

1. Fill in the blank: The best fit line is the line that fits the data best by minimizing some _____.

0 / 1 point

- ☐ regression function
- ☐ predicted values
- ☒ residual values
- ☐ loss function

⊗ Incorrect

The best fit line is the line that fits the data best by minimizing some loss function. To find the best fit line, it's necessary to measure error, which is the difference between the observed values and the predicted values generated by the model. Residual is the difference between observed or actual values and the predicted values of the regression line.

2. What is the sum of the squared differences between each observed value and the associated predicted value?

0 / 1 point

- ☐ Residual least squares
- ☒ Sum of squared predicted values
- ☐ Ordinary least squares
- ☐ Sum of squared residuals

⊗ Incorrect

The sum of squared residuals is the sum of the squared differences between each observed value and the associated predicted value. Data professionals use this sum to capture a summary of total error in the model.

3. What tool would be most effective for calculating the ordinary least squares?

1 / 1 point

- ☐ Google Sheets
- ☐ Microsoft Excel
- ☐ SQL
- ☒ Python

✓ Correct

Python is most effective for calculating the ordinary least squares. It enables data professionals to use the ordinary least squares technique to test out many lines and identify which one is the best fit line.