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Reflect on the Question

Analyze the Data

Draw Conclusions

Primary Research Questions

1. Does a film's rating (PG, PG-13, or R) impact its cost?
2. Does a film's rating (PG, PG-13, or R) influence its IMDB score?

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.

(3 points possible)

1a. How many PG-rated films are in the dataset?

Help

Answer: 39

1b. How many PG-13-rated films are in the dataset?

Answer: 94

1c. How many R-rated films are in the dataset

Answer: 18

Hide Answer

You have used 0 of 2 submissions

Research Question 1

2a. What is the **average cost**, in millions of dollars, to make each type of film? (no decimal places)

PG=

Answer: 75

PG-13=

Answer: 127

R=

Answer: 93

2b. Was the assumption of equal variability met?

☐ Yes

Help

ANOVA Results

2c. F-statistic (rounded to one decimal place)=

Answer: 13.1

Tukey Test Results

2d. The average budget for a PG-13 film was significantly higher than the budget for a(n) _____ rated film.

Answer: PG

2e. The difference between a PG-13 film and a(n) _____ rated film was almost, but not quite significant, at $p = 0.053$.

Answer: R

[Hide Answer](#)*You have used 0 of 2 submissions*

(5 points possible)

Research Question 2

Help

3a. What is the **average IMDB score** for each type of film? (report to 1 decimal place)

PG

Answer: 7.0

PG-13

Answer: 7.0

R

Help

Answer: 7.2

ANOVA Results

3b. What is the F statistic, rounded to 1 decimal place?

Answer: 0.3

Tukey Test Results

Was a Tukey test necessary for this analysis?

☐

No

Hide Answer

You have used 0 of 2 submissions





Help

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