Reflect on the Question | Analyze the Data | Draw Conclusions

Primary Research Question

Is there a linear relationship between how often a rider places in the Top 10 and how often he stays on his bull for a full 8 seconds?

Conduct the Analysis in R

1. Type or copy the script from the 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)

What do the histogram and descriptive statistics tell us about the distribution of the RidePer variable?

What percent of the time, on average, does a bullrider succeed in staying on his bull? (Round to the nearest whole number.)

37

37

Help

How many riders stayed on their bull more than 60% of the time?

1

1

Final Check Save Show Answer *You have used 1 of 2 submissions*

(4/4 points)

What does the scatterplot show us?

The relationship looks _____, _____, and _____.

linear linear

moderately strong moderately strong

positive positive

It looks like bullriders that appear frequently in the Top 10 list tend to have a _____ percentage of successful rides.

higher higher

Help

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(2/2 points)

The correlation, reported to three decimal places, between the number of Top 10 appearances and the percentage of successful rides is r =

0.855

0.855

Answer: 0.855

How many times does this value appear in the correlation matrix?

2

2

Answer: 2

Final Check | Save | Hide Answer *You have used 1 of 2 submissions*

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(2/2 points)

On the scatterplot, we see a data point with a fairly large residual. This rider stayed on his bull 53% of the time, but he only placed in the Top 10 a total of 5 times. This rider's data point falls _____ the line of best fit. If his data followed the line of best fit, he should have placed in the Top 10 about _____ times.

below below

11 11

Final Check | Save | Hide Answer *You have used 1 of 2 submissions*

(1/1 point)

Use this code to help identify this rider:

```
#identify a specific record
which(bull$Top10==5 & bull$RidePer==.53)
```

After looking at the data for this rider, can you explain **why** has he placed in the Top 10 so few times?

- He weighs more than 200 pounds, so he is too heavy.
- He had only 12 rides, so he was not able to be competitive for the Top 10.
- He only participated in 10 events, so he was not able to be competitive.
- He has been riding professionally for only 5 years. ✔

Help

Correct. The rider picked out by this code is Emilio Resende, represented by row 16 of the data frame. He has, in fact, ridden professonionally for 5 years, the only one of these four statements which is actually true of this rider.

Final Check | Save | Hide Answer *You have used 1 of 2 submissions*

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