

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...

<code>; scale-image :</code>	<code>image string</code>	→	<code>image</code>
function name	domain		
<code>; Make the image bigger or smaller, depending on the given string</code>			
<small>what does the function do?</small>			

Examples

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

<code>(EXAMPLE(scale-image (circle 5 "solid" "red") "bigger")</code>	<code>function name</code>	<code>input(s)</code>)
<code>(circle 10 "solid" "red")</code>			
<small>what the function produces</small>			
<code>(EXAMPLE(scale-triangle (triangle 20 "solid" "blue") "smaller")</code>	<code>function name</code>	<code>input(s)</code>)
<code>(triangle 10 "solid" "blue")</code>			
<small>what the function produces</small>			

Definition

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

<code>(define(scale-image original-image scale-factor)</code>	<code>function name</code>	<code>variables</code>)
<code>(cond</code>			
<code>[(string=? scale-factor "bigger") (scale 2 original-image)]</code>			
<code>[(string=? scale-factor "smaller") (scale 0.5 original-image)]</code>			
<code>[else original-image])</code>			