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radical of an integer

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Defines	radical

Given a natural number n, let $n = p_1^{\alpha_1} \cdots p_k^{\alpha_k}$ be its unique factorization as a product of distinct prime powers. Define the of n, denoted $\mathrm{rad}(n)$, to be the product $p_1 \cdots p_k$. The radical of a square-free number is itself.