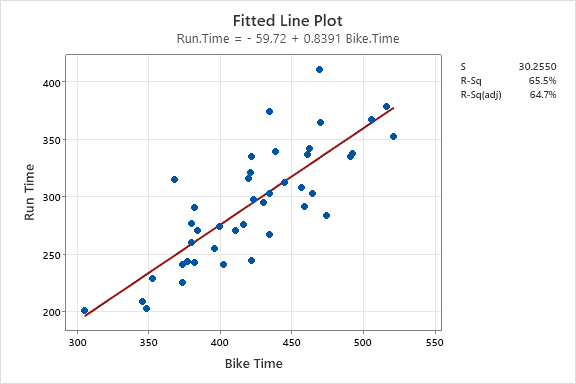
Data: triDataLakePlacidFinal.json

Description: The motivation for this data analysis is to explore the relationships between bike times and run times (in minutes) in order to gain insights into the performance patterns of triathletes. By analyzing this relationship, we can understand the interplay between different segments of the race and potentially identify areas of improvement for athletes. For this activity, we will specifically focus on times from Canadian finishers in the 2018 Lake Placid Ironman.



1. What is the explanatory variable in this situation? What is the response variable? What type are both variables?

Explanatory Variable: Bike Time  
Response: Run Time  
\*\*Both variables are Numerical\*\*

1. What does each point in the scatterplot represent?

Each dot represents a 2018 Canadian Female Lake Placid Ironman Finisher

1. Report the least squares regression equation for predicting price from points.
2. April Clausen had a 470 minute bike time. What is her predicted run time?

According to the model, April Clausen

1. April’s run time was 411 minutes. How far off was the model prediction? Explain why we might see this observation.

411 min – 334.3 minutes = 76.7 minutes.  
Answers may vary for the explanation.   
Sample: Since the run is the last leg of the race, her run time may have been slower due to burnout.

1. Interpret the slope of the model in the context of the application. Be sure to be mindful of the units.

For every 1 minute in Bike Time, the Run Time is expected to increase by 0.8391 minutes

1. Interpret the intercept of the model in the context of the application.

When a Bike Time is zero, the expected Run time is -59.72 minutes

1. Is the intercept interpretation meaningful? Explain.

No, this is not a meaningful interpretation.   
  
Neither a Bike Time of 0 minutes or a Run Time of -59.72 minutes is possible.

1. What percent of variation in Run Times is explained by the model using Bike Time?

R2 = 65.5%

1. What is the sample correlation between run times and bike times?