radical

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Defines	index
Defines	radical expression

The $\sqrt{}$ is called a *radical*. The of the radical symbol is the first letter "*r*" of the Latin *radix*, which "`http://planetmath.org/NthRoot`root".

There is other terminology that is related to radicals: In the expression $\sqrt[3]{x}$, x is the *radicand* and 3 is the *index*.

The index of a radical is usually an integer at least as large as two; however, if the index is two, it is usually not written. Moreover, if a radical does not have a written index, it is understood to be two, in which case the radical denotes a square root.

A *radical expression* is an expression that involves a radical.

One can use fractional powers instead of the radical symbol via $\sqrt[n]{x} = x^{\frac{1}{n}}$. This practice of avoiding the radical symbol may be due to typesetting issues.