

associator*

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Let A be a non-associative algebra over a field. The *associator* of A , denoted by $[, ,]$, is a trilinear map from $A \times A \times A$ to A given by:

$$[a, b, c] = (ab)c - a(bc).$$

Just as the commutator measures how close an algebra is to being commutative, the associator measures how close it is to being associative. $[, ,] = 0$ identically iff A is associative.

References

- [1] R. D. Schafer, *An Introduction on Nonassociative Algebras*, Dover, New York (1995).

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