**Unit 1.5 - Worksheet 3a**

**Working with Functions in Pyret – part 2**

1. Draw a rectangle with side lengths 2 cm by 3 cm.

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

1. Draw a rectangle with side lengths 3 cm by 5 cm.

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

1. Draw a rectangle with sides of length ‘l’ and width ‘w’.

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

# Design Recipe Worksheet

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

## Contract+Purpose Statement

Every contract has three parts:

# \_perimeter-rectangle\_ : Number, Number → \_\_\_Number\_\_\_\_\_\_\_

name Domain Range

# Consumes a *length* and a *width* of a rectangle and produces the perimeter of a rectangle.

What does the function do?

## Give Examples

Write examples of your function in action

examples:

\_perimeter-rectangle(4, 3)

the function application…

is \_\_\_2 \* (4 + 3)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

...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-rectangle(length, width):

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

end

1. Draw a rectangle with side lengths 2 cm by 3 cm.

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

1. Draw a rectangle with side lengths 3 cm by 5 cm.

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

1. Draw a rectangle with sides of length ‘l’ and width ‘w’.

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

# Design Recipe Worksheet

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

## 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