**Answer Key**

1. 1. Correlation = 0.8813535
   2. There is a strong positive correlation between Time1 and Rank4, meaning that when the time after the first interval is higher, the rank at the finish is higher as well, meaning the racer does not place as well.
   4. For every additional minute in Time1, Rank4 increases by 64.86 places.
2. 1. According to a residual vs. fits plot, the variance is strong.
   2. The plots scatter plot shows decent linearity.
   3. Both the histogram of residuals and the normal quantile plot show strong normality for the model.