

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...

;	<u>check-total</u>	:	<u>number</u>	→	<u>number</u>
	<small>function name</small>		<small>domain</small>		<small>range</small>
;	<u>Returns the total of a check with 20% of the cost added</u>				
	<small>what does the function do?</small>				

Examples

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

(EXAMPLE(<u>(total 20)</u>)	<u>(20 (+ (0.2 * 20) 20))</u>)
	<small>function name</small>		<small>input(s)</small>	<small>what the function produces</small>
(EXAMPLE(<u>(total 56.67)</u>)		
	<small>function name</small>		<small>input(s)</small>	
			<u>(56.67 (+ (0.2 * 56.67) 56.67))</u>)
			<small>what the function produces</small>	

Definition

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

(define(<u>check-total</u>		<u>food-total</u>)
	<small>function name</small>		<small>variables</small>	
			<u>(* (+ 0.2 food-total) food-total)</u>)
			<small>what the function does with those variables</small>	