Rectangle Calculator

Calculate area, perimeter and diagonal from two perpendicular side lengths. These equations require a rectangle, not an arbitrary quadrilateral.

Formula: area = a * b; perimeter = 2(a+b); diagonal = sqrt(a^2+b^2)

INPUTS AND EXAMPLE VALUES

First side: 3

Second side: 4

CHECK THE DEFAULT EXAMPLE

Area: 12

Perimeter: 14

Diagonal: 5

LIMITS AND CONVENTIONS

Both lengths must be positive and in the same unit.

Area uses squared units, while perimeter and diagonal use length units.

METHOD AND SOURCES

https://azhanmh.com/guides/tools/rectangle-calculator

OpenStax - Rectangles, areas and perimeters: https://openstax.org/books/prealgebra-2e/pages/9-4-use-properties-of-rectangles-triangles-and-trapezoids

OpenStax - Triangles and the Pythagorean theorem: https://openstax.org/books/prealgebra-2e/pages/9-3-use-properties-of-angles-triangles-and-the-pythagorean-theorem

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.