The Design Recipe

For the word problems below, assume you have `animalA` and `animalB` defined in your code.

Directions: Define a function called `kilos`, which consumes a Row of the animals table and divides the pounds column by 2.2 to *compute* the animal's weight in kilograms.

Contract and Purpose Statement

Every contract has three parts…

```
# kilos:: (r :: Row) -> Number
```
function name | *domain* | *range*

```
# Consumes an animal, and computes the animal's weight in kilos
```
what does the function do?

Examples

Write some examples, then circle and label what changes…

examples:

```
kilos ( "animalA" ) is animalA["pounds"] / 2.2
```
function name | *input(s)* | *what the function produces*

```
kilos ( "animalB" ) is animalB["pounds"] / 2.2
```
function name | *input(s)* | *what the function produces*

end

Definition

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

```
fun kilos( r ):
```
function name | *variable(s)*

```
  r["pounds"] / 2.2
```
what the function does with those variable(s)

end

Directions: Define a function called `smart-dot`, which consumes a Row of the animals table and *computes* the image of a solid red circle using the animal's `pounds` as the radius.

Contract and Purpose Statement

Every contract has three parts…

```
# smart-dot:: (r :: Row) -> Image
```
function name | *domain* | *range*

```
# Consumes an animal, and computes a solid red circle using the weight in pounds as the radius
```
what does the function do?

Examples

Write some examples, then circle and label what changes…

examples:

```
smart-dot ( "animalA" ) is circle(animalA["pounds"], "solid", "red")
```
function name | *input(s)* | *what the function produces*

```
smart-dot ( "animalB" ) is circle(animalB["pounds"], "solid", "red")
```
function name | *input(s)* | *what the function produces*

end

Definition

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

```
fun smart-dot( r ):
```
function name | *variable(s)*

```
  circle(r["pounds"], "solid", "red")
```
what the function does with those variable(s)

end