

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>
	<i>function name</i>		<i>domain</i>		<i>range</i>
<hr/>					
;	Returns the total of a check with 20% of the cost added				
	<i>what does the function do?</i>				

Examples

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

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

Definition

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

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