

# Seven Deadly Six

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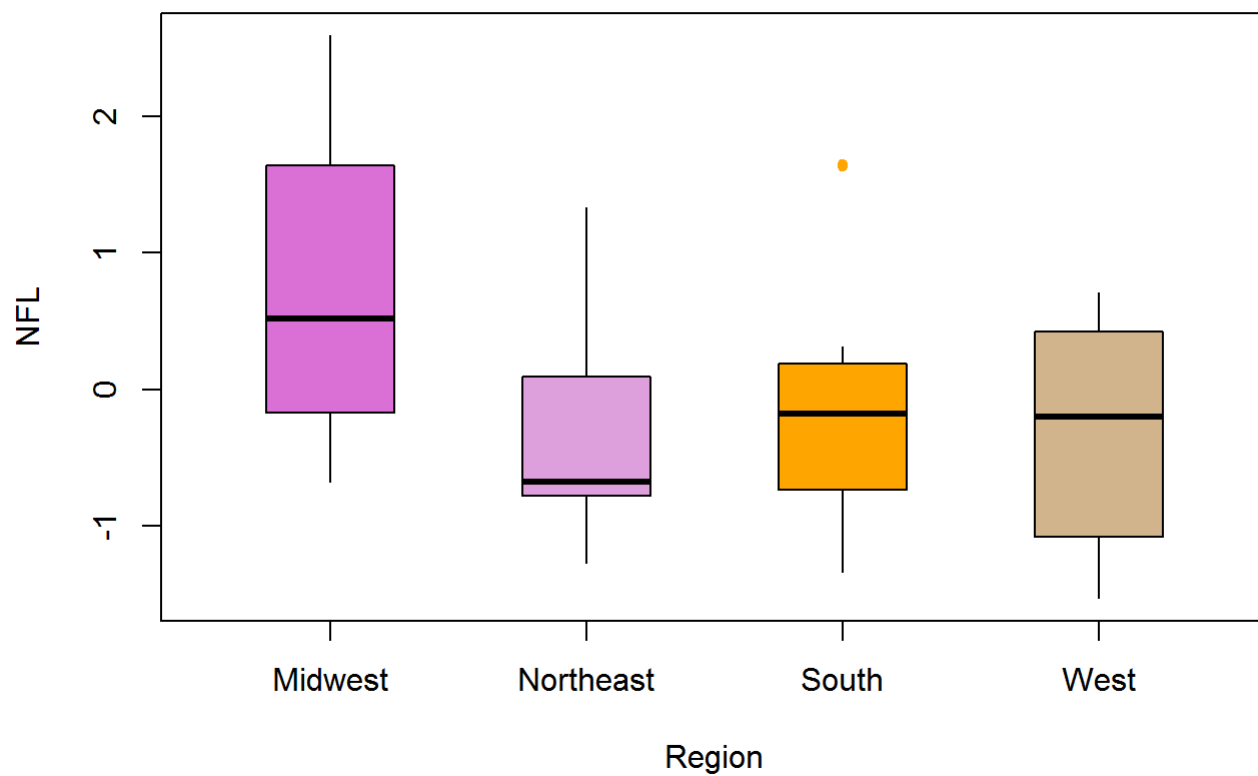
## R Essential Statistics Training

### Chapter 6

#### Boxplot

```
search <- read.csv("SearchData.csv", header = T)
attach(search)
boxplot(nfl ~ region,                                # nfl against region
       main = "NFL vs Region",                       # The Chart title
       ylab = "NFL",                                 # Y-axis Label
       boxwex = 0.5,                                # Width of Boxplot
       xlab = "Region",                              # X-axis Label
       col = c("orchid", "plum", "orange", "tan"),   # Colour for Individual Plot
       staplelty = 0,                                # Removes the Boxplot Staple
       whisklty = 1,                                 # Changes the whisker Line Type
       outpch = 20,
       outcol = c("orchid", "plum", "orange", "tan") # Colour for Outliers
       )
```

## NFL vs Region



## Chapter 7

### Comparing Proportions

All 30 teams

```
mlb <- read.csv("mlb2011.csv", header = T)
attach(mlb)
mlb.prop.test <- prop.test(Homewins, AllWins)
mlb.prop.test
```

```
##
## 30-sample test for equality of proportions without continuity
## correction
##
## data: HomeWins out of AllWins
## X-squared = 12.933, df = 29, p-value = 0.9956
## alternative hypothesis: two.sided
## sample estimates:
##   prop 1   prop 2   prop 3   prop 4   prop 5   prop 6   prop 7   prop 8
## 0.5425532 0.5280899 0.5652174 0.5000000 0.5492958 0.4556962 0.5316456 0.5500000
##   prop 9   prop 10   prop 11   prop 12   prop 13   prop 14   prop 15   prop 16
## 0.5205479 0.5263158 0.4305556 0.5535714 0.5633803 0.5232558 0.5121951 0.5937500
##   prop 17   prop 18   prop 19   prop 20   prop 21   prop 22   prop 23   prop 24
## 0.5238095 0.4415584 0.5360825 0.5810811 0.5098039 0.5000000 0.4929577 0.5348837
##   prop 25   prop 26   prop 27   prop 28   prop 29   prop 30
## 0.5820896 0.5000000 0.5164835 0.5416667 0.5185185 0.5500000
```

## Just the Highest and the lowest teams

```
home.highest.lowest <- c(min(HomeWins), max(HomeWins))
All.highest.lowest <- c(max(AllWins[HomeWins == min(HomeWins)]), AllWins[HomeWins == max(HomeWins)])
mlb.prop.test0 <- prop.test(home.highest.lowest, All.highest.lowest)
mlb.prop.test0
```

```
##
## 2-sample test for equality of proportions with continuity correction
##
## data: home.highest.lowest out of All.highest.lowest
## X-squared = 3.763, df = 1, p-value = 0.0524
## alternative hypothesis: two.sided
## 95 percent confidence interval:
## -0.3261225593 -0.0002663296
## sample estimates:
##   prop 1   prop 2
## 0.4305556 0.5937500
```