

The Design Recipe

Directions : Write a function `rect-perimeter` that takes in the length and width of a rectangle and returns the perimeter of that rectangle.

Contract and Purpose Statement

Every contract has three parts...

`rect-perimeter::` Number, Number \rightarrow Number
function name domain range

Takes in 2 numbers, length and width, and returns the double of the sum of both numbers
what does the function do?

Examples

Write some examples, then circle and label what changes...

examples:

`rect-perimeter` (10, 20) **is** $2 * (10 + 20)$
function name input(s) what the function produces

`rect-perimeter` (200, 350) **is** $2 * (200 + 350)$
function name input(s) what the function produces

end

Definition

Write the definition, giving variable names to all your input values...

fun `rect-perimeter`(length, width):
function name variable(s)

$2 * (length + width)$
what the function does with those variable(s)

end

Directions : Write a function `rectprism-vol` that takes in the length, width, and height of a rectangular prism and returns the Volume of a rectangular prism.

Contract and Purpose Statement

Every contract has three parts...

`rectprism-vol::` Number, Number, Number \rightarrow Number
function name domain range

Takes in 3 numbers, length, width, and height, and multiplies them to return that value
what does the function do?

Examples

Write some examples, then circle and label what changes...

examples:

`rectprism-vol` (10, 20, 30) **is** $10 * (20 * 30)$
function name input(s) what the function produces

`rectprism-vol` (100, 250, 350) **is** $100 * (250 * 350)$
function name input(s) what the function produces

end

Definition

Write the definition, giving variable names to all your input values...

fun `rectprism-vol`(length, width, height):
function name variable(s)

$length * (width * height)$
what the function does with those variable(s)

end