

Trigonometry Fundamentals Quiz

Trigonometry · Practice Test · 7 Questions

1. The word 'trigonometry' originates from Greek words meaning 'triangle' and 'measure.' Which Greek word specifically refers to 'triangle' in its etymology?

- A) Gonia
- B) Metron
- C) Trigonon
- D) Geometria

2. In a right-angled triangle, which trigonometric ratio is defined as the length of the side adjacent to an angle divided by the length of the hypotenuse?

- A) Sine
- B) Tangent
- C) Secant
- D) Cosine

3. Which unit of angle measurement is defined such that one unit is the angle subtended at the center of a circle by an arc equal in length to the radius of the circle?

- A) Gradian
- B) Degree
- C) Revolution
- D) Radian

4. What do inverse trigonometric functions (such as arcsin or arccos) primarily calculate?

- A) Side lengths
- B) Ratios of sides
- C) Angles
- D) Areas of shapes

5. The fundamental trigonometric identity ($\sin^2\theta + \cos^2\theta = 1$) is commonly known by which name?

- A) Quotient Identity
- B) Reciprocal Identity
- C) Pythagorean Identity
- D) Double Angle Identity

6. Which field heavily relies on trigonometry for applications like navigation, surveying, and mapping the Earth's surface?

- A) Biology
- B) Chemistry
- C) Geodesy
- D) Literature

7. What characteristic describes the repetitive nature of trigonometric functions like sine and cosine, where their values repeat over a fixed interval?

- A) Amplitude
- B) Frequency
- C) Periodicity
- D) Phase Shift