

Mathematical Concepts and Pioneers

Mathematics · Practice Test · 22 Questions

1. Who is considered the Father of Modern Analysis?

- A) Karl Theodor Wilhelm Weierstrass
- B) Rene Descartes
- C) Isaac Newton
- D) Leonhard Euler

2. What theorem is named after Fermat?

- A) Fermat's Last Theorem
- B) Pythagorean Theorem
- C) Central Limit Theorem
- D) Bayes' Theorem

3. Which mathematician is known as the Father of Computing?

- A) Charles Babbage
- B) Alan Turing
- C) Ada Lovelace
- D) John von Neumann

4. The Equal sign (=) was introduced by which mathematician?

- A) Robert Recorde
- B) René Descartes
- C) Gottfried Wilhelm Leibniz
- D) Isaac Newton

5. What is the name of the plane used to represent complex numbers graphically?

- A) Cartesian Plane
- B) Argand Plane
- C) Phase Plane
- D) Phase Space

6. Who is credited with proving Bertrand's conjecture?

- A) Pafnuty Chebyshev
- B) G.H. Hardy
- C) Srinivasa Ramanujan
- D) John Nash

7. What is the name of the theorem related to conditional probability?

- A) Bayes' Theorem
- B) Central Limit Theorem
- C) De Moivre's Theorem
- D) L'Hôpital's Rule

8. Which mathematician is known for his work on the theory of complex functions and is associated with Calculus?

- A) Augustin Cauchy
- B) Bernhard Riemann
- C) Karl Weierstrass
- D) Leonhard Euler

9. Who developed the concept of the Cartesian plane?

- A) René Descartes
- B) Pierre de Fermat
- C) Blaise Pascal
- D) Galileo Galilei

10. What is the name of the theorem that states that a system of linear equations has a solution if and only if the rank of the coefficient matrix is equal to the rank of the augmented matrix?

- A) Rouché-Capelli theorem
- B) Cramer's Rule
- C) Rank-Nullity Theorem
- D) Sylvester's Law of Inertia

11. Who is considered a Grand Russian mathematician and known for his work on probability theory and number theory?

- A) Pafnuty Chebyshev
- B) Andrey Kolmogorov
- C) Nikolai Lobachevsky
- D) Sofia Kovalevskaya

12. The 'Ars Magna' is a significant work in algebra by which Italian mathematician?

- A) Gerolamo Cardano
- B) Niccolò Fontana Tartaglia
- C) Bonaventura Cavalieri
- D) Rafael Bombelli

13. Who is known for his three planetary laws and was a student of Tycho Brahe?

- A) Johannes Kepler
- B) Galileo Galilei
- C) Isaac Newton
- D) Nicolaus Copernicus

14. The concept of 'imaginary numbers' was advanced by which mathematician?

- A) René Descartes
- B) Leonhard Euler
- C) Pierre-Simon Laplace
- D) Carl Friedrich Gauss

15. What is the name for the geometric shapes formed by the intersection of a cone with a plane?

- A) Conic Sections
- B) Quadratic Curves
- C) Curvilinear Figures
- D) Planar Intersections

16. Who is credited with introducing the multiplication symbol (×)?

- A) William Oughtred
- B) Gottfried Wilhelm Leibniz
- C) John Napier
- D) René Descartes

17. The 'Fano Plane' is an example of a finite projective plane studied in which area of mathematics?

- A) Combinatorics
- B) Number Theory
- C) Abstract Algebra
- D) Topology

18. Which mathematician is referred to as the 'Father of Modern Geometry' and is known for 'Euclidean geometry'?

- A) Euclid
- B) Pythagoras
- C) Archimedes
- D) Thales

19. Who formulated the 'Law of Cosines' and is known for contributions to trigonometry?

- A) Regiomontanus
- B) Nicolaus Copernicus
- C) Johannes Kepler
- D) Tycho Brahe

20. What is the name of the theorem that describes the relationship between the area of a triangle and the lengths of its sides?

- A) Heron's formula
- B) Law of Cosines
- C) Pythagorean Theorem
- D) Area formula

21. Who is known for the 'Principle of Mathematical Induction' and contributions to number theory?

- A) Peano
- B) Euclid
- C) Archimedes
- D) Pythagoras

22. The concept of 'Set Theory' is largely attributed to which mathematician?

- A) Georg Cantor
- B) Gottlob Frege
- C) Bertrand Russell
- D) David Hilbert