Some properties of generalized semirings

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ABSTRACT.

The purpose of this article is to define, illustrate and study a generalization of the semirings by replacement the binary additive and multiplicative operations by others, n-ary respectively m-ary. The connections between the properties of congruences and ideals of (n, m)-semirings and the corresponding properties of its $(n, 2)$-reduces are investigated.

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