

In the "Class Activity - Math 325 Setup Tutorial" you should have run three codes in your RStudio **Console**:

```
> View(cars)
> mean(cars$dist)
> plot(dist ~ speed, data=cars, col="sykblue", pch=16)
```

Let's begin understanding each of these codes a little more deeply, as well as a few other codes. Remember, as explained in the "Getting Started Tutorial" the three very important steps to learning how to use the R Statistical Programming language are (1) click,

(2) , and (3) .

Open your **Statistics Notebook** by locating the **index.html** file (just like you did in the class activity) and opening it.

- ☒ Got it.
- ☐ I'll email my teacher for help, or ask someone else. I'm not sure what this is asking me to do.

Then, mark off each of the following as you perform the requested action.

- ☒ Navigate to the "R Help -> R Commands" page of the Statistics Notebook.
- ☒ Go down to the "\$ The Selection Operator" portion of the "R Commands" page.
- ☒ Read about this operator. Study the three example Codes with the hover, click, and try process.

Now, let's see how you are doing with your understanding of the \$ selection operator. Open RStudio and compute the mean of the **Temp** column in the **airquality** data set. (Remember to use the "How Did I Do?" button to check your work.)

Answer. (Round to 1 decimal place.)

Good work.

Now, type **?airquality** into your Console. A help file for the airquality data set will appear. In that file, we learn that the **Temp** column records the "Maximum daily temperature in degrees Fahrenheit at ." (Type in the missing information using the help file.)

Let's say we wanted to create a new column in the **airquality** data set that showed **Temp** in degrees Celcius instead of degrees Fahrenheit. Mark off each of the following as you complete them in order to create this new column.

- ☒ Navigate to the "<- The Assignment Operator" on the "R Commands" page of your Statistics Notebook.
- ☒ Study the three codes within the Example Code. Remember, hover, click, and try the codes!

Follow the example codes to (1) create an airquality2 data set that is a copy of the airquality data set and (2) add a new

- ☒ column to the airquality2 data set called "Celcius" that converts Temp from degrees Fahrenheit (F) to Celcius (C) using the equation: **Celcius** = (**Temp** - 32) * 5/9. Don't forget to use airquality\$ appropriately in that equation!

To verify that you did things correctly, View(airquality2) and type in the first value showing under the new "Celcius" column.

Answer. (Round to 1 decimal place.)

Good work!

On to the next, and last, question for this quiz...