Square Root Calculator

Find the non-negative real square root of a number and check it by squaring the result. This is the principal root; an equation y^2 = x can also have the negative solution.

Formula: root = sqrtx; root * root = x

INPUTS AND EXAMPLE VALUES

Number: 81

CHECK THE DEFAULT EXAMPLE

Result: 9

LIMITS AND CONVENTIONS

Negative inputs require complex numbers, which this tool does not model.

Irrational roots are displayed as floating-point approximations.

METHOD AND SOURCES

https://azhanmh.com/guides/tools/square-root-calculator

OpenStax - Prealgebra 2e: numbers, fractions and percentages: https://openstax.org/books/prealgebra-2e/pages/1-introduction

Display precision is for reporting; keep unrounded values for later calculations. Verify units and conventions. This reference does not replace institution, employer or network rules.