

Check for Mistakes in this Word Problem: check-total

Directions: It is customary to tip 20% on a bill at a restaurant. Write a function that takes the total cost of the food and returns the new total including tip.

Contract and Purpose Statement

Every contract has three parts...

;

check-total

number

→

number

function name

domain

range

;

Returns the total of a check with 20% of the cost added

what does the function do?

Examples

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

(EXAMPLE (total 20) ) (20 (+ (0.2 \* 20) 20)) )

function name

input(s)

what the function produces

(EXAMPLE (total 56.67) )

function name

input(s)

output(s)

(56.67 (+ (0.2 \* 56.67) 56.67))

what the function produces

Definition

Use the definition, giving variable names to all your signal values...

(define (check-total food-total )

function name

variable

(+ (\* 0.2 food-total) food-total)

what the function does with these variables

)