



Bookmarks

- ▶ Important Pre-Course Survey
- ▶ Contact Us
- ▶ How To Navigate the Course
- ▶ Discussion Board
- ▶ Office Hours
- ▶ Week 1: Introduction to Data
- ▶ Week 2: Univariate Descriptive Statistics
- ▶ Week 3: Bivariate Distributions
- ▶ Week 4: Bivariate Distributions (Categorical Data)
- ▼ **Week 5: Linear Functions**

Readings

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



Week 5: Linear Functions > Pre-Lab > Conduct the Analysis



Bookmark

Reflect on the Question

Analyze the Data

Draw Conclusions

Primary Research Question

How has the men's shotput world record changed over time? What about the women's world record?

Conduct the Analysis in R

1. Type or copy the script from the Prepare for the Analysis section into the Script window of R.
2. Select the portion of the code you wish to run, then press "ctrl+ enter."
3. Output can be found in the Console window.

(2/2 points)

1a. How many records are in the menshot data frame?

39



Answer: 39

39

1b. How many records in the womenshot data frame?

41



Answer: 41


41

[Click here for a video explanation of how to answer this question.](#)


You have used 1 of 1 submissions

(2/2 points)

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 

As you look at the scatterplot:

2a. Is a linear model appropriate for the men's shotput data?

Yes ▾



Answer: Yes

2b. Is a linear model appropriate for the women's shotput data?

Yes ▾



Answer: Yes

[Click here for a video explanation of how to answer this question.](#)

You have used 1 of 1 submissions

(3/3 points)

What is the equation for the linear model that predicts the World Record shotput distance for men?

3a. record distance = _____ + (_____ * year)

-243.3 ▾



Answer: -243.3

0.134 ▾



Answer: 0.134

3b. What is the value of R^2 ?

0.941 ▾



Answer: 0.941

[Click here for a video explanation of how to answer this question.](#)

You have used 1 of 1 submissions

(3/3 points)

What is the equation for the linear model that predicts the World Record shotput distance for women?

4a. record distance = _____ + (_____ * year)

-440.3 ▾



Answer: -440.3

0.234 ▾

✓ Answer: 0.234

4b. What is the value of R^2 ?

0.962 ▾

✓ Answer: 0.962

[Click here for a video explanation of how to answer this question.](#)

You have used 1 of 1 submissions

(1/1 point)

5. What can we say about the models for men and women?

☐ There is no difference in the rate of change for men and women.

☐ The rate of change is greater for men than for women.

☒ The rate of change is greater for women than for men. ✓

☐ The two models cannot be compared because they are different events.

[Click here for a video explanation of how to answer this question.](#)

You have used 1 of 1 submissions

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