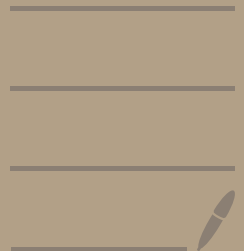


L3 - 13/08/2024

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- Nature - Physical, Inner (Mind), Inner (Study for its own sake), outer space
- Precise - formulation of statements having a definite truth value - True or False  
Moreover, every term has a def<sup>n</sup>.
- Symbolic - Representing nature via symbols & manipulating them.
- Logical - Systematic & rigorous application of the principles of logic.

## Syllogism

$$(A \Rightarrow B) \wedge (B \Rightarrow C) \Rightarrow (A \Rightarrow C)$$

eg -  $(\text{Socrates} \Rightarrow \text{Man}) \wedge (\text{Man} \Rightarrow \text{Mortal})$   
 $\Rightarrow (\text{Socrates} \Rightarrow \text{Mortal})$

- Abstraction - Capturing the essence of the situation / problem at hand.

This depends on the problem as well as its aesthetic aspects.

REMARK - 1. Abstraction is the most essential feature of Mathematics.

2. Mathematics can be considered a part of Philosophy.