

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 ...

; circle-area : number → number
function name *domain* *range*

; Takes the diameter of a circle and calculates the area by multiplying
what does the function do?

Examples

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

(EXAMPLE(circle-area 10) (* (sqr (/ 10 2)) pi))
function name *input(s)* *what the function produces*

(EXAMPLE(circle-area 50) (* (sqr (/ 50 2)) pi))
function name *input(s)* *what the function produces*

Definition

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

(define(area diameter)
function name *variables*

(* (sqr diameter) pi)
what the function does with those variables