Question 1

Not yet answered

Marked out of 1.00

Diagnostic plots are plots used to check if the residuals have non-linear patterns, if they are normally distributed, if there is equal variance among residuals, and if there are any influential observations.

Select one:

- True
- False

Question 2

Not yet answered

Marked out of 1.00

Which diagnostic plot is used to assess the assumption of linearity between the dependent variable and the independent variables in linear regression?

- a. Histogram
- b. Scatterplot
- c. QQ Plot
- d. Residual Plot

Question 3

Not yet answered

Marked out of 1.00

We check nearly normal residuals with mean 0 using a normal probability plot.

Select one:

- True
- False

Question 4

Not yet answered

Marked out of 1.00

When using a logistic regression model, it is impossible for the model to predict a probability that is negative or a probability that is greater than 1.

- True
- False

Question 5

Not yet answered

Marked out of 1.00

We check for constant variability of residuals using plot of residuals vs. $\hat{y}$ using plot of residuals vs. each x

Select one:

- True
- False

Question 6

Not yet answered

Marked out of 1.00

When fitting logistic regression, we typically complete model selection using adjusted R2.

- a. True
- b. False

Question 7

Not yet answered

Marked out of 1.00

How do we check the independence of residuals (and hence observations)?

- a. using scatterplots of residuals vs. order of data collection.
- b. if the dataset is a time series structure, this will reveal non-independence.
- c. all the above

Question 8

Not yet answered

Marked out of 1.00

What is the primary assumption of linear regression regarding the relationship between the independent variables and the dependent variable?

- a. Linearity
- b. Normality
- c. Homoscedasticity
- d. Independence

Question 9

Not yet answered

Marked out of 1.00

The downside of using transformations is that it does not reduce the ease of interpreting the results.

- a. True
- b. False

Question 10

Not yet answered

Marked out of 1.00

Logit transformation is required because it is a transformation that makes the range of possibilities on the left-hand side of the equation equal to the range of possibilities for the right-hand side.

Select one:

- True
- False