

Check for Mistakes in this Word Problem: scale-image

Directions: Write a function which takes an image and a string, representing what to scale the image by. The function should return a smaller image if the string is 'smaller' and a bigger image if the string is 'bigger'.

Contract and Purpose Statement

Every contract has three parts...

; scale-image : image string → image
function name domain range

; Make the image bigger or smaller, depending on the given string
what does the function do?

Examples

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

(EXAMPLE(scale-image (circle 5 "solid" "red") "bigger") (circle 10 "solid" "red"))
function name input(s) what the function produces

(EXAMPLE(scale-triangle (triangle 20 "solid" "blue") "smaller")
(triangle 10 "solid" "blue"))
function name input(s) what the function produces

Definition

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

(define(scale-image original-image scale-factor)
function name variables

(cond

[(string=? scale-factor "bigger") (scale 2 original-image)]

[(string=? scale-factor "smaller") (scale 0.5 original-image)]

[else: original-image]))