Frequencies

```
> ### Frequency Distribution

> FrequencyTable <- table(Outcome)
> FrequencyTable

Outcome
0 3 4 5 7 9
2 1 2 1 1 1

> prop.table(FrequencyTable)

Outcome
    0     3     4     5     7     9
0.250 0.125 0.250 0.125 0.125 0.125

> ### Descriptive Statistics

> length(Outcome)

[1] 8

> summary(Outcome)

   Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
   0.00    2.25    4.00    4.00    5.50    9.00
```

The first column lists all the actual scores in the entire data set. "Freq" indicates the number of times that score exists. For example, the score 4 was listed 2 times.

The "prop.table" provides the proportion of cases for each possible score. For example, of the 8 scores in the entire data set, the score of 4 was listed 2 times and 2/8 is .250.

"Summary" provides the scores associated with particular percentile ranks. For example, the 50th percentile is the score in the following position:

$$Position = PR(N + 1) = .50(8 + 1) = 4.5$$

Thus, the score at the 50th percentile ("Median") is the 4.5th score in the frequency distribution – a score of 4.