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## modular law

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Let  $_RM$  be a left R-module with submodules A,B,C, and suppose  $C\subseteq B.$  Then

$$C + (B \cap A) = B \cap (C + A)$$

This result shows that the submodules of  $_RM$ , partially ordered by inclusion, form a modular lattice with  $\cap$  as the meet and + as the http://planetmath.org/Joinjoin.