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2.Q.1

1/1 point (graded)

For each of the following parts, indicate whether we would generally expect the performance of a flexible statistical learning method to be better or worse than an inflexible model.

The sample size n is extremely large, and the number of predictors p is small:

Flexible is better ✔ **Answer:** Flexible is better

Explanation

A flexible model will allow us to take full advantage of our large sample size.

Submit

Answers are displayed within the problem

2.Q.2

1/1 point (graded)

The number of predictors p is extremely large, and the sample size n is small:

Flexible is worse ✔ **Answer:** Flexible is worse

Explanation

The flexible model will cause overfitting due to our small sample size.

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Answers are displayed within the problem

2.Q.3

1/1 point (graded)

The relationship between the predictors and response is highly non-linear:

Flexible is better ✔ **Answer:** Flexible is better

Explanation

A flexible model will be necessary to find the nonlinear effect.

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Answers are displayed within the problem

2.Q.4

1/1 point (graded)

The variance of the error terms, i.e. $\sigma^2 = \mathrm{Var}(\epsilon)$, is extremely high:

Flexible is worse ✔ **Answer:** Flexible is worse

Explanation

A flexible model will cause us to fit too much of the noise in the problem.

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Answers are displayed within the problem