**R Code for Examples in the book**



***“Statistics: The Art and Science of Learning from Data”***

**by Agresti, Franklin and Klingenberg, 5th edition**

**Chapter 10**

**Example 7: Standard Error for the Difference of Two Sample Means**

## Reading in data

data <- read.csv(file='https://raw.githubusercontent.com/artofstat/data/master/Chapter10/text\_and\_graph.csv')

## To subset data to make the two groups

text\_and\_graph <- subset(data, Graph == 'Yes')  
text\_only <- subset(data, Graph == 'No')

## To find sample mean, sample standard deviation, and sample size

xbar\_1 <- mean(text\_and\_graph$Rating)  
xbar\_2 <- mean(text\_only$Rating)  
sd\_1 <- sd(text\_and\_graph$Rating)  
sd\_2 <- sd(text\_only$Rating)  
n\_1 <- length(text\_and\_graph$Rating)  
n\_2 <- length(text\_only$Rating)

## To compute the standard error for the difference

se <- sqrt((sd\_1 \*\* 2 / n\_1) + (sd\_2 \*\* 2 / n\_2))  
round(se, 3)

## [1] 0.335