Statistics 520
Five Minute Quiz 1

Fall 2025

(4 pts.) Circle all that are correct.

A basic notion connected with epistemic probability is that belief should be modified in the light of observed information. We use the mathematical formalism of Bayes Theorem to accomplish such modification to ensure that

1. epistemic probability follows the laws of probability developed from Kolmogorov's axioms.

2. the use of epistemic probability corresponds to a Bayesian analysis.

3. if both epistemic probability and relative frequency are applicable to a problem, they will agree.

4. the modification of belief is done in a logically consistent manner across different problems.

Correct Answers: 1 and 4