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artinian

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A module  $M$  is *artinian* if it satisfies the following equivalent conditions:

- the descending chain condition holds for submodules of  $M$ ;
- every nonempty family of submodules of  $M$  has a minimal element.

A ring  $R$  is *left artinian* if it is artinian as a left module over itself (i.e. if  ${}_R R$  is an artinian module), and *right artinian* if it is artinian as a right module over itself (i.e. if  $R_R$  is an artinian module), and simply *artinian* if both conditions hold.