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Understanding Estimation - Quiz

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Question 1

1/1 point (graded)

For all families of distributions, estimation is trying to determine the specific _____ of a distribution.

- a. Mean
- b. Variance
- c. Parameter ✔
- d. Maximum

Explanation

Estimation is trying to determine the specific parameter of a distribution, because this will give us a lot information about the shape of the distribution. For example, for normal distributions, estimation will typically try to determine the mean and variance.

Submit You have used 1 of 2 attempts

✔ Correct (1/1 point)

Question 2

1/1 point (graded)

True or False: Estimators are the realizations of applying estimates to random samples.

a. True

b. False ✔

Explanation

The function of a random sample is the estimator. The realization of the function of the random sample is the estimate, so the estimates are the realizations of applying the estimators to random samples.

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✔ Correct (1/1 point)

Question 3

1/1 point (graded)

$\hat{\theta}$ is used to stand for: (Select all that apply)

- [ ] a. The parameter
- [ ] b. The sample mean
- [ ] c. The variance
- [x] d. The estimator ✔
- [x] e. The estimate ✔

✔

Explanation

The estimator and the estimate could both be represented by $\hat{\theta}$. The parameter they are estimating could be represented by θ. The estimator and estimate are $\hat{\theta}$, because they are estimating the parameter.

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Discussion

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