



Bookmarks



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▶ Week 1: Introduction to Data

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▼ Week 5: Linear Functions

Readings

Reading Check due
Mar 15, 2016 at 18:00
UTC



Week 5: Linear Functions > Lab > 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?

(8/8 points)

Write Your Conclusion

Based on scatterplots of the men's and women's world record mile event, both of these events follow a strong, ✓ **Answer:** 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 ✓ **Answer:** .393 seconds per year, while the women's record distance decreases by an average of ✓

Answer: .973 seconds per year. Because the ✓


Answer: intercept estimate is the value of the record distance 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 ✓ **Answer:** .977 and ✓

Answer: .896, respectively. For the men's world record, 97.7% of the ✓ **Answer:** variance is explained by the linear model of year, while for the female world record, 89.6% of the ✓


Answer: variance in performance can be explained by the linear model of year.

You have used 1 of 1 submissions


Lecture Videos

Comprehension Check
due Mar 15, 2016 at
18:00 UTC 


R Tutorial Videos**Pre-Lab**

Pre-Lab due Mar 15,
2016 at 18:00 UTC 

Lab

Lab due Mar 15, 2016
at 18:00 UTC 

Problem Set

Problem Set due Mar
15, 2016 at 18:00 UTC 

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