



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

```
effectiveness <-  
read.csv(file='https://raw.githubusercontent.com/artofstat/data/master/Chapter10/text_and_graph.csv')
```

To subset data to make the two groups

```
textAndGraph <- subset(effectiveness, Graph == 'Yes')  
textOnly <- subset(effectiveness, Graph == 'No')
```

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

```
sd1 <- sd(textAndGraph $Rating)  
sd2 <- sd(textOnly$Rating)  
n1 <- length(textAndGraph$Rating)  
n2 <- length(textOnly $Rating)
```

To compute the standard error for the difference

```
se <- sqrt((sd1 ** 2 / n1) + (sd2 ** 2 / n2))  
round(se, 3)  
## [1] 0.335
```