

Milestones in Mathematical History

Mathematics · Practice Test · 10 Questions

1. Who is historically credited with the first recorded instance of using a mathematical proof to determine the height of the Great Pyramid of Giza by measuring shadows?

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

2. In which 16th-century work did Gerolamo Cardano first publish the general algebraic solution for cubic equations?

- A) Liber Quadratorum
- B) Ars Magna
- C) Summa de arithmetica
- D) La Géométrie

3. Which mathematician is credited with the discovery of the first 'non-Euclidean' geometry, specifically hyperbolic geometry, independently of Bolyai?

- A) Bernhard Riemann
- B) Carl Friedrich Gauss
- C) Henri Poincaré
- D) Giuseppe Peano

4. The 'Pell's equation' is a misnomer attributed by Euler; which mathematician did he actually intend to credit for the study of this equation?

- A) Lord Brouncker
- B) John Pell
- C) Pierre de Fermat
- D) Diophantus

5. Who published the first treatise on the calculus of variations, establishing the foundations for the field in 1744?

- A) Isaac Newton
- B) Gottfried Wilhelm Leibniz
- C) Leonhard Euler
- D) Joseph-Louis Lagrange

6. What is the name of the first printed mathematical book, published in 1478, which contains the first known appearance of the plus and minus signs in print?

- A) Treviso Arithmetic
- B) The Elements
- C) Liber Abaci
- D) De Arte Supputandi

7. Which 19th-century mathematician published the first formal rigorous definition of the limit of a function using 'epsilon-delta' notation?

- A) Augustin-Louis Cauchy
- B) Karl Weierstrass
- C) Bernhard Bolzano
- D) Richard Dedekind

8. Who was the first person to prove that the set of real numbers is uncountable using his famous diagonal argument?

- A) Kurt Gödel
- B) Georg Cantor
- C) Bertrand Russell
- D) David Hilbert

9. In 1824, which mathematician proved the impossibility of solving general quintic equations by radicals?

- A) Évariste Galois
- B) Niels Henrik Abel
- C) Paolo Ruffini
- D) Joseph-Louis Lagrange

10. Which scholar is credited with the first known use of the symbol 'π' (pi) to represent the ratio of a circle's circumference to its diameter in 1706?

- A) William Jones
- B) Leonhard Euler
- C) John Machin
- D) Isaac Newton