

# WISG19

*Rice & Reif*

*1/21/2019*

## R Markdown

This is an R Markdown document. Markdown is a simple formatting syntax for authoring HTML, PDF, and MS Word documents. For more details on using R Markdown see <http://rmarkdown.rstudio.com>.

When you click the **Knit** button a document will be generated that includes both content as well as the output of any embedded R code chunks within the document.

## Including Code Chunks

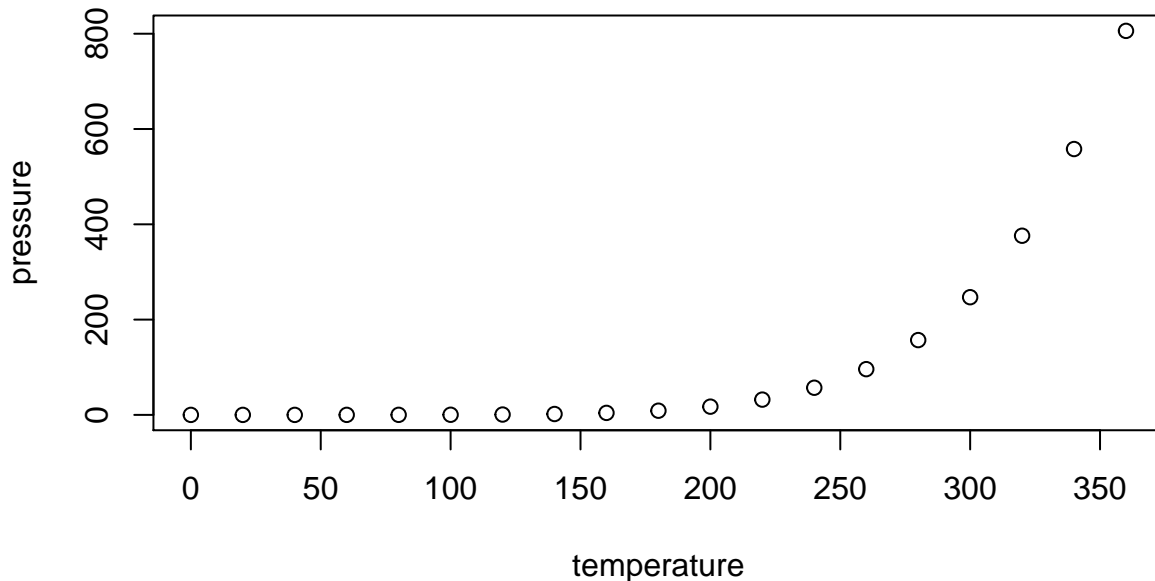
You can embed an R code chunk like this:

```
summary(cars)
```

```
##      speed      dist
## Min.   : 4.0    Min.   :  2.00
## 1st Qu.:12.0    1st Qu.: 26.00
## Median :15.0    Median : 36.00
## Mean   :15.4    Mean   : 42.98
## 3rd Qu.:19.0    3rd Qu.: 56.00
## Max.   :25.0    Max.   :120.00
```

## Including Plots

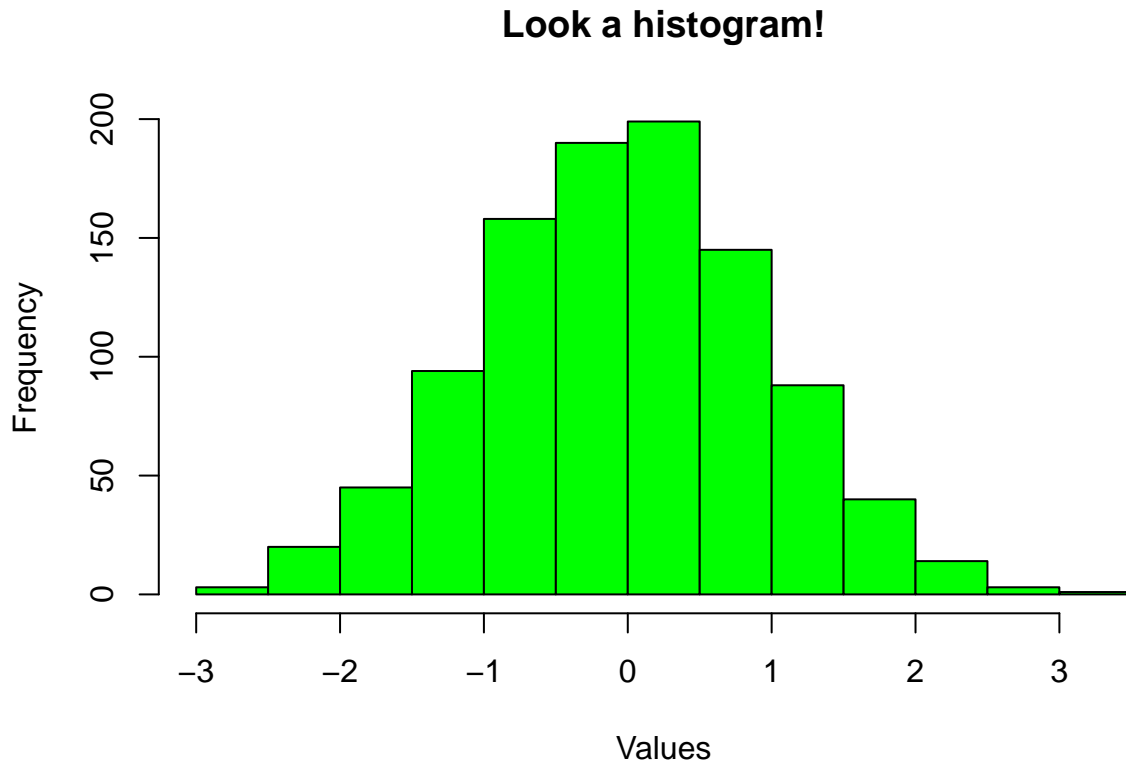
You can also embed plots. Note that the `echo = FALSE` parameter was added to the code chunk to prevent printing of the R code that generated the plot.



## Options for Combined Output

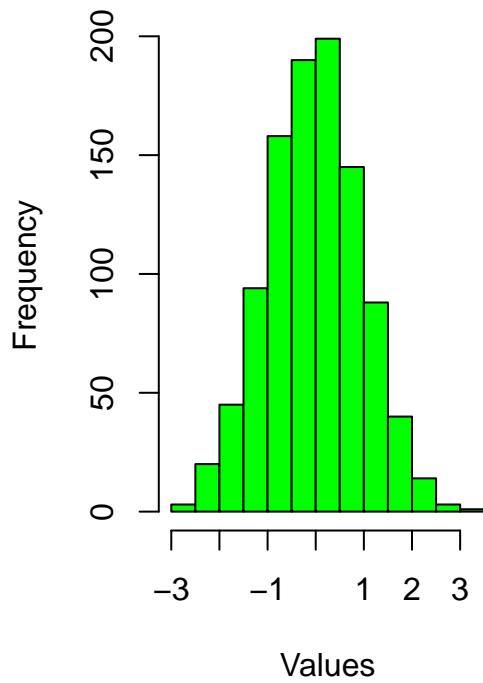
You can print your figures directly into the document, with or without showing the associated code.

```
set.seed(4)
vals <- rnorm(1000)
hist(vals, main = "Look a histogram!", xlab = "Values", col = "green")
```



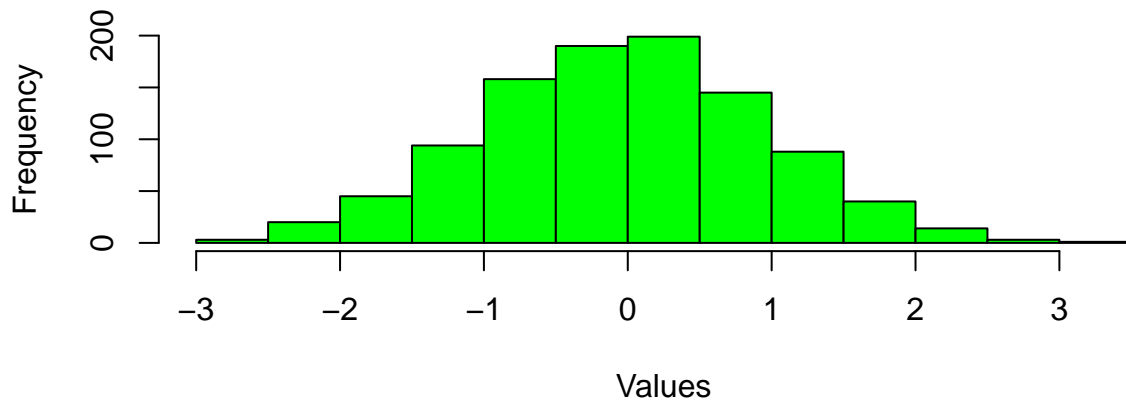
You can adjust the figure width using `fig.width`.

### Look a histogram!



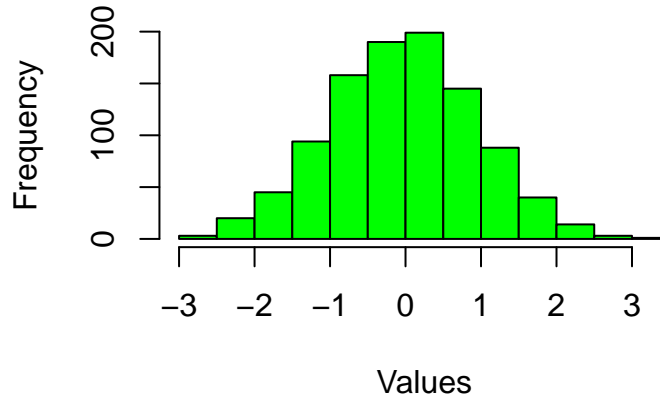
You can adjust the figure height using `fig.height`.

### Look a histogram!



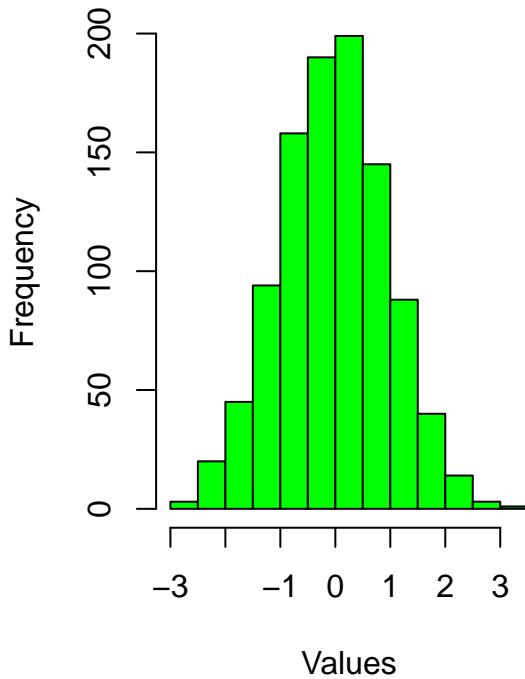
You can set the alignment using `“fig.align”`

### Look a histogram!

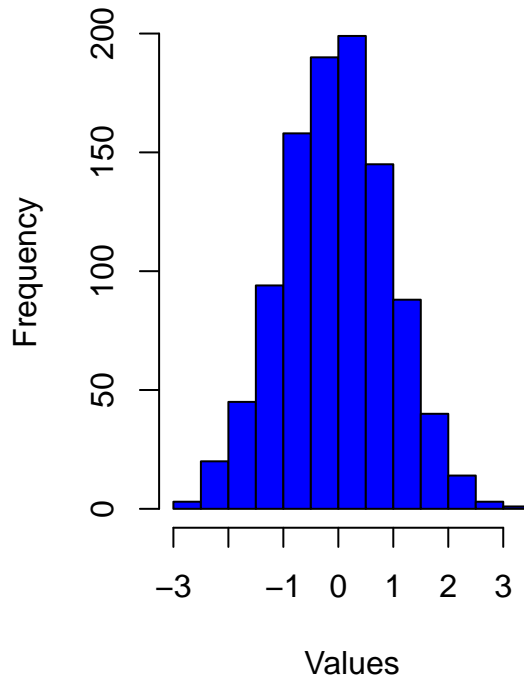


Take advantage of par options to print multiple figures in a layout.

### Look a histogram!



### Look another histogram!



### Math

If you want to include nicely formatted mathematical expressions inline with your text, use math text between dollar signs. For example,  $\sum_{i=1}^n x_i$ . This can be useful for printing special characters as well:  $\beta$ , *alpha*,  $\pm$ .

If you want the expression in display form, use two dollar signs.

$$\int_0^\infty \int_0^\infty \left( \frac{X_i}{Y_i} \right) dx dy$$