Zerosumfree monoid

In abstract algebra, an additive monoid $(M, 0, +)$ is said to be **zerosumfree**, **conical**, **centerless** or **positive** if nonzero elements do not sum to zero. Formally:

$$(\forall a, b \in M)\ a + b = 0 \implies a = b = 0$$

This means that the only way zero can be expressed as a sum is as $0 + 0$.

1 References

- Wehrung, Friedrich (1996). "Tensor products of structures with interpolation". *Pacific Journal of Mathematics* **176** (1): 267–285. Zbl 0865.06010.

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2.1 Text

- **Zerosumfree monoid** *Source:* https://en.wikipedia.org/wiki/Zerosumfree_monoid?oldid=622220752 *Contributors:* Cronholm144, Cydebot, Pascal.Tesson, David Eppstein, Jeepday, Classicalecon, Piano non troppo, Erik9bot, Qetuth, Deltahedron and Anonymous: 2

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