

Foundations of Mathematics

Pre-Algebra · Answer Key · 12 Questions

1. In which year did the International Bureau of Weights and Measures confirm the modern definition of the base-10 number system digits?

- A) 1960**
- B) 1889
- C) 1901
- D) 1955

2. What is the value of the mathematical constant Pi (rounded to two decimal places) used in basic geometry?

- A) 3.12
- B) 3.14**
- C) 3.16
- D) 3.18

3. How many sides does a regular heptagon have?

- A) 5
- B) 6
- C) 7**
- D) 8

4. Which ancient civilization is credited with developing the base-60 sexagesimal system around 3000 BCE?

- A) Romans
- B) Greeks
- C) Mayans
- D) Sumerians**

5. What is the result of 2 to the power of 5?

- A) 10
- B) 25
- C) 32**
- D) 64

6. Who is often referred to as the 'Father of Algebra' for his work 'Al-Kitab al-mukhtasar fi hisab al-jabr wa'l-muqabala' written around 820 CE?

- A) Euclid
- B) Al-Khwarizmi**
- C) Pythagoras
- D) Archimedes

7. What is the sum of the interior angles of a triangle in Euclidean geometry?

- A) 90 degrees
- B) 180 degrees**
- C) 270 degrees
- D) 360 degrees

8. How many years are in a millennium?

- A) 10
- B) 100
- C) 1,000**
- D) 10,000

9. What is the smallest prime number?

- A) 0
- B) 1
- C) 2**
- D) 3

10. The number 1,000,000,000 (one billion) consists of the digit 1 followed by how many zeros?

- A) 6
- B) 8
- C) 9**
- D) 12

11. In the order of operations (PEMDAS), what does the 'E' stand for?

- A) Equations
- B) Exponents**
- C) Elements
- D) Estimation

12. How many centimeters are in one meter?

- A) 10
- B) 100**
- C) 500
- D) 1,000