

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

argument

range

Takes the diameter of a circle and calculates the area by multiplying

the diameter by itself and then multiplying by pi.

Examples

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

EXAMPLE( circle-area

10

)

( \* (sqr (/ 10 2)) pi)

)

function name

argument

what the function produces

EXAMPLE( circle-area

50

)

( \* (sqr (/ 50 2)) pi)

)

function name

argument

what the function produces

Definition

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

(define( area

diameter

)

function name

variable

( \* (sqr diameter) pi)

)

Write the definition then circle these variables