

# Historical Foundations of Algebra

History Of Algebra · Answer Key · 15 Questions

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**1. Which 9th-century mathematician wrote 'Al-Kitab al-Mukhtasar fi Hisab al-Jabr wa'l-Muqabala', the work from which the term 'algebra' is derived?**

- A) Al-Khwarizmi**
- B) Diophantus of Alexandria
- C) Omar Khayyam
- D) Brahmagupta

**2. In the 3rd century AD, which Greek mathematician wrote 'Arithmetica', a collection of problems that introduced syncopated algebraic notation?**

- A) Euclid
- B) Diophantus**
- C) Pappus
- D) Archimedes

**3. Which Persian polymath was the first to provide a systematic method for solving cubic equations by intersecting conic sections?**

- A) Al-Karaji
- B) Al-Biruni
- C) Omar Khayyam**
- D) Nasir al-Din al-Tusi

**4. Who is credited with introducing the equals sign (=) in the 1557 book 'The Whetstone of Witte'?**

- A) Francois Viète
- B) Robert Recorde**
- C) Gerolamo Cardano
- D) Thomas Harriot

**5. In 1545, which Italian mathematician published 'Ars Magna', containing the first published algebraic solutions to cubic and quartic equations?**

- A) Niccolo Fontana Tartaglia
- B) Scipione del Ferro
- C) Gerolamo Cardano**
- D) Lodovico Ferrari

**6. Which 16th-century mathematician is known as the 'father of modern algebraic notation' for introducing the use of vowels for unknowns and consonants for constants?**

- A) Francois Viete**
- B) Rene Descartes
- C) Pierre de Fermat
- D) John Wallis

**7. The Hindu-Arabic numeral system, essential for algebraic advancement, was brought to European attention in 1202 by which mathematician?**

- A) Fibonacci**
- B) Nicole Oresme
- C) Luca Pacioli
- D) Gerbert of Aurillac

**8. Which 17th-century philosopher and mathematician is credited with popularizing the use of 'x', 'y', and 'z' for unknown variables?**

- A) Blaise Pascal
- B) Rene Descartes**
- C) Isaac Newton
- D) Gottfried Wilhelm Leibniz

**9. Before modern notation, what was the primary method used by Babylonian mathematicians to solve quadratic equations?**

- A) Geometric dissection**
- B) Logarithmic tables
- C) Matrix inversion
- D) Boolean logic

**10. Which Indian mathematician authored the 'Brahmasphutasiddhanta' in 628 AD, which provided the first clear rules for operations with negative numbers and zero?**

- A) Bhaskara II
- B) Aryabhata
- C) Brahmagupta**
- D) Mahavira

**11. The 'Cossic' algebra, a term used in 15th-century Europe, derives its name from the Latin word 'cosa', which refers to what?**

- A) The unknown quantity**
- B) The square root
- C) The balance scale
- D) The calculation table

**12. Which mathematician, in his 1631 work 'Artis Analyticae Praxis', pioneered the notation of using lowercase letters to represent algebraic quantities?**

**A) Thomas Harriot**

B) William Oughtred

C) Marin Mersenne

D) Pierre Herigone

**13. Which early 19th-century mathematician proved the impossibility of solving the general quintic equation by radicals?**

**A) Niels Henrik Abel**

B) Carl Friedrich Gauss

C) Augustin-Louis Cauchy

D) Joseph-Louis Lagrange

**14. The 'Lilavati', a classic text on arithmetic and algebra, was written in 1150 AD by which Indian scholar?**

A) Madhava

**B) Bhaskara II**

C) Varahamihira

D) Sridhara

**15. Which 18th-century mathematician was the first to use the term 'function' in an algebraic context in his work 'Introductio in analysin infinitorum'?**

**A) Leonhard Euler**

B) Jean le Rond d'Alembert

C) Daniel Bernoulli

D) Joseph-Louis Lagrange