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Title:	Integral basis of pure prime degree number fields
Authors:	Jakhar, A. (/jspui/browse?type=author&value=Jakhar%2C+A.)
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Keywords:	Algebraic number theory
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	Integral
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Citation:	Indian Journal of Pure and Applied Mathematics, 50(2),pp. 309-314.
Abstract:	Let $K = \mathbb{Q}(\theta)$ be an extension of the field \mathbb{Q} of rational numbers where θ satisfies an irreducible polynomial $xp-a$ of prime degree belonging to $\mathbb{Z}[x]$. In this paper, we give explicitly an integral basis for K using only elementary algebraic number theory. Though an integral basis for such fields is already known (see [Trans. Amer. Math. Soc., 11 (1910), 388–392)], our description of integral basis is different and slightly simpler. We also give a short proof of the formula for discriminant of such fields.
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