

🎉 **Congratulations! You passed!**

Grade received 100% To pass 80% or higher

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1. Fill in the blank: Adjusted R squared is a variation of the R squared regression evaluation metric that _____ unnecessary explanatory variables.

1 / 1 point

- ☐ rewards
- ☐ eliminates
- ☐ adds
- ☒ penalizes

👍 **Correct**

Adjusted R squared is a variation of the R squared regression evaluation metric that penalizes unnecessary explanatory variables. Similar to R squared, adjusted R squared varies from less than 0 to 1.

2. Which of the following statements accurately describe the differences between adjusted R squared and R squared? Select all that apply.

1 / 1 point

- ☐ R squared is used to compare models of varying complexity.
- ☒ Adjusted R squared is used to compare models of varying complexity.

👍 **Correct**

Adjusted R squared is used to compare models of varying complexity. R squared is more easily interpretable.

- ☒ R squared is more easily interpretable.

👍 **Correct**

R squared determines how much variation in the dependent variable is explained by the model. Another difference is adjusted R squared is used to compare models of varying complexity.

- ☐ Adjusted R squared is more easily interpretable.

3. What variable selection process begins with the full model that has all possible independent variables?

1 / 1 point

- ☐ Forward selection
- ☐ Extra-sum-of Squares
- ☒ Backward elimination
- ☐ F-test

👍 **Correct**

The backward elimination variable section process begins with the full model.

4. Which of the following are regularized regression techniques? Select all that apply.

1 / 1 point

- ☒ Elastic-net regression

👍 **Correct**

Lasso regression, ridge regression, and elastic-net regression are regularized regression techniques.

- ☒ Ridge regression

👍 **Correct**

Lasso regression, ridge regression, and elastic-net regression are regularized regression techniques.

- ☐ F-test regression

- ☒ Lasso regression

👍 **Correct**

Lasso regression, ridge regression, and elastic-net regression are regularized regression techniques.