

Chajda, Ivan; Länger, Helmut

Relatively pseudocomplemented posets. (English) Zbl 1463.06006
Math. Bohem. 143, No. 1, 89-97 (2018).

Summary: We extend the notion of a relatively pseudocomplemented meet-semilattice to arbitrary posets. We show some properties of the binary operation of relative pseudocomplementation and provide some corresponding characterizations. We show that relatively pseudocomplemented posets satisfying a certain simple identity in two variables are join-semilattices. Finally, we show that every relatively pseudocomplemented poset is distributive and that the converse holds for posets satisfying the ascending chain condition and one more natural condition. Suitable examples are provided.

MSC:

[06A11](#) Algebraic aspects of posets
[06A06](#) Partial orders, general
[06D15](#) Pseudocomplemented lattices

Cited in **2** Documents

Keywords:

relatively pseudocomplemented poset; join-semilattice; distributive poset

Full Text: [DOI](#)