

# 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) ) (56.67 (+ (0.2 \* 56.67) 56.67)) )  
function name input(s) what the function produces

## Definition



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

(define( check-total food-total )  
function name variables

(\* (+ 0.2 food-total) food-total) )  
what the function does with those variables