**Unit 1.5 - Worksheet 3**

**Working with Functions in Pyret – part 1**

1. Draw a square with side lengths 2 cm.

1. Determine the perimeter of the square. Show your work.

1. Draw a square with side lengths 3 cm.

1. Determine the perimeter of the square. Show your work.

1. Draw a square with sides of length ‘l’.

1. Determine the perimeter of the rectangle. Show your work.

# Design Recipe Worksheet

Purpose of this function is to calculate the perimeter of a square.

## Contract+Purpose Statement

Every contract has three parts:

# \_perimeter-square : \_Number\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ → \_\_Number\_\_\_\_\_\_\_\_\_\_\_\_

name Domain Range

# Consumes a side length and produces the perimeter of a square. What does the function do?

## Give Examples

Write examples of your function in action

examples:

\_\_\_perimeter-square(2)

the function application…

is *2 \* 4*-\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

...which evaluates to

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_)

the function application…

is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

...which evaluates to

end

## Function

Find the changes in the examples, and name the variables.

Write the code, copying everything that isn't circled, and using names where you find variables!

fun \_\_perimeter-square(side):

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

end

1. Draw a square with side lengths 2 cm.

1. Determine the area of the square. Show your work.

1. Draw a square with side lengths 3 cm.

1. Determine the area of the square. Show your work.

1. Draw a square with sides of length ‘l’.

1. Determine the area of the rectangle. Show your work.

# Design Recipe Worksheet

Purpose of this function is to calculate the area of a square.

## Contract+Purpose Statement

Every contract has three parts:

# \_\_\_\_\_\_\_\_\_\_\_\_\_\_ : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ → \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

name Domain Range

# \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ What does the function do?

## Give Examples

Write examples of your function in action

examples:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_)

the function application…

is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

...which evaluates to

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_)

the function application…

is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

...which evaluates to

end

## Function

Find the changes in the examples, and name the variables.

Write the code, copying everything that isn't circled, and using names where you find variables!

fun \_\_\_\_\_\_\_\_\_\_\_\_:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

end