

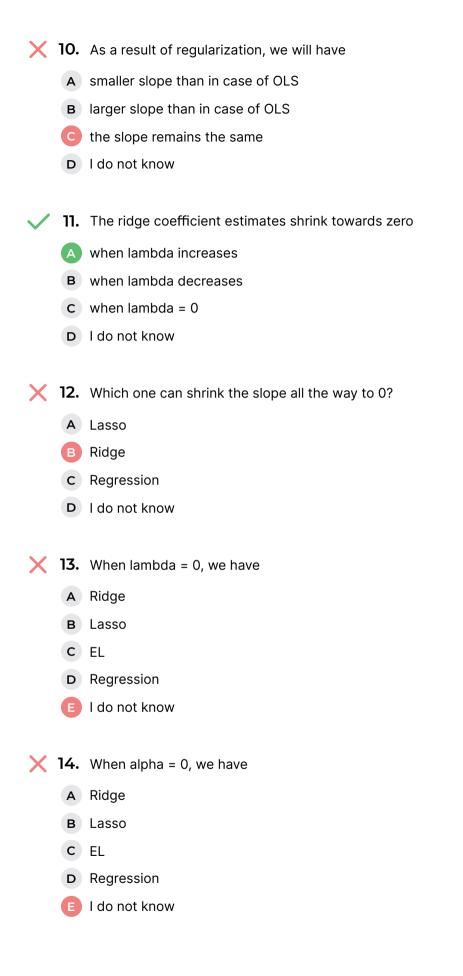
DM-Quiz-2020-Q5

43.75% (7/16)

- **1.** In the multiple linear regression, we assume that...
 - A The number of observations is much larger than the number of variables (n>>p)
 - B The number of observations is slightly larger than the number of variables (n>p)
 - C The number of observations equals than the number of variables (n=p)
 - D The number of observations is lees than the number of variables (n<p)
 - It is not important
 - F I do not know
- **2.** The way of solving the problem of a large number of variables is...
 - A Subset Selection & Shrinkage (Regularization)
 - B Shrinkage (Regularization) & Maximum Likelihood estimation
 - C Dimension Reduction & OLS estimation
 - **D** I do not know
 - **E** The absence of the right answer
- X The bias of an estimator (e.g. z^) equals
 - $A E(z^{-}) z$
 - **B** E(z^2) [E(z)]^2
 - c $[E(z^2) E(z)]^2$
 - $D E(z^2)$
 - E I do not know
- X 4. The main idea of regularization is
 - A To introduce a small amount of bias in order to have less variance.
 - B To introduce a small amount of variance in order to have less bias.
 - c To introduce a small amount of variance and bias in order to have less bias.
 - D I do not know

| / | 5. | With which function we can show regularization in R |
|----------|----|---|
| | A | glmnet() |
| | В | regular() |
| | C | lm() |
| | D | glm() |
| | E | I do not know |
| | | |
| X | 6. | How the tune of any parametr can be made |
| | A | using Cross validation |
| | В | It is impossible |
| | C | I do not now |
| | D | using larger sample |
| | E | only having population |
| | | |
| / | 7. | Elastic Net is |
| | A | the combination of L1 and L2 regularization |
| | В | the combination of L2 and L3 regularization |
| | C | is independent from other types of refularization |
| | D | I do not know |
| | E | not a type of regularization |
| | | |
| X | 8. | Regularization is used only for |
| | A | Poisson Regression |
| | В | Linear Regression |
| | C | Logistic Regression |
| | D | any regression |
| | E | I do not know |
| | _ | |
| / | 9. | Regularization can solve the problem of |
| | A | heteroscedasticity |
| | В | multicollinearity |
| | C | autocorrelation |

D I do not know



- Which function can help to perform cross-validation for regularization in R?
 cv.glmnet()
 cros_val()
- ✓ 16. Why we use set.seed() in R?

c glmnet(method = "cv)

D I do not know

- A To have universal result
- B To perform better result
- c To have random models
- **D** I do not know