1. Using a graph to illustrate slope and intercept, define basic linear regression.

2. In a graph, explain the terms rise, run, and slope.

3. Use a graph to demonstrate slope, linear positive slope, and linear negative slope, as well as the different conditions that contribute to the slope.

4. Use a graph to demonstrate curve linear negative slope and curve linear positive slope.

5. Use a graph to show the maximum and low points of curves.

6. Use the formulas for a and b to explain ordinary least squares.

7. Provide a step-by-step explanation of the OLS algorithm.

8. What is the regression's standard error? To represent the same, make a graph.

9. Provide an example of multiple linear regression.

10. Describe the regression analysis assumptions and the BLUE principle.

11. Describe two major issues with regression analysis.

12. How can the linear regression model's accuracy be improved?

13. Using an example, describe the polynomial regression model in detail.

14. Provide a detailed explanation of logistic regression.

15. What are the logistic regression assumptions?

16. Go through the details of maximum likelihood estimation.