

# functions.Rmd

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## Exercise 1

```
convert_pounds_to_grams <- function(pounds) {  
  grams = 453.6 * pounds  
  return(grams)  
}  
convert_pounds_to_grams(3.75)
```

- a) convert\_pounds\_to\_grams is a function of pounds converted into grams
- b)
- c)

## Using and Modifying functions

```
get_mass_from_length_theropoda <- function(length){  
  mass <- 0.73 * length ^ 3.63  
  return(mass)  
}  
get_mass_from_length_theropoda(16)
```

## Create new version of this function

```
get_mass_from_length <- function(length){  
  mass <- 214.44 * length ^ 1.46  
  return(mass)  
}  
get_mass_from_length(26)
```

## Introductory Section

Functions allow for the creation of modular code, which makes it easier to manage. Functions can be reused in different parts of a data science project. Functions provide a way to abstract away the details of a complex algorithm or process.

## Exercise 3

```
get_mass_from_length <- function(length){  
  mass <- 214.44 * length ^ 1.46  
  return(mass)  
}  
get_mass_from_length(22)  
}  
get_mass_from_length <- function(length){  
  mass <- 39.9 * length ^ 2.6  
  return(mass)  
}  
get_mass_from_length(16)  
}
```

## Exercise 4

```
convert_kg_to_pounds <- function(kg){  
  pounds = 2.205 * kg  
  return(pounds)  
}  
convert_kg_to_pounds(50)  
  
get_mass_from_length <- function(length, a=10.95, b=2.64)  
  mass = a * length ** b  
  return(mass)  
}  
get_mass_from_length(12)  
}
```