

Check for Mistakes in this Word Problem: calc-pencils

Directions: All students are given five (5) pencils at the beginning of the school year. Write a function called *calc-pencils* that takes the number of students in the school and calculates the number of pencils needed for that school.

Contract and Purpose Statement

Every contract has three parts...

;	<u>calc-pencils</u>	:	<u>number</u>	→	<u>number</u>
	<i>function name</i>		<i>domain</i>		<i>range</i>
<hr/>					
;	Takes a number of students and gives the number of pencils				
	<i>what does the function do?</i>				

Examples

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

(EXAMPLE (<u>calc-pencils</u>	<u>100</u>)	(* 100 5))
	<i>function name</i>	<i>input(s)</i>		<i>what the function produces</i>	
<hr/>					
(EXAMPLE (<u>calc-pencils</u>	<u>40</u>)	(* 40 6))
	<i>function name</i>	<i>input(s)</i>		<i>what the function produces</i>	

Definition

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

(define (calculate-pencil	<u>p</u>)
	<i>function name</i>	<i>variables</i>
<hr/>		
	(* p 5))
	<i>what the function does with those variables</i>	