

## 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" )
   _____
   function name          input(s)

   (circle 10 "solid" "red")
   _____
   what the function produces

(EXAMPLE( scale-triangle (triangle 20 "solid" "blue") "smaller" )
   _____
   function name          input(s)

   (triangle 10 "solid" "blue")
   _____
   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 ]))
```