



NBA Apply Problem

Which Statistics Are Correlated?

powered by NBA data

Which statistics are correlated? Do players who score more points also commit more personal fouls? Do players who commit more turnovers also get more steals?



Choose two statistics that you predict will have a strong positive correlation and explain why you chose them. Create a model to find the relationship between the statistics. Explore the measures of correlation and decide if your prediction was correct.

**Correlated Statistics**www.vimeo.com/190274691

Use statistics from the NBA or WNBA to analyze players' statistics.

**NBA Stats**www.nba.com/stats**WNBA Stats**www.wnba.com/stats

How well is your pair of basketball statistics correlated?

Evaluation Criteria

Your response will be judged on four criteria:

1. Creating a model to determine correlation
2. Calculating an equation for line of best fit and correlation coefficient (using technology)
3. Describing the model
4. Comparing the model to your original prediction

Criteria	Scale				
	4	3	2	1	0
Model	Creates an organized, accurate model, that includes a data table, scatterplot, and line of best fit.	Creates an organized, accurate model but lacks labels, data table, scatterplot, or line of best fit.	Creates an organized, complete and labeled model, but the model is inaccurate.	Creates an inaccurate and poorly organized model.	Does not make a meaningful attempt to complete the task.
Line of Best Fit and Correlation Coefficient	Correctly calculates the equation for the line of best fit and the correlation coefficient.	Correctly calculates the equation for the line of best fit or the correlation coefficient.	Incorrectly calculates the equation for line of best fit and correlation coefficient, but shows some ability.	Incorrectly calculates the equation for line of best fit and correlation coefficient, and shows no ability.	Does not make a meaningful attempt to complete the task.
Meaning	Gives an accurate explanation of the slope, y -intercept, and correlation coefficient.	Gives an accurate explanation of the slope, y -intercept of the equation, or the correlation coefficient.	Gives an inaccurate explanation of the slope, y -intercept, or the correlation coefficient.	Gives an inaccurate explanation of the slope, y -intercept, and the correlation coefficient.	Does not make a meaningful attempt to complete the task.
Analysis	Correctly compares the model and the original prediction, and analyzes the correlation coefficient in the context of the two variables.	Compares the model and the original prediction, and analyzes the correlation coefficient, but includes one minor error.	Compares the model and the original prediction, and analyzes the correlation coefficient, but includes moderate errors.	Compares the model and the original prediction, and analyzes the correlation coefficient, but not both.	Does not make a meaningful attempt to complete the task.