Edulyte

COEFFICIENT OF DETERMINATION FORMULA

The coefficient of determination meaning, R-squared, is a numerical value between zero and one. It seeks to assess how well a statistical model can predict an outcome. In simpler terms, R-squared represents the percentage of variability in the dependent variable that the statistical model can accurately explain.

Read more

Q1: What does an R-squared value of 0 indicate?

A: A perfect fit
B: No variance explained
C: A strong positive correlation
D: A strong negative correlation

Q2: Can R-squared be negative?

A: Yes, in certain cases
B: No, it's always positive
C: Only when there are outliers
D: Only in non-linear regression

Q3: In a regression context, what does a low R-squared value suggest?

A: A strong relationship between variables
B: A poor fit of the model
C: High predictive accuracy
D: Overfitting

Q4: What does an R-squared value of 1 indicate?

A: A perfect fit
B: No variance explained
C: A strong positive correlation
D: A strong negative correlation

Q5: What is the best score of R-squared?

A: 0.3
B: 0.5
C: 0.4
D: 0.7

Q6: What is the Coefficient of Determination?

A: r
B: r + 2
C: r - 2
D: r^2

Q7: Is it Possible to use R-squared for Non-Linear Regression?

A: Yes
B: At times
C: No
D: In special situations

Q8: What is RSS in Coefficient of Determination?

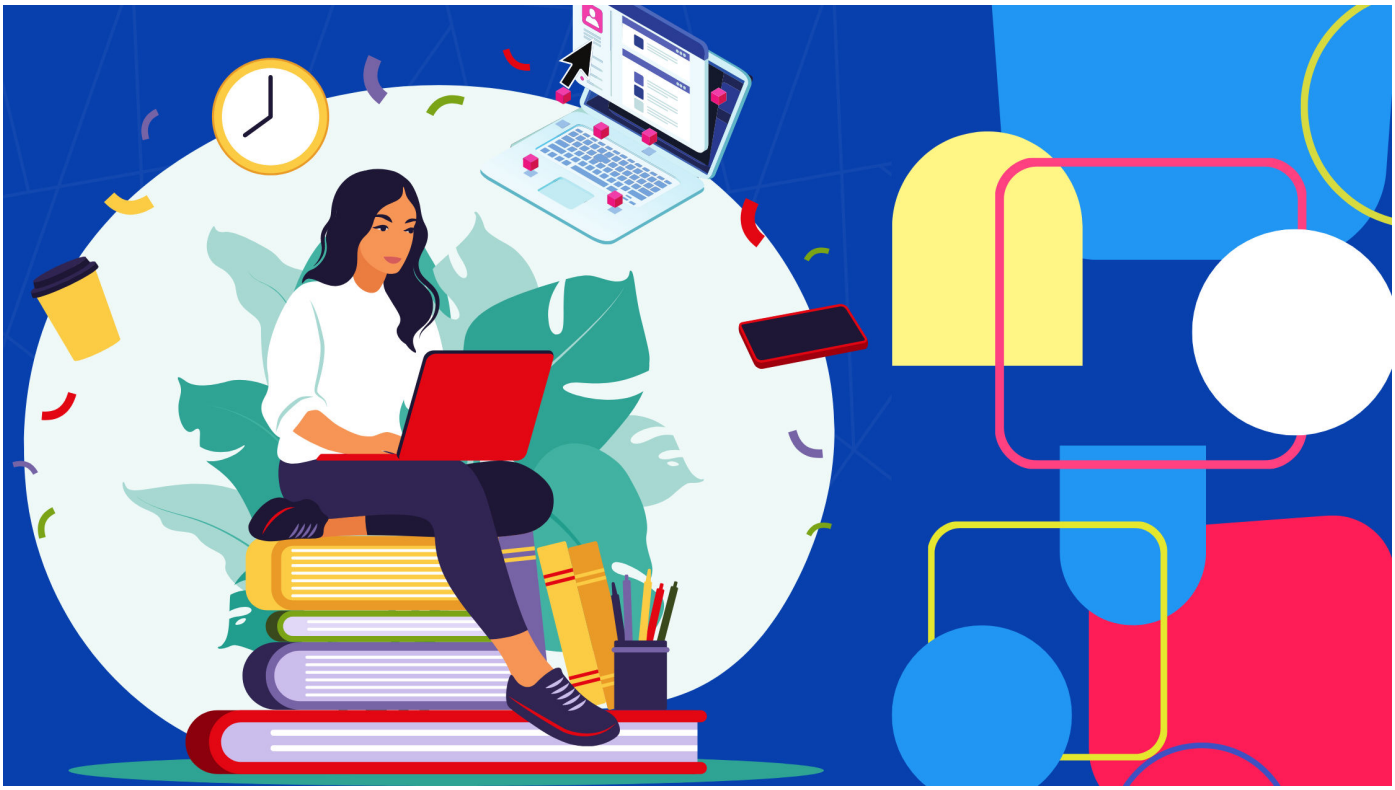
A: Residual sum of Squares
B: Residual Squares of Sum
C: Regression Sum of Squares
D: Regression Squares of Sum

Q9: What is the value of Σx in the formula of R-squared?

A: Total value of the second variable
B: Total of the first variable
C: The sum of both variables
D: None of these

Q10: What is the value of Σxy in the formula of R-squared?

A: The sum of the first and second variable
B: The first variable minus the second variable
C: The sum of the product of the first and second variable
D: Product of first and second variable



Answers

Q1: D - A strong negative correlation

Q2: B - No, it's always positive

Q3: B - A poor fit of the model

Q4: A - A perfect fit

Q5: D - 0.7

Q6: D - r^2

Q7: C - No

Q8: A - Residual sum of Squares

Q9: B - Total of the first variable

Q10: C - The sum of the product of the first and second variable