

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...

$$\begin{array}{ccc} \text{; check-total} & : & \text{number} \rightarrow \text{number} \\ \hline \text{function name} & & \text{range} \end{array}$$

```
; 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...

function name	input(s)	what the function produces
(EXAMPLE) (total 20)		(20 (+ (0.2 * 20) 20))

(EXAMPLE((total 56.67)))

function name input(s)

$$\frac{(56.67 + (0.2 * 56.67) 56.67))}{\text{what the function produces}}$$

Definition

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

```
(define( check-total food-total )
```

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

what the function does with these variables