

CONCEPT Estimation refers to the process of making an approximate calculation of a quantity or value using limited information or assumptions. In many cases, it is not possible or practical to obtain precise measurements or conversions, and estimations are necessary for practical or time-sensitive applications.

BACKGROUND

Early societies developed their own systems for measuring and quantifying physical quantities. These early systems were often based on body parts or natural features, such as the foot, cubit, or palm, and varied widely between different cultures and regions. Over time, as trade and commerce expanded, there arose a need for standardized units of measurement that could be used across different societies and regions. This led to the development of various systems of measurement, including the metric system, which is now widely used around the world. Today, the science of measurement, or metrology, is a critical component of many fields, including science, engineering, manufacturing, and trade, and plays a key role in ensuring accurate and reliable measurements and conversions.

FORMULAS

HEURISTICS: There are a variety of heuristics that can be used to estimate conversions or measurements in the absence of precise data.

SOME EXAMPLES OF HEURISTICS INCLUDE:

THE PALM METHOD: using the width of one's hand to estimate the length of an object.

THE ARM SPAN METHOD: using the distance between one's outstretched arms to estimate the length of an object.

THE RULE OF THUMB: using a rough approximation based on personal experience or intuition, such as estimating a cup of liquid as roughly the size of one's fist.

