

✔ Congratulations! You passed!

Grade received 100% To pass 80% or higher

Go to next item

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

1 / 1 point

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

✔ Correct

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.

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

1 / 1 point

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

✔ Correct

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 does the circumflex symbol, or "hat" ($\hat{}$), indicate when used over a coefficient?

1 / 1 point

- ☐ The coefficient is an "actual" value (not predicted)
- ☐ The coefficient is a population parameter value
- ☐ The coefficient is a residual
- ☒ The coefficient is an estimate or predicted value

✔ Correct