Philosophy and Rationale

## MATH

## Adventist Philosophy of Math



Everywhere in nature there are evidences of mathematical relationships. These are shown in ideas of number, form, design and symmetry, and in the constant laws gov-

erning the existence and harmonious working of all things. Through the study of these laws, ideas, and processes, mathematics can reveal some of God's creative attributes, particularly His constancy.

Whereas the student cannot comprehend the absolute unchangeable nature of God, mathematical dependability demonstrates clearly the consistency of God and His perfect creation. This is a demonstration of total dependability.

Mathematics may also develop students' capacity to use appropriate thought processes to more clearly identify aspects of truth which relate to natural laws and design. Such truth is predictable, in that given a set of axioms and the appropriate mathematical processes, the result is always as expected. Therefore, when students learn mathematical processes, axioms and laws, they may be further enabled to more clearly identify God's design and handiwork in nature.

While mathematics is a pure science, allowing many hypotheses and conjectures to be conclusively demonstrated as being either correct or incorrect, it also opens possibilities of knowledge that defies either proof or disproof. Examples are infinite smallness and infinite greatness. This unusual balance between the unexplained and the clearly evident provides the student with an accurate picture of an infinite and eternal God, whom we can neither prove nor disprove, yet in whom we believe. However, God has created rules and functions that can be demonstrated as an evidence of His presence.

As the language of the universe, mathematics helps show us how God is made manifest there. It expresses this part of God's quality in its patterns of space and number that are partly aesthetic and spiritual. The spiritual dimension of mathematics transcends logic and reason. It asks ultimate questions, reveals the marvels of human imagination, presents amazing ideas, and changes the way we think about the world.



step 2 learning the approaches

## MATH

## Adventist Rationale for Math

There are many reasons why students should learn mathematics. Firstly, they need to master basic mathematical skills in order to cope with the demands of life. Such demands include being numerically literate, gaining the tools for future employment, developing the prerequisites for further education, and appreciating the relationship between mathematics and technology.

Secondly, mathematics is the language of the sciences, and many disciplines depend on this subject as a symbolic means of communication. Conversely, it can be used as a tool to learn other disciplines that ultimately leads to the appreciation of God's attributes.



Thirdly, a particularly important life skill is d e c i s o n making. It disciplines the mind and teaches the students to focus. It is

a subject built on the discovery of creative thinking and is appropriate for teaching critical thinking. It therefore provides the students the ability to deal with life and thereby become faithful stewards as God ordained them to be. Mathematics education can play an important part in developing students' general decision-making and problem solving skills.

A fourth justification for learning mathematics is the need for students to use the subject as an important means of discovering truth. The discipline clearly and precisely presents aspects of knowledge which are helpful in finding out truth about the structure and patterns of the environment, and of some of the ways in which God has communicated wth man.

A fifth objective closely associated with the quest for truth, is the search for beauty. Mathematics can assist students to develop their aesthetic aptitudes by looking at patterns in nature and by appreciating the precision and symmetrical beauty in God's creation.

Finally, mathematics equips the students with skills that make them better servants of God and man. Numerical accountability and accuracy in every line of work is as important as fulfilling God's expectations.