

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

## Definition

Write the definition, giving 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*