greatlearning
Power Ahead

:☰ Course Content

Quiz - 1

Type	:	Graded Quiz
Attempts	:	2/2
Questions	:	10
Time	:	15m
Scoring Policy	:	Highest Score
Due Date	:	Jan 31, 2022, 11:59 PM
Your Score	:	10/10

Instructions	⌄

Attempt History

Date	Attempt	Marks	
Oct 07, 2020, 12:53 PM	2	10	Hide answers

Question No: 1   (Correct Answer)

Marks: 1/1

The least square regression line for the set of n data points is given by the equation of a line in slope intercept form is

○ y = a x + by

⦿ y = a x + b   (You Selected)

○ y = a x + by + cd

○ None of these

Question No: 2   (Correct Answer)

Marks: 1/1

Linear regression where the sum of vertical distances d1 + d2 + d3 + d4 between observed and predicted (line and its equation) values is

○ Maximized

⦿ Minimized   (You Selected)

○ Neutral

Question No: 3   (Correct Answer)

Marks: 1/1

The coefficients of the least squares regression line are determined by

minimizing the sum of the squares of the

○ x-coordinates.

○ y-coordinates.

◉ residuals. You Selected

Question No: 4 Correct Answer

Marks: 1/1

A geometric interpretation of a residual is the

○ horizontal distance from a data point to the regression line.

◉ vertical distance from a data point to the regression line. You Selected

○ perpendicular distance from a data point to the regression line.

Question No: 5 Correct Answer

Marks: 1/1

A paired data set has n = 5, Σ x = 15, Σ y = 27, Σ xy = 100, and Σ x $_2$ = 55. The slope of the regression line is

○ 10

○ 09

○ 0.9

◉ 1.9   You Selected

Question No: 6   Correct Answer

Marks: 1/1

A point for the slope of least squares regression line for all pairs in the
population is

◉ the slope of the regression line for the pairs in the sample.   You Selected

○ the sum of the squares of the residuals for the regression line for the pairs in the sample.

○ the correlation coefficient for the pairs in the sample.

Question No: 7   Correct Answer

Marks: 1/1

The critical value for a confidence interval for the slope of the least squares

regression line for all pairs in the population does not depend on

- O the sample size

- O the confidence level

- ⦿ the slope of the least squares regression line for the sample | You Selected

---

Question No: 8 | Correct Answer

Marks: 1/1

Which method is commonly used to get the best fit with linear regression

- O Least angle

- ⦿ Least squares | You Selected

- O Principal component

Question No: 9 | Correct Answer

Marks: 1/1

What is slope in the below formula y =mx+b?

○ x

◉ m   (You Selected)

○ b

○ y

Question No: 10   (Correct Answer)

Marks: 1/1

A linear regression line has an equation of the form Y = a + bX,

◉ Where X is the explanatory variable and Y is the dependent variable.   (You Selected)

○ Where X is not the explanatory variable and Y is the dependent variable

○ Where X is the explanatory variable and Y is the independent variable

---

Oct 07, 2020, 12:48 PM   1   6   View answers