



Assessing Performance

13 试题

1.

If the features of Model 1 are a strict subset of those in Model 2, the TRAINING error of the two models can **never** be the same.

- ☐ True
- ☒ False

2.

If the features of Model 1 are a strict subset of those in Model 2, which model will USUALLY have lowest TRAINING error?

- ☐ Model 1
- ☒ Model 2
- ☐ It's impossible to tell with only this information

3.

If the features of Model 1 are a strict subset of those in Model 2. which model will USUALLY have lowest TEST error?

- ☐ Model 1
- ☐ Model 2
- ☒ It's impossible to tell with only this information

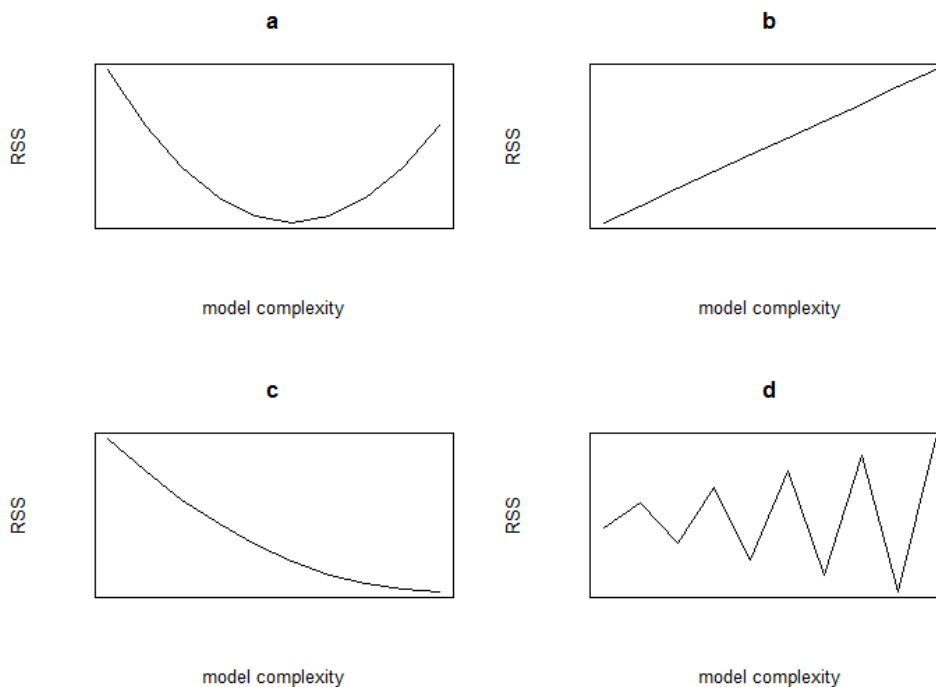
4.

If the features of Model 1 are a strict subset of those in Model 2, which model will USUALLY have lower BIAS?

- ☐ Model 1
 - ☒ Model 2
 - ☐ It's impossible to tell with only this information
-

5.

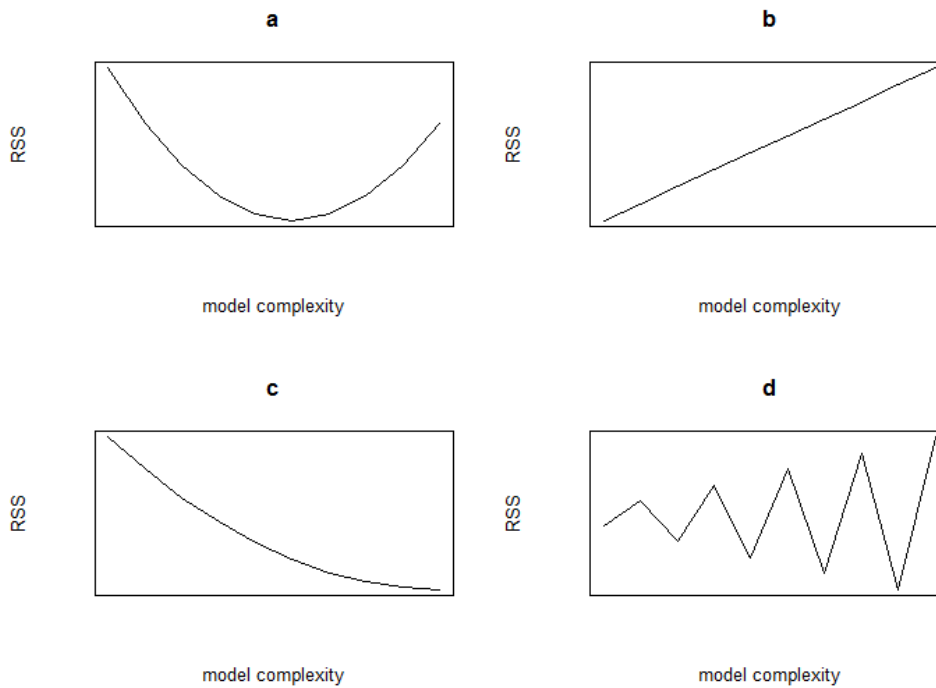
Which of the following plots of model complexity vs. RSS is most likely from TRAINING data (for a fixed data set)?



- ☐ a
 - ☐ b
 - ☒ c
 - ☐ d
-

6.

Which of the following plots of model complexity vs. RSS is most likely from TEST data (for a fixed data set)?



- ☒ a
- ☐ b
- ☐ c
- ☐ d

7.

It is **always** optimal to add more features to a regression model.

- ☐ True
- ☒ False

8.

A simple model with few parameters is most likely to suffer from:

- ☒ High Bias

☐ High Variance

9.

A complex model with many parameters is most likely to suffer from:

☐ High Bias

☐ High Variance

10.

A model with many parameters that fits training data very well but does poorly on test data is considered to be

☐ accurate

☐ biased

☐ overfitted

☐ poorly estimated

11.

A common process for selecting a parameter like the optimal polynomial degree is:

☐ Bootstrapping

☐ Model estimation

☐ Multiple regression

☐ Minimizing test error

☐ Minimizing validation error

12.

Selecting model complexity on test data (choose all that apply):

- ☐ Allows you to avoid issues of overfitting to training data
 - ☐ Provides an overly optimistic assessment of performance of the resulting model
 - ☐ Is computationally inefficient
 - ☐ Should never be done
-

13.

Which of the following statements is true (select all that apply): For a **fixed model complexity**, in the limit of an infinite amount of training data,

- ☐ The noise goes to 0
 - ☐ Bias goes to 0
 - ☐ Variance goes to 0
 - ☐ Training error goes to 0
 - ☐ Generalization error goes to 0
-

提交测试

