

# Word Problem: next-position

Write a function *next-position*, which takes in two numbers (an x and y-coordinate) and returns a *DeliveryState*, increasing the x-coordinate by 5 and decreasing the y-coordinate by 5.

## Contract+Purpose Statement

Every contract has three parts:

# next-position : : Number, Number  $\rightarrow$  DeliveryState  
name Domain Range

# Consumes x and y coordinates and produces a *DeliveryState* by adding 5 to x and subtracting 5 from y What does the function do?

## Give Examples

Write examples of your function in action

examples:

next-position ( 30, 250 ) is  
the user types...

delivery(30 + 5, 250 - 5)  
...which should become

next-position ( 65, 800 ) is  
the user types...

delivery(65 + 5, 800 - 5)  
...which should become

end

## Function

Circle 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 next-position ( x, y ) :

delivery(x + 5, y - 5)

end