

MEASURING/MODELING STANDARDS STATISTICS

CONCEPT Statistics is a branch of mathematics that deals with the collection, analysis, interpretation, presentation and organization of data. It involves the use of statistical methods to make inferences and predictions about a population based on a sample. Statistics can include data collection, sampling methods, variables and more.



REAL WORLD CONNECTIONS

Nebraska is a leading producer of corn, soybeans and other crops, and farmers and policymakers rely on accurate yield predictions to make informed decisions about planting, harvesting and marketing their products. Statistical models consider a wide range of variables, such as weather patterns, soil conditions and crop genetics to predict yields with a high degree of accuracy. These models can also be used to evaluate the effectiveness of different farming practices, such as irrigation or fertilization, and to identify areas where improvements can be made.

BACKGROUND

Statistics has a long and rich history that spans several centuries. The discipline has roots in early civilizations, where rudimentary forms of data collection and analysis were used for agricultural purposes, census taking and trade. The advent of computers in the mid-20th century revolutionized the field of statistics, allowing for more complex analyses and the development of new methods such as machine learning and data mining. Today, statistics plays a critical role in many fields, from public health and medicine to finance and technology. The field continues to evolve and innovate with advances in technology and computing power.





