

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...

<code>; rect-perimeter:</code>	<code>Number Number</code>	<code>-></code>	<code>Number</code>
<i>function name</i>	<i>domain</i>		<i>range</i>

what does the function do?

Examples □

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

(EXAMPLE (rect-perimeter 10 20) (* 2 (+ 10 20)))

function name *input(s)* *what the function produces*

(EXAMPLE (rect-perimeter 200 350) (* 2 (+ 200 350)))

function name *input(s)* *what the function produces*

Definition

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

```
(define (rect-perimeter length width)
  (* 2 (+ length width)))
```

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...

<code>;rectprism-vol :</code>	<code>Number</code>	<code>Number</code>	<code>Number</code>	<code>-></code>	<code>Number</code>
<i>function name</i>	<i>domain</i>				<i>range</i>

; Takes in 3 numbers, length, width, and height, and multiplies them to return that value

Examples □

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

(EXAMPLE (rectprism-vol 10 20 30) (* 10 (* 20 30)))

function name *input(s)* *what the function produces*

(EXAMPLE (rectprism-vol 100 250 350) (* 100 (* 250 350)))

function name *input(s)* *what the function produces*

Definition

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

```
(define (rectprism-vol length width height)  
  (* length (* width height)))
```