

Mathematics for Society

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Mathematics is arguably the most fundamental and ancient subject in science. It arose from humanity's innate curiosity to comprehend numbers, figures, and the underlying rules governing phenomena in nature and human behavior. Mathematicians meticulously derive insights based on logic, ensuring a rigorous foundation for their findings.

Unlike many other fields, mathematics remains immutable regardless of our evolving understanding of the world around us. Its truths are independent of spatial or temporal constraints, unaffected by changes in velocity or energy scales. Consequently, the applications of mathematics exhibit a universal character, enabling mathematicians to discern similarities in dynamics between molecular and galactic movements.

The universal nature of mathematics facilitates a deeper understanding of nature itself. Euclid's formulation of axioms for plane geometry exemplifies this, as do Isaac Newton's three laws of mechanics, which govern the macroscopic world. Over the past three centuries, various scientific disciplines have undergone conceptual breakthroughs, with mathematics playing a pivotal role in each revolution.

As we enter the 21st century, technological advancements, particularly those related to computing equipment, hold the promise of catalyzing another scientific and technological revolution. Undoubtedly, mathematics, especially its core principles, will continue to be indispensable in driving such progress.