

Statistics 520

Five Minute Quiz 2

Fall 2025

1. (2 pts.) Complete the following sentence:

A statistical model is a collection of probabilistic assignments and specified relations among model components that leads to

Answer: a joint distribution for the entire set of random variables involved in a problem.

2. (2 pts.) In a study of the effect of slash and burn agriculture on deforestation in a particular region of the Amazon rain forest, flights were conducted over a regular 30×40 grid placed on the landscape. For each grid cell the number of “swiddens”, or open fields created through the use of slash and burn agriculture were counted. How many random variables should be defined for this problem?

Answer: 1200