

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 the square of the radius
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, given variable names to all your input values...

(define(area diameter)
function name variables

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