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overring

Canonical name Overring

Date of creation 2013-03-22 14:22:33 Last modified on 2013-03-22 14:22:33

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Numerical id 12

Author pahio (2872) Entry type Definition Classification msc 13B30

 $Related\ topic \qquad A Condition Of Algebraic Extension$

Let R be a commutative ring having regular elements and let T be the total ring of fractions of R. Then $R \subseteq T$. Every subring of T containing R is an *overring* of R.

Example. Let p be a rational prime number. The http://planetmath.org/PAdicValuationp integral rational numbers are the quotients of two integers such that the http://planetmath.org/Divisiondivisor is not divisible by p. The set of all p-integral rationals is an overring of \mathbb{Z} .