Draw Conclusions

Reflect on the Question | Analyze the Data | Draw Conclusions

Primary Research Question

How have the world record times for the men's and the women's mile event changed over the years?

problem

8/8 points (graded)

Write Your Conclusion

Based on scatterplots of the men's and women's world record mile event, both of these events follow a strong, negative ✔ relationship over time. For both groups, the assumption of linearity appears to be satisfied. The men's world record mile time decreases by an average of .393 ✔ seconds per year, while the women's record distance decreases by an average of .973 ✔ seconds per year. Because the intercept ✔ estimate is the value of the record time when year is equal to 0, it is not

interpretable in the context of the problem. Both linear models fit the data well, with R-squared values for the men's and women's models equal to .977 ✔ and .896 ✔, respectively. For the men's world record, 97.7% of the variance ✔ is explained by the linear model of year, while for the female world record, 89.6% of the variance ✔ in performance can be explained by the linear model of year.

Submit You have used 1 of 1 attempt