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