

Check for Mistakes in this Word Problem: circle-area

Directions: Write a function that returns the area of a circle given its diameter.

Contract and Purpose Statement

Every contract has three parts ...

;	<u>circle-area</u>	:	<u>number</u>	→	<u>number</u>
	<small>function name</small>		<small>domain</small>		<small>range</small>
;	<u>Takes the diameter of a circle and calculates the area by multiplying</u>				
	<small>what does the function do?</small>				

Examples

Write some examples of your function in action...

(EXAMPLE (<u>circle-area</u>	<u>10</u>)	(* (sqr (/ 10 2)) pi)
	<small>function name</small>	<small>input(s)</small>		<small>what the function produces</small>
(EXAMPLE (<u>circle-area</u>	<u>50</u>)	(* (sqr (/ 50 2)) pi)
	<small>function name</small>	<small>input(s)</small>		<small>what the function produces</small>

Definition

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

(define(<u>area</u>	<u>diameter</u>)
	<small>function name</small>	<small>variables</small>	
	<u>(* (sqr diameter) pi)</u>		
	<small>what the function does with those variables</small>		