

# The Design Recipe

**Directions:** A dot is a solid circle of radius 50. Define a function called `dot`, which makes dots of any color it is given

## Contract and Purpose Statement

Every contract has three parts...

# dot:: (color :: String) -> Image

function name domain range

# Consumes a color, and produces a solid, 50px-radius circle of that color.

what does the function do?

## Examples

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

**examples:**

dot ( "red" ) is circle(50, "solid", "red")

function name input(s) what the function produces

dot ( "blue" ) is circle(50, "solid", "blue")

function name input(s) what the function produces

end

## Definition

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

**fun** dot( color ):

function name variable(s)

circle(50, "solid", color)

what the function does with those variable(s)

end

**Directions:** A gym membership costs \$25/month, with a one-time \$75 signing fee. Define a function `membership` that computes the total cost of a membership for a given number of months.

## Contract and Purpose Statement

Every contract has three parts...

# membership:: (months :: Number) -> Number

function name domain range

# Consumes a number of months, and produces the total cost of a membership given a signing fee of \$75 and \$25/month.

what does the function do?

## Examples

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

**examples:**

membership ( 5 ) is (5 \* 25) + 75

function name input(s) what the function produces

membership ( 16 ) is (16 \* 25) + 75

function name input(s) what the function produces

end

## Definition

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

**fun** membership( months ):

function name variable(s)

(months \* 25) + 75

what the function does with those variable(s)

end