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Principal congruences in De Morgan algebras. (English) Zbl 0595.06013
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It is shown that, for a Kleene algebra, the intersection of two principal congruences is always a principal congruence. However, an example is given to show that this need not be the case for a de Morgan algebra (of which Kleene algebras are a particular example). This answers a question of H. P. Sankappanavar (and T. S. Blyth and J. C. Varlet).

MSC:

[06D30](#) De Morgan algebras, Łukasiewicz algebras (lattice-theoretic aspects)
[06B10](#) Lattice ideals, congruence relations
[03G25](#) Other algebras related to logic

Cited in **8** Documents

Keywords:

[principal congruences](#); [Kleene algebras](#)

Full Text: [DOI](#)

References:

- [1] Burris, A Course in Universal Algebra (1981) · [doi:10.1007/978-1-4613-8130-3](#)
- [2] Blyth, Bull. Soc. Roy. Sci. Liege 53 pp 341– (1984)
- [3] Balbes, Distributive Lattices (1974)
- [4] DOI: [10.2307/1996955](#) · [Zbl 0291.08001](#) · [doi:10.2307/1996955](#)
- [5] Sankappanavar, in Mathematical Logic in Latin America pp 341– (1980)
- [6] Priestley, Ann. Discrete Math. 23 pp 39– (1984)
- [7] Cornish, Bull. Austral. Math. Soc. 16 pp 1– (1977)
- [8] DOI: [10.2307/2038700](#) · [Zbl 0269.06005](#) · [doi:10.2307/2038700](#)
- [9] Gratzer, Lattice Theory: First Concepts and Distributive Lattices (1971)
- [10] DOI: [10.2307/1993112](#) · [Zbl 0228.06003](#) · [doi:10.2307/1993112](#)
- [11] Davey, NATO Advanced Study Institutes Series pp 43– (1982)
- [12] Cornish, J. Austral. Math. Soc. Ser. A 27 pp 209– (1979)
- [13] DOI: [10.1112/blms/2.2.186](#) · [Zbl 0201.01802](#) · [doi:10.1112/blms/2.2.186](#)

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