algebra is at most ternary? And more, is every reduct of such an algebra at most ternary?

New Scottish Book, Probl. 856, 12. 2. 1971.

P 776. Is it true that any reduct of an algebra with the property EIS (property of exchange of independence sets ⁽⁴⁾) has that property?

New Scottish Book, Probl. 857, 12. 2. 1971.

P 777. Is it true that the sum of a direct system of algebras ⁽⁵⁾ with the property EIS ⁽⁴⁾ has that property?

New Scottish Book, Probl. 858, 12. 2. 1971.

⁽³⁾ J. Płonka, *On idempotent reduct of Boolean algebra*. Algebra Universalis (in print). For the notions of the arity of an algebra and of a reduct see, e. g., K. Urbanik, *On some numerical constants associated with abstract algebras*, Fundamenta Mathematicae 59 (1966), p. 263, and 62 (1968), p. 201.

⁽⁴⁾ See E. Marczewski, *Independence in abstract algebras. Results and problemes*, Colloquium Mathematicum 14 (1966), p. 169-188, especially p. 174.

⁽⁵⁾ See J. Płonka, *On a method of construction of abstract algebras*, Fundamenta Mathematicae 61 (1968), p. 183-189.

S. HARTMAN (WROCLAW)

P 778. For a given set $E \subset \mathbb{Z}$ let $B(E)^-$ denote the uniform closure of the algebra $B(E)$ of restrictions $\hat{\mu} \upharpoonright E$, where $\hat{\mu}$ is the Fourier transform of a measure μ on a circle. A set $E \subset \mathbb{Z}$ is called of *type* I_0 if each function bounded on E can be extended to a function almost periodic on \mathbb{Z} . Does there exist a set E which is not of type I_0 but has the property that every function of $B(E)^-$ can be extended to an almost periodic function?

New Scottish Book, Probl. 859, 15. 2. 1971.

T. TRACZYK (WARSZAWA)

P 779. Let $A_{m,n}$ be a free Boolean m -algebra with n free generators where m and n are infinite cardinal numbers, and let X be an m -independent set of generators of $A_{m,n}^{(*)}$. Is X a set of free generators of $A_{m,n}$? The answer is positive in the case $m = \aleph_0$ and, more generally, if $A_{m,n}$ is a free m -representable Boolean algebra.

Letter of February 24, 1971.

(*) For definitions see R. Sikorski, *Boolean algebras*, 2nd ed., Berlin-Göttingen-Heidelberg-New York 1964.