Mathematics in the Modern World

1RDT-A) I BATCH 2025

COLLEGE OF RADIOLOGY – FEU-NICANOR REYES MEDICAL FOUNDATION

TRANSCRIBED BY: Arota, Bicada, Dumanon, Enriquez, Ladanga, Maraggun
LECTURER/S: Mr. Efren Suratos Jr.
REFERENCES: PPT, Handouts, Internet, textbook

NATURE OF MATHEMATICS

PPT	Professor	Textbook
Black	Mr. Efren Suratos Jr.	Mathematics in Modern World

NATURE OF MATHEMATICS

WHAT IS MATHEMATICS?	
	Mathematics means many things to many people.
1	According to Galileo Galilei, 'The laws of nature are written in the language of mathematics.
2	Mathematics is unique in that it can be both tangible yet completely abstract (intangible) at the same time.
3	One fascinating thing about mathematics is that it is a universal language. Though there are many different tongues on the planet, there's one common form of mathematics.
4	Mathematics is not the exclusive domain of the human race. It has been shown that some animals, e.g., crows, demonstrate the rudiments of counting.

Media have also played a significant role in popularizing mathematics.

→ Oscar--winning film A beautiful Mind
→ Dan Brown's Bestseller The Da Vinci Code
→ Academy Award-winning film Good Will Hunting
→ The Bigbang Theory
→ The Man who knew Infinity

→ Note: {} = the set of / = element of

LOGIC PATTERNS

Pattern – is an arrangement which helps observers anticipate what they might see or what happens next.

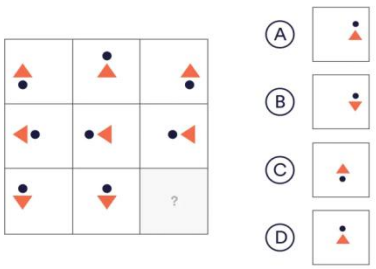
Commonly used patterns today:
→ logic pattern
→ number pattern
→ nature pattern
→ word pattern

Logic Patterns

→ These types of patterns are common in aptitude tests.
→ To construct or solve a pattern, find the rule for the pattern, understand the nature of the sequence, analyze the difference between the two successive terms.

Example:

Which of the given shapes would complete the



sequence?
Answer: B

Number Patterns

→ A **sequence** consists of the elements of a sequence function, listed in order.

→Finite Sequence Function
Example: $f(n) = 2n \quad n \in (1, 2, 3, 4, 5)$
Corresponding Sequence: 2, 4, 6, 8, 10
→Infinite Sequence Function:
Example: $g(n) = \frac{1}{n} \quad n \in (1, 2, 3, \ldots)$
Corresponding Sequence: $1, \frac{1}{2}, \frac{1}{3}, \frac{1}{4}, \frac{1}{5}, \ldots.$