ARIZONA STATISTICS · UNIT 4 · 5 QUESTIONS

Regression and Experiments — Practice Test

This practice test was made by AI and there may be mistakes. If a question or answer looks wrong, use the Flag a mistake button to let Brett know so he can fix it.

1 **The regression line is $\hat{y} = 5 - 0.5x$. The predicted value of y when x = 6 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

2 **An observed value is 18 and the predicted value is 21. What is the residual?**

ANSWER _____

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3 **A negative slope means that as x increases, the predicted y usually**

A. Decreases

B. Increases

C. Stays the same

D. Becomes zero

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4 **Antique brass orrery, a model of the solar system with planets around a central sun. A residual plot with points scattered randomly around zero suggests the linear model fits**



A Only for large x

B Well

C Not at all

D Poorly

Understand It with Pulse | Flag a mistake

5

A residual plot with a clear curved pattern suggests the relationship is

A Perfect

B Linear

C Nonlinear

D Random

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Flag a mistake

ANSWER KEY

1. 2
2. -3
3. A
4. B
5. C

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