1. In a linear equation, what is the difference between a dependent variable and an independent variable?

2. What is the concept of simple linear regression? Give a specific example.

3. In a linear regression, define the slope.

4. Determine the graph's slope, where the lower point on the line is represented as (3, 2) and the higher point is represented as (2, 2).

5. In linear regression, what are the conditions for a positive slope?

6. In linear regression, what are the conditions for a negative slope?

7. What is multiple linear regression and how does it work?

8. In multiple linear regression, define the number of squares due to error.

9. In multiple linear regression, define the number of squares due to regression.

In a regression equation, what is multicollinearity?

11. What is heteroskedasticity, and what does it mean?

12. Describe the concept of ridge regression.

13. Describe the concept of lasso regression.

14. What is polynomial regression and how does it work?

15. Describe the basis function.

16. Describe how logistic regression works.