PHILOMATH

LOVE OF LEARNING MATHEMATICS AND LEADS TO SUCCESS IN LIFE

1980, German, Wilhelm Leibniz Maxi card

2011,INDIA,SRINIVASA RAMANUJAN

1979,INDIA,ALBERT EINSTEIN

1957,TURKIYE,BENJAMIN FRANKLIN

Gottfried Wilhelm **Leibniz** (1646- 1716) was a German philosopher, mathematician, and logician who is probably **most well known for** having invented the differential and integral calculus (independently of Sir Isaac Newton).

1967,INDIA.DIAMOND JUBILEE
SCOUT MOVEMENT ,BLOCK OF FOUR
WITH MARGIN
NUMBER COUNTING BY USING FINGERS
(NUMBER THREE)

=>

2. PHILOMATH

A **philomath** from Greek ("beloved", "loving", as in philosophy or philanthropy) and *manthanein*, *math-* ("to learn", as in polymath) is a lover of learning and studying.

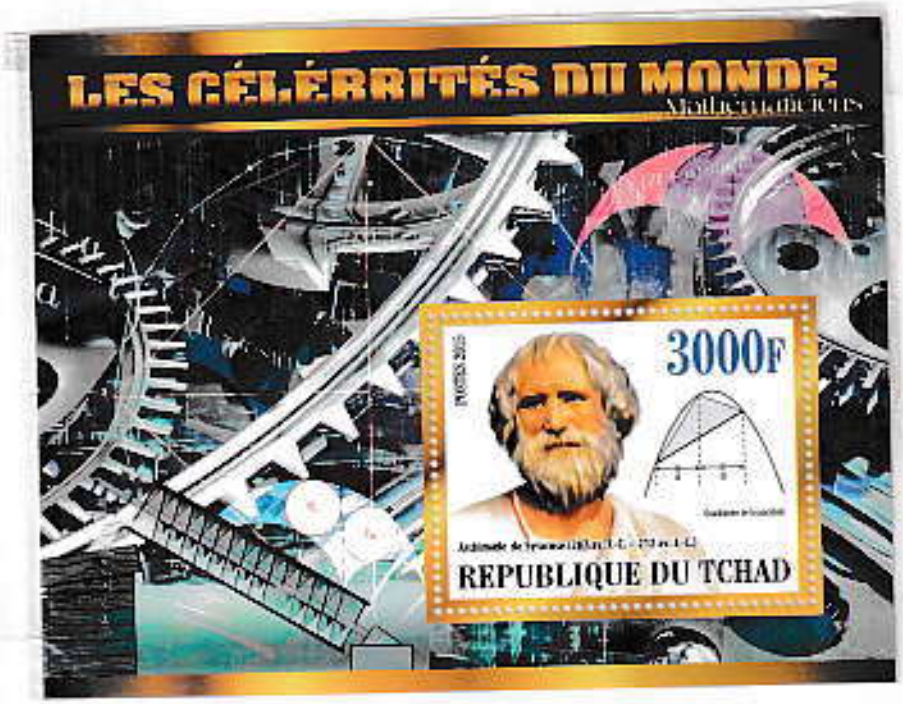
1982.SAN MARINO.FIRST DAY COVER

2002.MOLDOVA.LEONARDO DA VINCI.MINI SHEET

EXACT FUNDAMENTALS FIRST CONSISTUTED BY GREEK SCHOLARS:

2.1.ARCHIMEDES:

Greek mathematician **Archimedes** is widely considered by many to be the "father of mathematics." He is regarded as one of the leading scientists in classical antiquity and is credited with designing numerous innovative machines, including the screw pump and siege engines.



2015,REPUBLIQUE DU TCHAD
MINI SHEET

1982,SAN MARINO,ARCHIMEDE
BLOCK OF FOUR

1993,GERMANY,FIRST DAY COVER-NUMBER CANCELLATION ON COVER

2.2.PLATO:

Plato was an Athenian philosopher during the classical period in ancient Greece, founder of the Platonist school of thought, and the Academy, the first institution of higher learning in the western World.

1966,SPECIAL COVER.G.W.LEIBNIZ NAME CANCELLATION ON COVER

1995,GERMANY,POST CARD,C.F.GAUSS IMAGE CANCELLATION ON CARD

2.3.ARISTOTLE:

Aristotle was a Greek philosopher and polymath during the classical period in Ancient Greece. He was the founder of the Lyceum and the peripatelic school of philosophy and Aristotelian tradition. Along with his teacher Plato, he has been called the "Father of western Philosophy"

1978.GREECE
ARISTOTLE

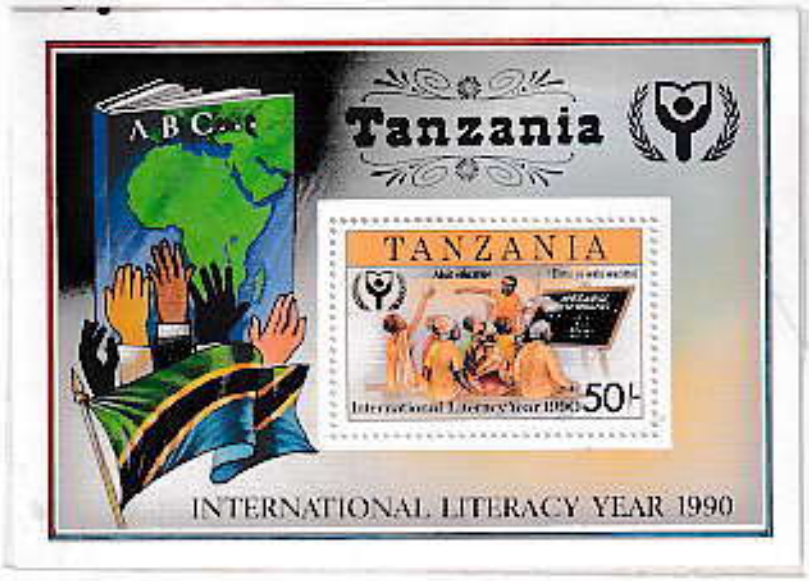
2016, CHINA 57 TH INTERNATIONAL OLYMPIAD
MINI SHEET

1975,NEDERLAND,BRAILLE LITREATRE COUNTING ON DOTS.FIRST DAY COVER

2.4.EDUCATION:

Education is the process of facilitating learning, or the acquisition of knowledge, skills, values, beliefs, and habits. Educational methods include storytelling, discussion, teaching, training and direct research. Education frequently takes place under the guidance of educators, however learners

2000,NEDERLAND,FIST DAY COVER,LEARNING ARITHMETIC WITH FINGER PRINT



1990,TANZANIA,INTERNATIONAL LITERACY YEAR,
TEACHING NUMBERS TO STUDENTS ,MINI SHEET

2016,SWITZERLAND, LEARNING MATHS,MINT

3.1.THE FUNDAMENTAL OF MATHEMATIS

Definition:

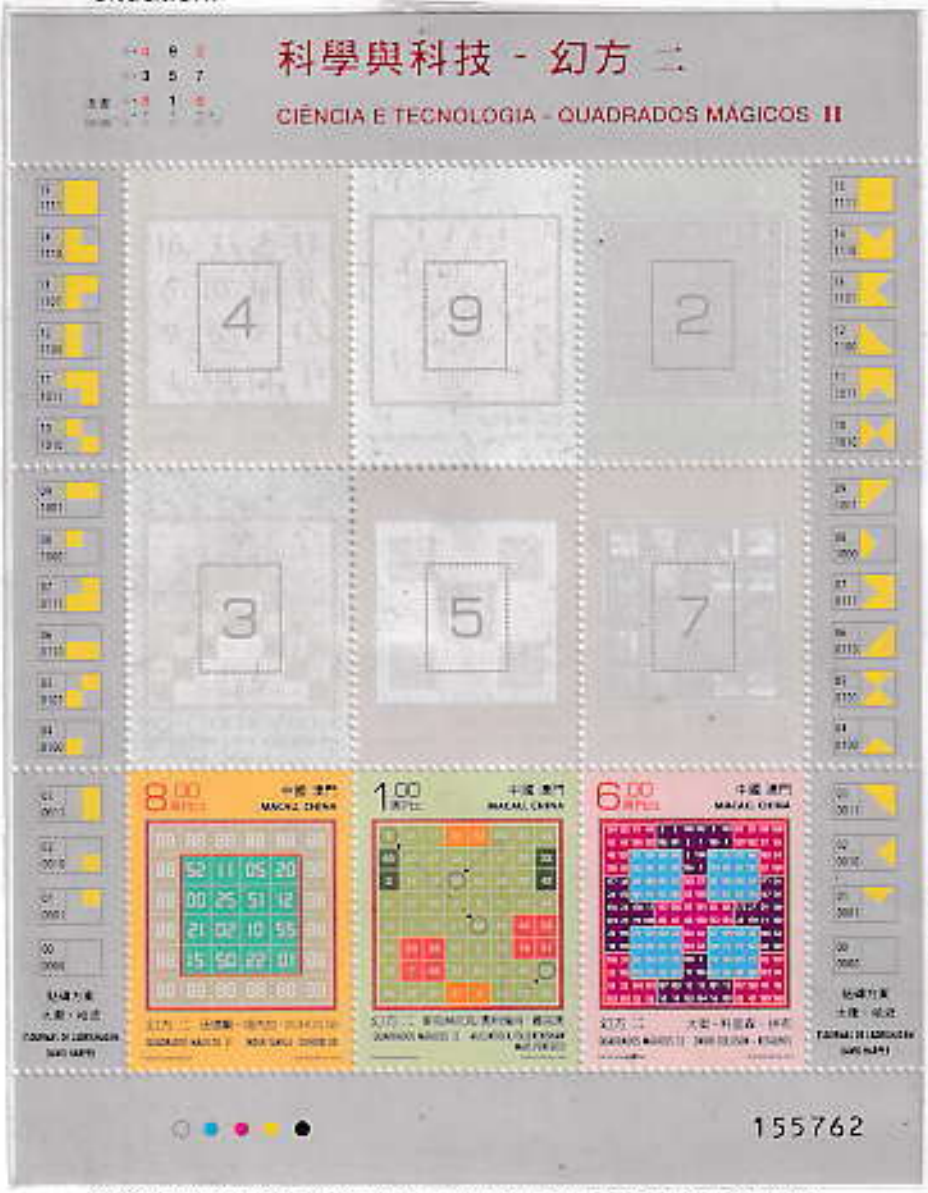
Mathematics is mental activity which consists in carrying out, one after the other, those mental constructions which are inductive and effective.

1979,BELGIE:MATHS SYMBOL CANCELLATION ON PICTURE POST CARD

Mathematics is the manipulation of the meaningless symbols of a first-order language according to explicit, syntactical rules.

1987,SPAIN,ARITHMETIC LEARNING IN HAND,SPECIAL COVER

Purpose: Math helps us have better problem-solving skills. Analytical thinking refers to the ability to think critically about the world around us. Reasoning is our ability to think logically about a situation.



2016,CHINA ,MAGIC SQUARE,MINI SHEET: PROBLEM SOLVING

1982,HUNGARY,RUBIC CUBIC
PROBLEM SOLVING SKILL

1979,GUINE-BISSAU,
LEARNING SKILLS

Principles: The **Principles of Mathematics** (PoM) is a 1903 book by Bertrand Russell, in which the author presented his famous paradox and argued his thesis that **mathematics** and logic are identical.

1970,INDIA,BERTRAND RUSSELL
NOBLE PRIZE WINNER,BLOCK OF FOUR

1979,ZAIRE,ALBERT EINSTEIN
$E=MC^2$,MINI SHEET

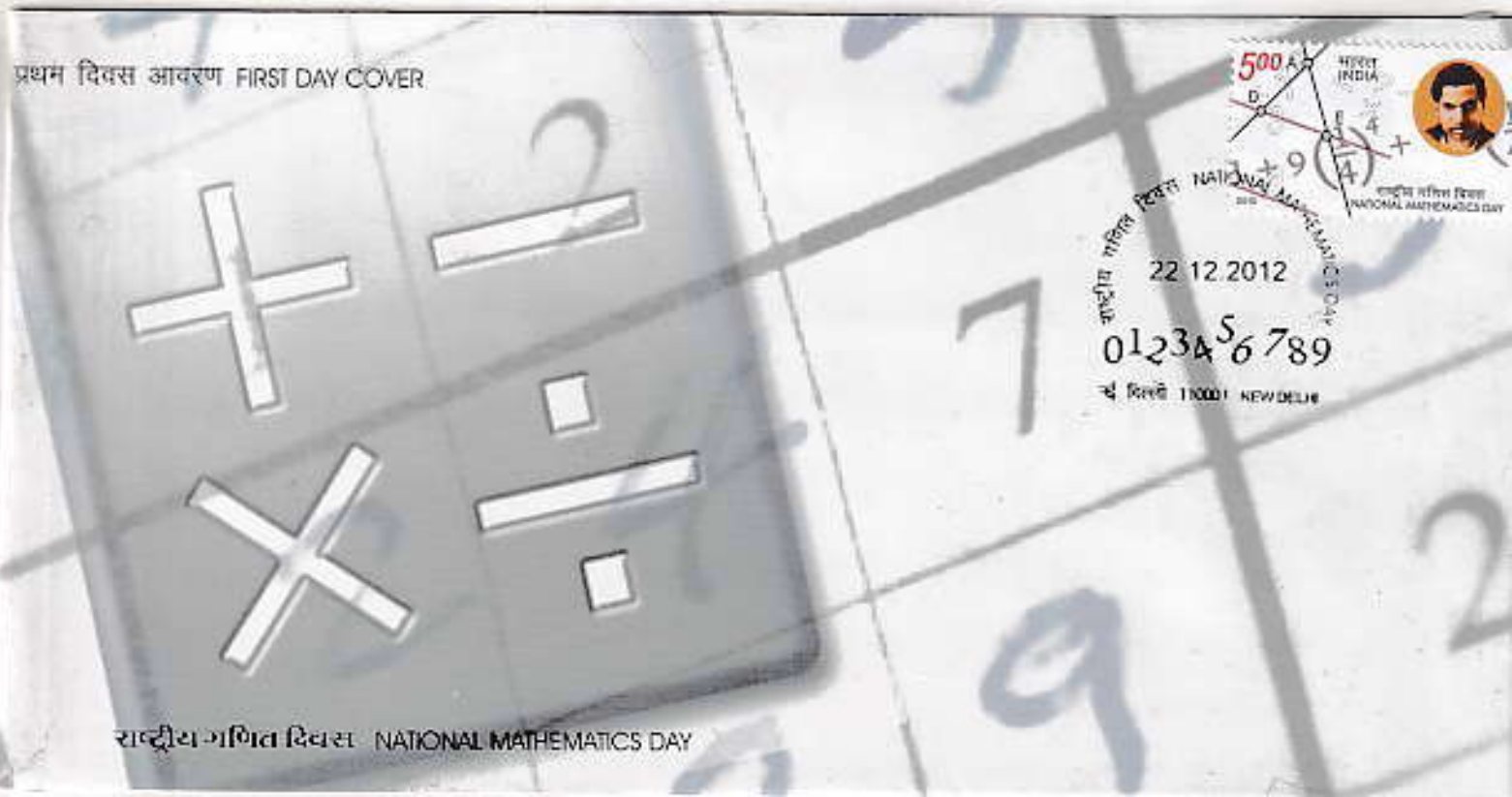
3.4.ORIGIN AND DEVELOPMENT

3.4.1.BASIC GEOMETRIC KNOWELEDGE

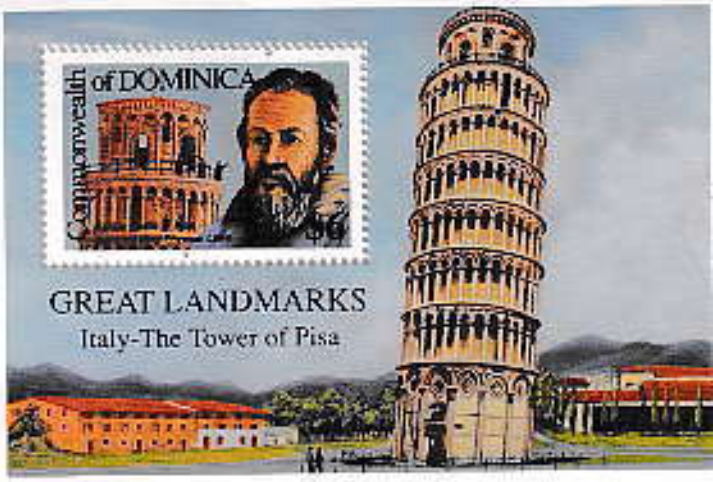
2018,CHINA
MINI SHEET,
,BASIC ALGEBRA
WITH GEOMETRIC
PRINCIPLE

3.4.2.FROM COUNTING TO INGENIOUS NUMERAL SYSTEM:

2012,INDIA,NATIONAL MATHEMATICS DAY,NUMBER CANCELLATIONS ON COVER



3.4.3.ACHIEVEMENTS OF ARCHITECTS AND ENGINEERS OF EARLY CIVILIZATIONS



2012,REPUBLIQUE DE GUINEE
MERVEILLES ARCHITECTURE

3.5.MATHEMATICS SYMBOLS

1991,HONG KONG,FIRST DAY COVER:ARITHMETIC SYMBOL

4.QUADRIVIUM: The **quadrivium** (plural, quadrivia) is the four subjects, or arts (namely arithmetic, geometry, music and astronomy), taught after teaching the trivium. The word is Latin, meaning *four ways*, and its use for the four subjects has been attributed to Boethius or Cassiodorus in the 6th century. Together, the trivium and the quadrivium comprised the seven liberal arts (based on thinking skills), as distinguished from the practical arts (such as medicine and architecture).

2000,KOREA ,ARITHMETIC

1973,INDIA:COPERNICUS

1990,RWANDA,LEARN ARITHMETIC

1969,KWAIT,GEOMETRY

1965,PARAGUAY,TRIANGLE SHAPE

ISAAC NEWTON

4.1.ARITHMETIC TO ALGEBRA: Arithmetic is a branch of mathematics that consists of the study of numbers,especially the properties of the traditional operations on them-addition,subtraction,multiplication and division.arithmetic is an elementary part of number theory and number theory is considered to be one of the top-level divisions of modern mathematics, along with algebra, geometry, and analysis.

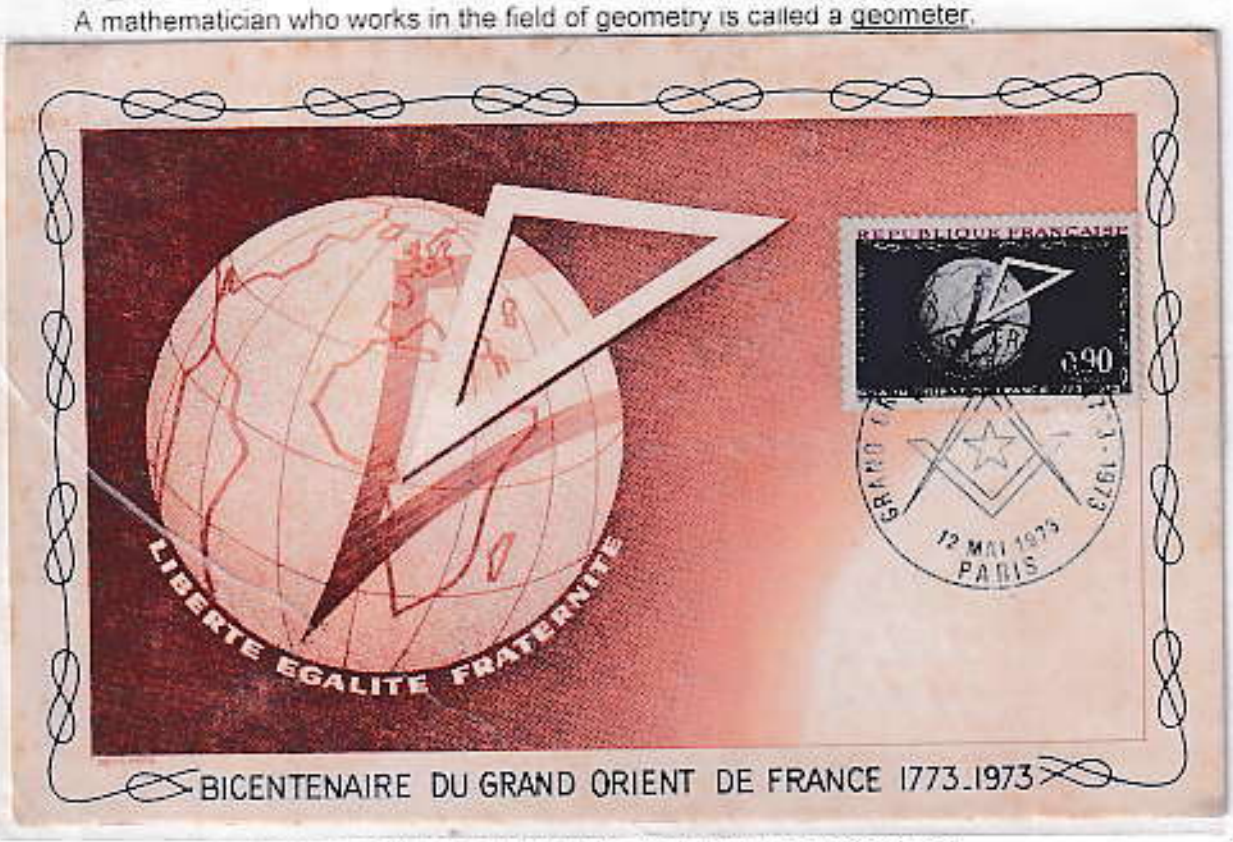
1990,FRANCE,MINI SHEET,MODERN MATHS

1978,BRASIL
ALGEBRA

2013,LIBERIA,ABACUS

1981,GRENADA: ANALYSIS,TRIANGLE SHAPE

4.2.GEOMETRY: **Geometry** (from the Ancient Greek: *geo-* "earth", *-metron* "measurement") is a branch of mathematics concerned with questions of shape, size, relative position of figures, and the properties of space. A mathematician who works in the field of geometry is called a geometer.



1973,FRANCE,COMPASS SHAPE CANCELLATION ON PICTURE POST CARD

1954,GERMANY

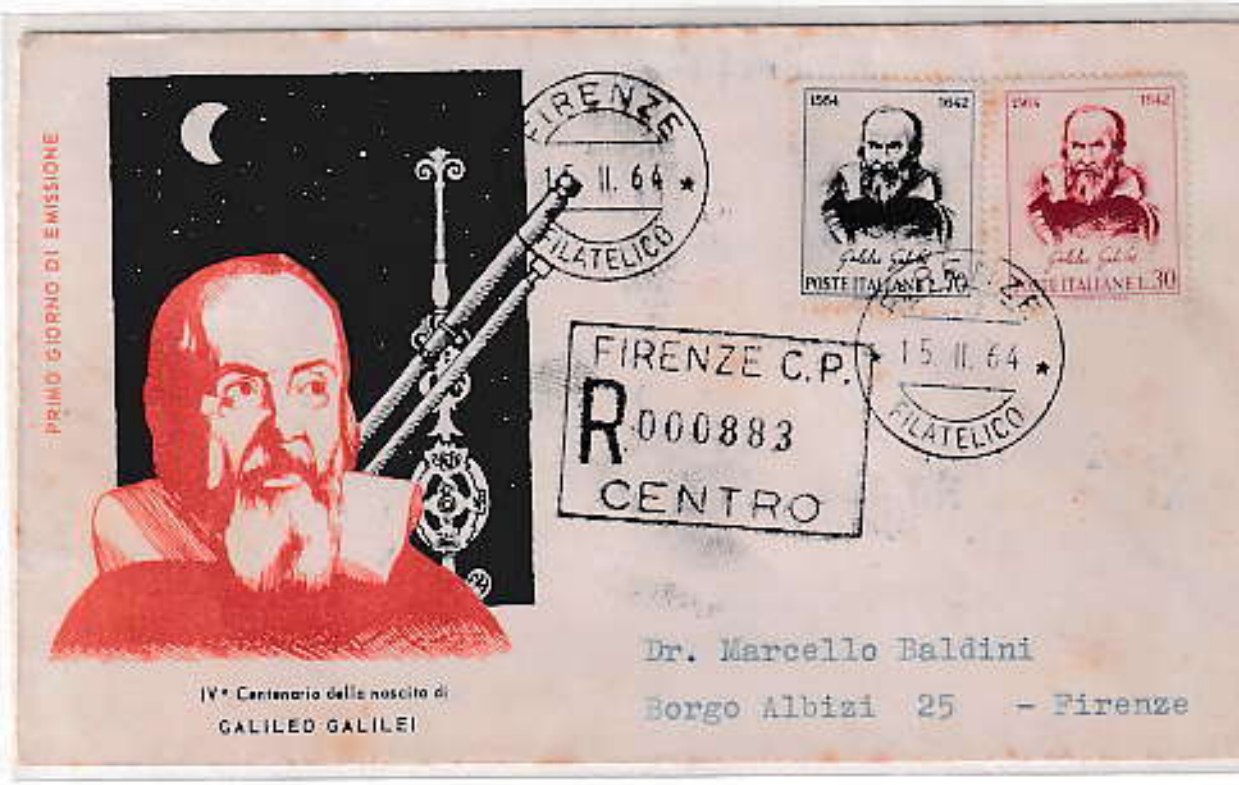
1980,INDIA ,COMPASS SYMBOL CANCELLATION ON INFORMATION SHEET

1974,KWAIT

1965,PARAGUAY,TRIANGLE SHAPE

4.3.ASTRONOMY- LEGENDS: **Astronomy** (from Greek) is a natural science that studies celestial objects and phenomena. It uses mathematics, physics, and chemistry in order to explain their origin and evolution. Objects of interest include planets, moons, stars, nebulae, galaxies, and comets.. Cosmology is a branch of astronomy. It studies the Universe as a whole.

1964,ITALY
SPECIAL COVER
GALILEO GALILEI



1981,ZAIRE,DAVINCI

1973,REPUBLIC DU DAHOMEY

1987,LESOTHO,NEWTON

1971,ROMANIA,KEPLER

1967,ESPANA,
MAIMONIDES

AVERROES

BANGLADESH
COPERNICUS

1971,ITALY
GALILEO

2011,VATICAN CITY,FRANZ LISZT

MUSIC THEORY: Music theory is the study of the practices and possibilities of music. *The Oxford Companion to Music* describes three interrelated uses of the term "music theory":

5.THE METHODS OF TEACHING

5.1.MATHEMATICS IS PSYCHOLOGICAL ORIENTED EDUCATIONAL SYSTEM: MATHEMATICAL PSYCHOLOGY IS THE STUDY OF BEHAVIOUR THROUGH A MATHEMATICAL LENS.THIS SCIENCE ATTEMPTS TO PREDICT BEHAVIOURS BY APPLYING STATISTICS AND MATHEMATICAL FORMULAS

1998,INDIA,ABACUS ON STAMP SAVITRIBAI PHULE

1994,FRANCE, FORMULAS ON STAMP

2000,LUXEMBOURG *π VALUE ON STAMP*

1966,RUSSIA SYMBOLS ON STAMP

5.2.LEARNING BY DOING: LEARNING IS A STYLE IN WHICH TAKES PLACE BY THE STUDENTS CARRYING OUT PHYSICAL ACTIVITIES.RATHER THAN LISTENING TO A LECTURE OR WATCHING DEMONSSTRATIONS

1998,MACEDONIA SYMBOLS ON STAMP

2013,ITALY,GEOMETRY SHAPES ON STAMP

1969,FINLAND SYMBOLS ON STAMP

2012, CZECH REPUBLIC FORMULAS ON STAMP

5.3.PEDAGOGICAL SYSTEM: PEDAGOGY REFERS TO THE "INTERACTIONS BETWEEN TEACHERS,TUDENTS,AND THE LEARNING ENVIRONMENT AND THE LEARNING TASKS"

1972, GERMAN GAUSS FORMULAS STAMP ON COVER

5.4.INTERGAL EDUCATION: INTERAL EDUCATION INCLUDES APPROACHES TO EDUCATION FROM NUMEROLOGICAL,BIOLOGICAL, CULTURAL,PSYCHOLOGICAL AND SPIRITUAL FIELDS OF STUDTY.

2015,THAILAND,THAI NUMERALS,MINI SHEET

5.5.ACTIVE BASED EDUCATION: ACTIVE LEARNING INCLUDE ROLE-PLAYING,CASE STUDIES,GROUP PROJECTSTHINK-PAIR-SHARE,PEER TEACHING,DEBATES AND SHORT DEMONSTRATIONS FOLLOWED BY CLASS DISCUSSION

2014.KOREA, PYTHAGORAS EULERS,PASCAL THEORIES ON STASMPS WITH MARGIN

1993, REPUBLIC TUNISIENNE ARITHMETIC LEARNING BY USING FINGERS ON COVER

6.MATHEMATICS IS THE SEED OF ALL SCIENCE AND HUMANITIES:

6.1.PHYSICS: THE NOBLE PRIZE IN PHYSICS 1930 WAS AWARDED TO SIR C.V.RAMAN FOR HIS WORK ON SCATTERING OF LIGHT

1971,INDIA =>
BLOCK OF FOUR
CANCELLATION ON
FIRST DAY COVER
SIR.C.V.RAMAN

1994,INDIA
S.N.BOSE

2005,HUNGARY ,EINSTEIN STAMP WITH MARGIN

1965,PARAGUAY ,ISSAC NEWTON ,ODD SHAPE

1987,LESOTHO
CHUCK YEAGER
ALEXANDER G.
R.GUDDARD

1975,GHANA
METERE TAPE
WEIGHT SCALE
THERMOMETRE

1971, KENYA,UGANDA,TANZANIA
SITE MEASURE
PETROL TANK
WEIGHT MEASURE

6.2.CHEMISTRY:

1962,U.S.A,
ATOMIC ENERGY ACT
BREIEN MCMAHON
FIRST DAY COVER

MONACO - 2ème PARTIE 1983

CEF

PREMIER JOUR
D'ÉMISSION
FIRST DAY COVER

1963,MONACO
ALFERD NOBEL
FIRST DAY COVER

1971,KENYA,UGANDA,TANZANIA
FAHREN HEAT,CENTIGRADE SCALE

1975,FRANCE
ELEMENTS ON STAMP

1976,GRENADA
ALFERD NOBEL

6.3.BIOLOGY:

1963,GRONALAND
NIELS BOHR

2008,SPAIN
CELSIUS SCALE ON STAMP

1958, INDIA, BLOCK OF FOUR
JAGADISH CHANDRA BOSE

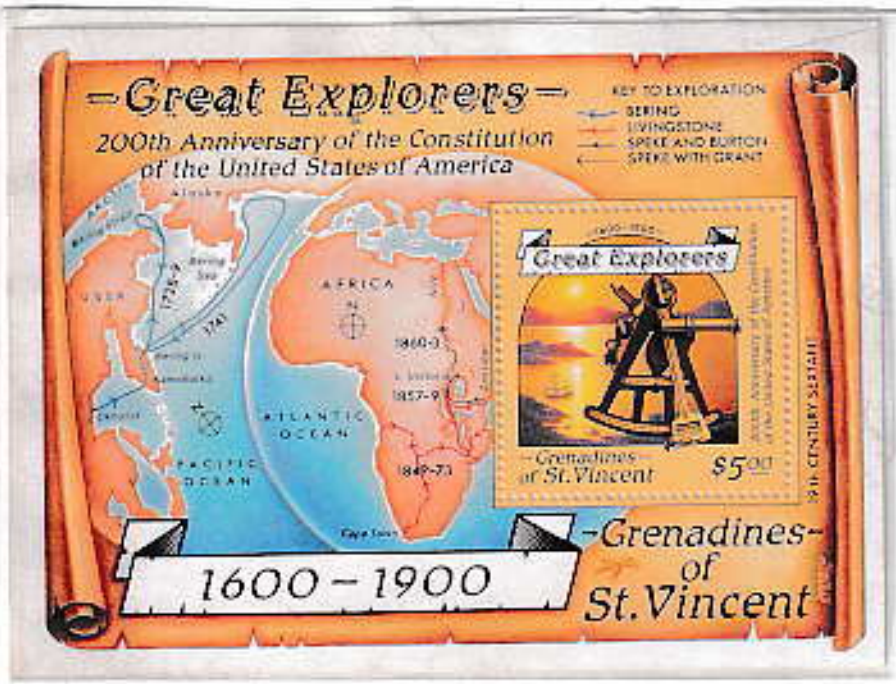
6.4.ECNOMICS:INSIGHTS FROM LARGE DATA VOLUME IN ECONOMIC AND SCIENCE STATISTICS:

P.C.MAHALANOBIS WAS AN INDIAN SCIENTIST AND STATISTICIAN.HE IS BEST REMEMBERED FOR THE MAHALANOBIS DISTANCE,A STATISTICAL MEASURE,AND FOR BEING ONE OF THE MEMBERS OF THE PLANNIN COMMISSION OF FREE INDIA.
NATIONAL STATISTIC DAY(JUNE-29)

2018,INDIA,SPECIAL COVER,125 TH BRITISH ANNIVERSARY OF P.C.MAHALANOBIS

1977,INDIA => FRST DAYCOVER 4 TH SESSION INTERNATIONAL STATISTICAL INISTITUTE

1993,INDIA P.C.MAHALANOBIS



1988,ST.VINCENT,MINI SHEET

1972,U.N.O

1995,MEXICO

2001,BULGARIA ROMAN NUMBER XXI (21)

1991,INDIA MAP ON STAMP WITH MARGIN

1951, REPUBLIC MALUKU (IMPORATE STAMP)

1962,MALTA

1981,GERMANY

1978,GERMANY

1982,PORTUGAL

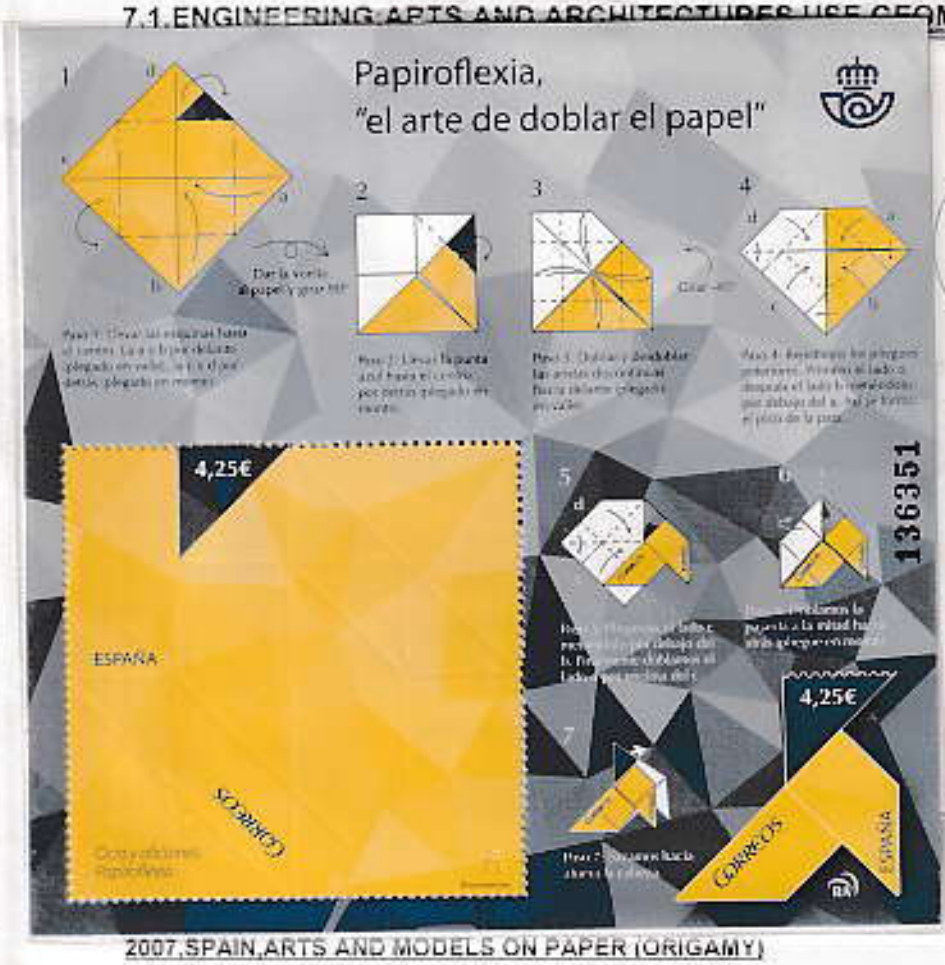
1966, BARBUDA

1996, NEDERLAND

1983, IRAQ

7.A SCIENCE BETWEEN THEORY AND APPLICATIONS OF MATHEMATICS:

7.1.ENGINEERING,ARTS AND ARCHITECTURES USE GEOMETRIC PRINCIPLES:



2007,SPAIN,ARTS AND MODELS ON PAPER (ORIGAMY)

1978,SOUTH AFRICA,FDC
ENGINEERING WORK ON BRIDGE

1987,REGISTER COVER
FROM CHILE TO QATAR

1982,PAPAUA &
NEW GUINEA

7.2.ASTRONOMERS AND NAVIGATORS HELP TO BROADEN TRIGNOMETRIC KNOWELEDGE:

2014,SRI LANKA,SOLAR SYSTEM

1980,GREEK

1959,CESKOSLOVENSKO

1981,GERMANY

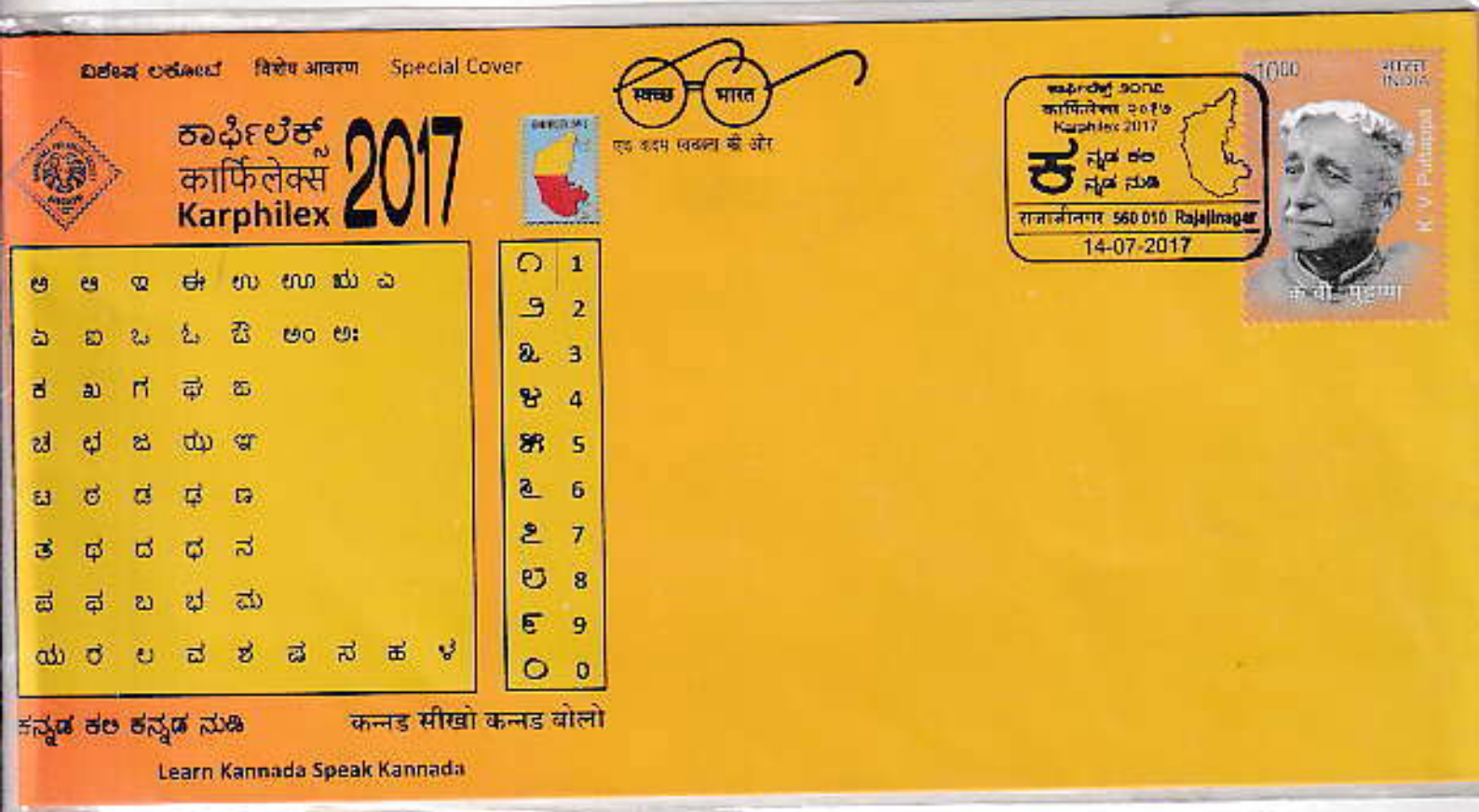
1986,MAURITIUS

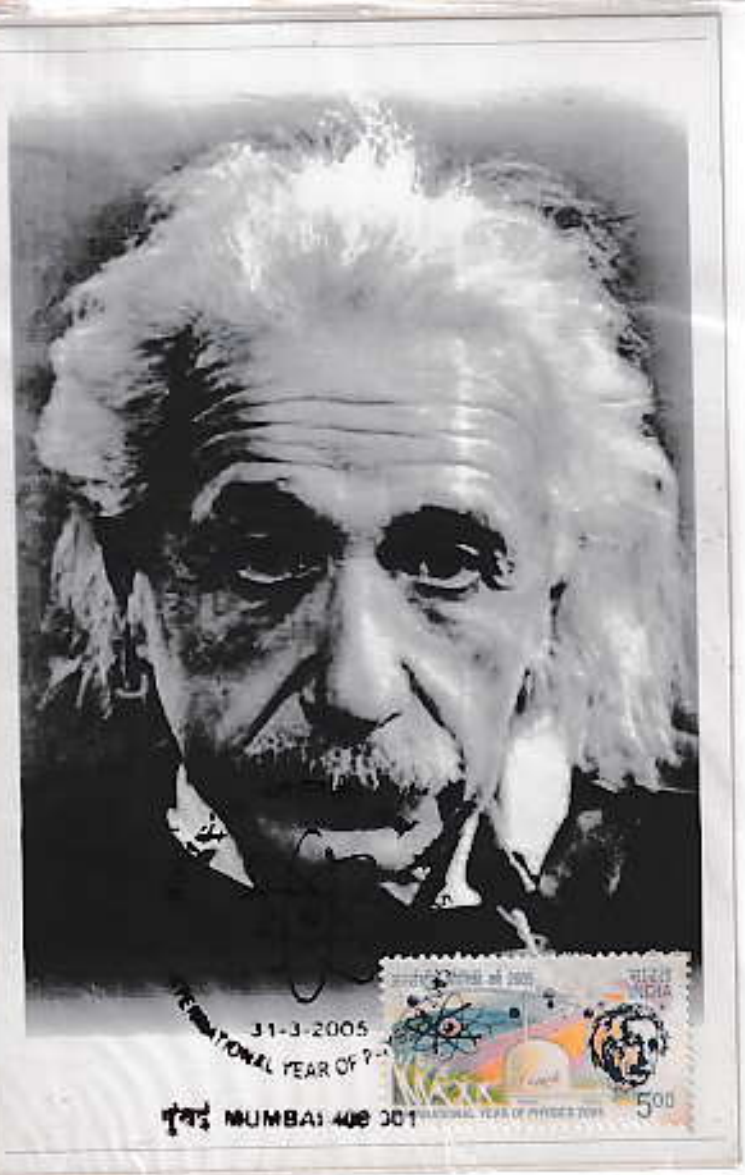
1986,SRI LANKA
HALLEY'S COMET

2004,INDIA,MINI SHEET,TRIGNOMETRY SURVEY

7.3.STATISTICS:ALGEBRA AND ARITHMETIC SUPPORT TRADERS AND SCIENTISTICS:

2017,INDIA,SPECIAL COVER,ARITHMETIC NUMBER ON COVER(LEARN KANNADA NUMBER LANGUAGE)





<= 2005,INDIA
NATIONAL PHYSICS YEAR
EINSTEIN PICTURE POST CARD

2005,THAILAND,
BLOCK OF FOUR
TRIGONOMETRIC CURVES ON
BUFFALO HORN
TRIGNOMETIC RATIOS-
(SINθ COSθ TANθ COSECθ SECθ COTθ)

7.4.COMPUTER AND ICT:RAPID ADVANCE OF THE COMMUNICATION TECHNOLOGY:

1997, REPUBLIC DU NIGER, MINI SHEET ICT TECHNOLOGY

1997,REPUBLIC DU NIGER,MINI SHEET,COMMUNICATION TECHNOLOGY

2018,USA, ICT TECHNOLOGY

1983,ZAIRE

1963,DUBAI

1978,GRENADA

1985,INDIA

1983,CANADA

1982,POLSKA.DIGITALISATION IN MATHEMATICS FIELD

8.DEVELOPMENTS OF MODERN MATHEMATICS IN FORMULAS AND NUMBERS:

8.1.FORMULAS:

1998,GERMAN
SQUARE ROOT
CANCELLATION
ON STAMP
WITH MARGIN

2008,ISRAEL
FORMULA
ON STAMP

8.2.FIBBNOCCI SEQUANCE:

1,1,2,3,5,8,13,21...

RABBITS,RATS,SUNFLOWERSEED
FORMATION ON FIBBNOCCI

1992,INDIA
SUNFLOWER

8.3.FANCY NUMBER:

1982,IRAQ
777
ANGEL NUMBER

1965,GERMAN
5 X 5 X 5=125

2001,BOSNA HERCEGOVINA
FORMULA
ON STAMP WITH MARGIN

8.3:PALINDROME NUMBERS:

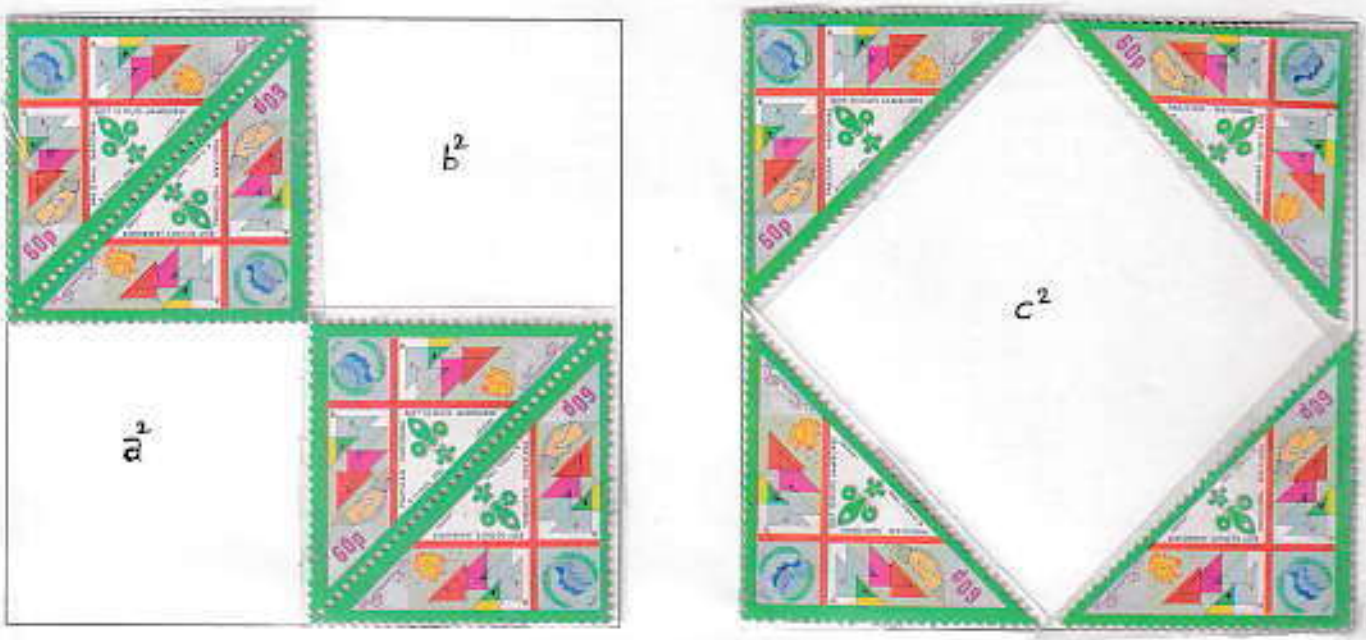
"A WORD,PHRASE,SEQUENCE THAT READS THE SAME BACKWARDS AS FORWARDS"

8.1.18
DATE
CANCELLATION
ON INLAND
LETTER CARD

8.1.18
DATE
CANCELLATION
ON POST CARD

9.MAN USES GEOMETRIC FIGURES FOR DECORATION PURPOSE:

9.1.PYTHAGORAS THEOREM FORM ($a^2 + b^2 = c^2$) ON ODD SHAPE STAMPS:



2008,BRITAN
SQUARE

1967,INDIA
RECTANGLE

1989,INDIA
DIAMOND

2018,INDIA
CIRCLE

2019,INDIA
OCTAGON
(8 SIDES)

2008,SRI LANKA
TRAPAZIUM
(4 SIDES)

1989,MALASIYA
QUADRILATERAL
(4 SIDES)

9.2.ODD SHAPES ON STAMPS:

NIPPON, CIRCLE

NIPPON SEMI CIRCLE

NIPPON ELLIPSE

NIPPON ARCH

RUSSIA ARCH HOME

LAOS HEART

TONGA: ODD SHAPES

10.THE WORLD FAMOUS PERSONALITIES QUOTES FOR MATHS:

1960,INDIA
THIRUVALLUAR

=> HE USED MANY ARITHMETIC TERMS NAME ON THIRUKURAL

1330=>1+3+3+0=7 (NO.OF.THIRUKURAL)

133=>1+3+3=7 (NO.OF.ADHIKARAM)

=> HE USED MANY NUMBERS NAME ON CHILDRENS AND FREEDOM FIGHT SONGS

1960,INDIA
BHARATHIYAR

=> "AN EQUATION MEANS NOTHING TO ME UNLESS IT EXPRESS A THOUGHT OF GOD"

1962,INDIA
SRINIVASA RAMANUJAN

=> "MATHEMATICS SEEMS TO ENOW ONE WITH SOMETHING LIKE A NEW SENSE"

1983,INDIA
CHARLES DARWIN

=> "SHE DESIGNED MATHS MATERIALS TO INCORPORATE THE NATURAL CAPABILITIES OF A CHILDS MATHEMATICAL MIND"

1970,INDIA
DR.MONTESSORI

=> A TEACHER IN MATHEMATICS,TEACHER'S COLLEGE,SAIDAPET,MADRAS,1917
" FATHER OF INDIAN LIBRARY "

1992,INDIA
DR.S.R.RANGANATHAN

=> "A MAN IS LIKE A FRACTION WHOSE NUMERATOR IS WHAT HE IS AND WHOSE DENOMINATOR IS WHAT HE THINK OF HIMSELF.THE LARGER THE DENOMIATOR,THE SMALLER THE FRACTION "

1978,INDIA, LEO TOLSTOY

=>MATHEMATICS ORIGINALLY SIGNIFIED ANY KIND OF DISCIPLINE OR LEARNING,BUT NOW I IT IS TAKEN FOR THAT SCIENCE WHICH TEACHES OR CONTEMPLATES WATEVER IS CAPABLE OF BEING NUMBERED OR MEASURED.

1957,TURKIYE
BENJAMIN FRANKLIN

1980,USA
BENJAMIN BANNEKER

1952,ITALY
LEONORDO DA VINCI

2008,INDIA
DAMODAR KOSAMBAI

2011,RUSSIA,M.B.KENABIW

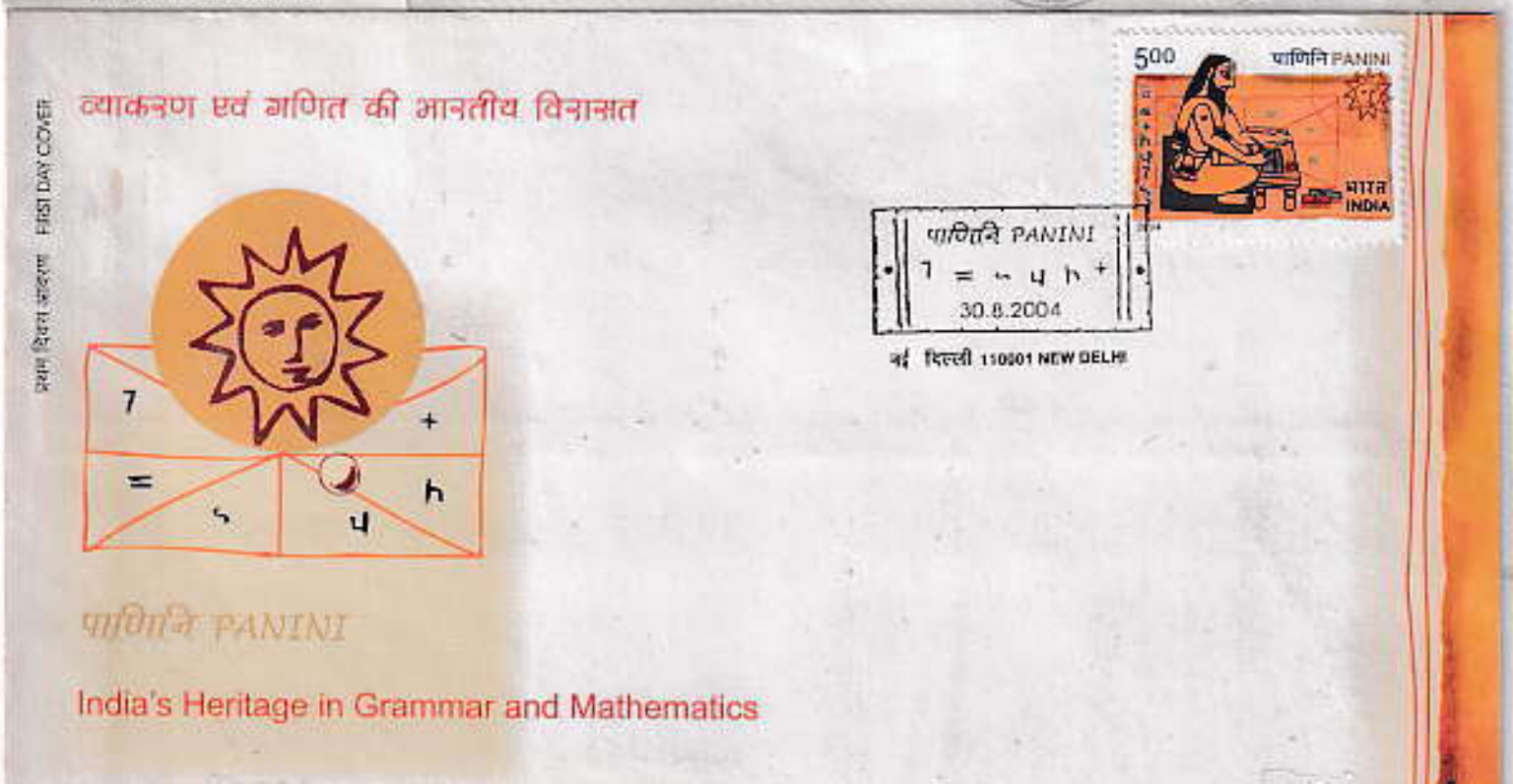
2011,RUSSIA B.ACTEKNOB

2001, ITALY,FERMI

2009,GUINE BISSAU,HENRY BRAGG

2001,USA,ENRICO FERMI

2007,FRANCE
PIERRE DE FERMAT
FIRST DAY COVER



11.THE INTERNATIONAL MATHEMATICAL UNION

11.1.THE INTERNATIONAL MATHE MATICS YEAR(2000)

ON MAY,6TH,1992 IN RIO DE JANEIRO(BRAZIL),THE INTERNATIONAL MATHEMATICAL UNION DECLARED THAT THE YEAR 2000 WILL BE THE WORLD MATHEMATICAL YEAR.

2000,BELGIQUE
PYTHAGORES
FORMULAS ON
STAMP

1982,GREAT BRITIAN
NEWTON APPLE

1975,PAKISTAN
NUMBERS ON STAMP

1994,IRAN
SPHERE ON STAMP

2000,ITALY
CYLINDER SHAPE
ON STAMP

1961,AUSTRIA
CUBOID SHAPE

1996,HUNGARY
PYRAMID SHAPE

2006,SPAIN
NUMBERS ARE REVERSE

2009,INDIA,PASAL TRIANGLE ON STAMP
INDIAN MATHEMATICAL SOCIETY
BLOCK OF FOUR

1979,UNITED ARAB
ALGEBRA WORD ON STAMP

2006,SPAIN

11.2.THE NATIONAL MATHEMATICS DAY:

In India, the National Mathematics Day is observed on **December 22** every year. It is celebrated in order to honor the birth anniversary of the famous mathematician Sir Srinivasa Ramanujan.

2010INDIA
"NATIONAL MATHEMATICS DAY"
SRINIVASA RAMANUJAN
BLOCK OF FOUR WITH MARGIN

1962,INDIA
BLACK,RED
CANCELLATION ON
FIRST DAY COVER

2011,INDIA
RAMANUJAN NAME
CANCELLATION ON
PICTURE POST CARD

12.CONCLUSION:

MEASURES-FUNDAMENTAL IN SCIENCE,TECHNOLOGY AND EVERYDAY LIFE:

- Shaping up with everyday maths. Shapes and space, is the oldest branch of maths. ...
- Thinking in numbers. Arithmetic crops up a lot in daily life. ...
- Lies, damned lies. Newspapers and TV news are full of statistics. ...
- Algebra and equations. A real world example of using algebra is pricing. ...
- Fractions, decimals and percentages.

1964, UNO "EDUCATION FOR PROGRESS" -FIRST DAY COVER

3R'S(READING,WRITING,ARITHMETIC) ARE IMPORTANT IN MATHEMATICS LEARNING PROCES

USA, HEART SHAPE ON STAMP

RWANDA, ARITHMETIC TEACHING

1979,GUINE BISSAU NUMBERS READING

PAPUA NEW GUINEA NUMBER WRITTING

1986,INDIA OVAL SHAPE ON STAMP YEAR OF PEACE(HAPPY)

LOVE + LEARNING + READING + WRITING =

" MATHEMATICS IS SUCCESSFUL IN ENTIRE LIFE FOR HUMAN BEING"