

# What's Wrong with these Recipes? 6

**Directions:** Write a function that 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...

**examples:**

scale-image ("circle(5, \"solid\", \"red\"), \"bigger\")  
function name input(s)  
is circle(10, \"solid\", \"red\")  
function name what the function produces input(s)  
scale-image (\"triangle(20, \"solid\", \"blue\"), \"smaller\")  
function name what the function produces input(s)  
ends triangle(10, \"solid\", \"blue\")  
what the function produces

## Definition

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

**fun** scale-image(original-image, scale-factor):  
function name variable(s)

**ask:**

| scale-factor == \"bigger\" **then:** scale(2, original-image)

| scale-factor == \"smaller\"

| then: scale(0.5, original-image)  
otherwise: original-image

**end**

**end**

**Directions:** Some states have different tax rates. New York is 8%, Pennsylvania is 3%, and Delaware is 0%. All other states are 5%. Write a function that takes in the price of an item and returns how much the tax will be on the item.

## Contract and Purpose Statement

Every contract has three parts...

# state-tax:: String -> Number  
function name domain range

# Given the state and an item's price, return the tax on that item

what does the function do?

## Examples

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

**examples:**

tax (\"Delaware\") **is** 0.0 + price  
function name input(s) what the function produces  
tax (\"Georgia\") **is** 0.05 + price  
function name input(s) what the function produces

**end**

## Definition

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

**fun** state-tax( state price ):  
function name variable(s)

**ask:**

| state == "Pennsylvania"      then: 0.03 \* price

| state == "New York"      then: 0.08 \* price

| state == "Delaware"      then: 0.0 \* price

| otherwise: 0.05 \* price

end

end