

The Principal Square Root of Real Numbers

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$$\forall a \geq 0 \quad ,$$

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$$\forall a \geq 0 \quad , \quad \sqrt{a}$$

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$$\forall a \geq 0, \quad \sqrt{a} :$$

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$\forall a \geq 0$, \sqrt{a} : The positive square root of a

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$\forall a \geq 0$, \sqrt{a} : The positive square root of a
i.e.

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$\forall a \geq 0$, \sqrt{a} : The positive square root of a
i.e. $(\sqrt{a})^2 = a$

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$\forall a \geq 0$, \sqrt{a} : The positive square root of a
i.e. $(\sqrt{a})^2 = a$, $\sqrt{a} \geq 0$

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i :

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$\forall a \geq 0$, \sqrt{a} : The positive square root of a
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i : The imaginary unit

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$\forall a \geq 0$, \sqrt{a} : The positive square root of a
i.e. $(\sqrt{a})^2 = a$, $\sqrt{a} \geq 0$

i : The imaginary unit
Let $i = \sqrt{-1}$

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$$\forall a \in \mathbb{R} , \sqrt{a} = \begin{cases} \sqrt{a} \end{cases}$$

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i.e. $(\sqrt{a})^2 = a$, $\sqrt{a} \geq 0$

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$\forall a \in \mathbb{R}$, $\sqrt{a} = \begin{cases} \sqrt{a} & , \text{ if } a \geq 0 \end{cases}$

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