have $x_{i+1} \in M_i$, $x_{i+1} \in M_{i+1}$, thus $M_i \cap M_{i+1} \neq \emptyset$, which means $(M_i, M_{i+1}) \in \mathcal{N}$, where $\mathcal{N}$ is the tolerance on $\mathfrak{M}_T$ defined above, for $i = 1, \ldots, n - 1$. This means that $(M_1, M_n) \in \mathscr{C}(\mathcal{N})$ and the sets M_1, M_{n-1} are contained in the same class of the partition hull of $\mathfrak{M}_T$. As $a = x_1 \in M_1$, $b = x_n \in M_{n-1}$, the elements a, b are in the same class of the partition hull of $\mathfrak{M}_T$. As a and b were chosen arbitrarily, each equivalence class of $C(T)$ is contained in a class of the partition hull of $\mathfrak{M}_T$. Now let $c \in M$, $d \in M$ and let c and d be contained in the same class of the partition hull of $\mathfrak{M}_T$. Then there exist sets $M'_1, \ldots, M'_n$ of $\mathfrak{M}_T$ such that $c \in M'_1$, $d \in M'_n$ and $M'_i \cap M'_{i+1} \neq \emptyset$ for $i = 1, \ldots, n - 1$. For each i from the numbers $1, \ldots, n - 1$ we choose an element $y_i \in M'_i \cap M'_{i+1}$. We have $c\, T\, y_1$, $y_n\, T\, d$ and $y_i\, T\, y_{i+1}$ for $i = 1, \ldots, n - 1$. Thus $c\, C(T)\, d$. As c and d were chosen arbitrarily, each class of the partition hull of $\mathfrak{M}_T$ is contained in an equivalence class of $C(T)$. The assertion is proved.

References

[1] *G. Birkhoff:* Lattice Theory, Amer. Math. Soc. New York 1940.

[2] *G. Birkhoff:* On the structure of abstract algebras. Proc. Cambridge Phil. Soc. *31* (1935), 433—454.

[3] *G. Birkhoff* and *J. Frink:* Representation of lattices by sets. Trans. Amer. Math. Soc. *64* (1948), 299—316.

[4] *N. Funayama* and *T. Nakayama:* On the distributivity of a lattice of lattice-congruences. Proc. Imp. Acad. Tokyo *18* (1942), 553—554.

[5] *G. Grätzer:* Universal Algebra, Van Nostrand Co., London 1968.

[6] *G. Grätzer:* Lattice Theory First Concepts and Distributive Lattices, Freeman and Co., San Francisco 1971.

[7] *I. Chajda* and *B. Zelinka:* Tolerance relations on lattices. Čas. pěstov. mat. *99* (1974), 394—399.

[8] *I. Chajda* and *B. Zelinka:* Compatible relations on algebras. Čas. pěstov. mat. *100* (1975), 355—360.

[9] *I. Chajda* and *B. Zelinka:* Weakly associative lattices and tolerance relations. Czech. Math. J. *26* (1976), 259—269.

[10] *I. Chajda, J. Niederle* and *B. Zelinka:* On existence conditions for compatible tolerances, Czech. Math. J. *26* (1976), 304—311.

[11] *G. Szász:* Introduction to Lattice Theory. Akadémiai Kiadó Budapest 1963.

[12] *E. C. Zeeman:* The topology of the brain and visual perception. In: The Topology of 3-Manifolds, ed. by M. K. Fort, pp. 240—256.

[13] *B. Zelinka:* Tolerance graphs. Comment. Math. Univ. Carol. *9* (1968), 121—131.

[14] *B. Zelinka:* Tolerance in algebraic structures. Czech. Math. J. *20* (1970), 179—183.

[15] *B. Zelinka:* Tolerance in algebraic structures II. Czech. Math. J. *25* (1975), 175—178.

Authors' addresses: I. Chajda, 750 00 Přerov, Tř. Lidových milicí 290; B. Zelinka, 461 17 Liberec, Komenského 2 (Katedra matematiky a deskriptivní geometrie VŠST).