Egyptian Expressions: Past and Present

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Ancient civilizations developed unique systems of mathematics that laid the foundation for modern math. One of the most overlooked contributions that the ancient Egyptians produced are known as Egyptian expressions. These expressions use unit fractions to represent other fractions, leading to many interesting insights about their properties. Preserved scrolls of papyrus have been found which reveal several applications of the mathematics ancient Egyptians developed. Common uses ranged from settling land disputes to distributing food rations for workers. Despite the math existing for thousands of years, new usages are still being investigated in the modern day. Egyptian expressions are especially interesting in the context of perfect and semiperfect numbers. These numbers have factors that sum exactly to the original number or exceed it respectively. They are described by a specific function indicated by the Greek letter phi. Perfect and semiperfect numbers can be described alternatively by using Egyptian expressions. This provides a fresh perspective on the topic that is worth looking into. Ancient civilizations were much more advanced than we as a modern society give them credit for. Ancient Egyptians laid a substantial mathematical foundation for future generations and bringing awareness to their contributions will help to correct the common misconception that ancient humans were not capable of performing outstanding computational feats.